



The Scottish Parliament
Pàrlamaid na h-Alba

SPICe

The Information Centre
An t-Ionad Fiosrachaidh

SPICe Briefing

Pàipear-ullachaidh SPICe

Circular Economy (Scotland) Bill

Alexa Morrison, Damon Davies

The Circular Economy (Scotland) Bill aims to introduce measures to help develop a circular economy, including setting circular economy targets, and makes provision about the reduction, recycling and management of waste. This briefing summarises the background to the Bill, the current regulatory and policy framework, changes proposed by the Bill and international developments in circular economy policy.



22 September 2023
SB 23-36

Contents

Summary and key Bill documents	4
Context for the Bill	6
What is a circular economy?	6
Why do we need a circular economy?	7
Tackling Scotland's carbon footprint (consumption emissions)	11
Environmental Impacts	13
Socio-economic drivers	15
Existing circular economy policy, laws and targets	18
Key circular economy and waste policy	18
Scottish waste targets and trends	20
Key related legislation	26
International developments (including EU Circular Economy Programme and 'keeping pace' considerations)	29
Securing circular economy benefits - academic critique of the circular economy model	31
Circular Economy Strategy	33
What the Bill does - sections 1 - 5	33
Background	34
Circular Economy Targets	37
What the Bill does - section 6	37
Background	38
Circular economy targets in other countries	40
Restrictions on the disposal of unsold consumer goods	42
What the Bill does - section 8	42
Background	42
Charges for single-use items	45
What the Bill does - section 9	45
Background	46
Household waste (duty of care)	50
What the Bill does - section 10	50
Background - flytipping and the household duty of care	50
Consultation on flytipping and Members Bill	52
Household waste (household waste requirements)	54
What the Bill does - section 11 (household waste requirements)	54
What the Bill does - section 12 (Code of Practice on Household Waste Recycling)	55

What the Bill does - section 13 (Targets for local authorities relating to household waste recycling)	56
Background - household recycling performance	56
International best practice in household recycling	59
Littering from vehicles	61
What the Bill does - section 14	61
Background	61
Enforcement powers in respect of certain environmental crimes	62
What the Bill does - sections 15 - 16	62
Background	62
Reporting on waste, surpluses, etc.	64
What the Bill does - section 17	64
Background	64
Consultation proposals not taken forward in the Bill (and expected amendments on Zero Waste Scotland at Stage 2)	66
Topical areas (not directly included in the Bill) - single-use vapes	70
Bibliography	72

Summary and key Bill documents

The Circular Economy (Scotland) Bill [was introduced on 13 June 2023](#) and is published on the Scottish Parliament website. The Scottish Government states that:

“ The Bill will establish the legislative framework to support Scotland's transition to a zero waste and circular economy, significantly increase reuse and recycling rates, and modernise and improve waste and recycling services.”

Key provisions of the Bill are:

- A requirement for a Circular Economy Strategy with associated consultation, review and reporting requirements.
- Powers to introduce circular economy targets with associated monitoring and reporting.
- Powers to introduce restrictions on the disposal of unsold consumer goods for the purpose of reducing waste.
- Powers to introduce charges for single-use items (expected to be initially used to introduce a charge for disposal beverage cups).
- A new criminal offence for a householder to breach their duty of care in relation to household waste, and new fixed penalty regime for that offence.
- Introduction of new enforcement measures around household waste disposal and recycling (fixed penalty and civil penalty charges).
- A new statutory code of practice on household waste recycling.
- Powers to set targets for local authorities relating to household waste recycling.
- Introduction of a new civil penalty charge for littering from a vehicle.
- Powers to introduce mandatory public reporting requirements for businesses in respect of waste and surpluses.
- Powers to enable enforcement authorities to seize and search vehicles to tackle waste crime.

Supporting documents published by the Scottish Government alongside the Bill include:

- A [Policy Memorandum](#).
- [Explanatory Notes](#).
- A [Financial Memorandum - to set out the estimated costs associated with the measures introduced by the Bill](#).
- An [Equality Impact Assessment \(EQIA\)](#).
- A [Fairer Scotland Duty Summary](#).

- A [Business and Regulatory Impact Assessment \(BRIA\)](#).

Consultation on proposals for the Bill

The Scottish Government [consulted on proposals for a Circular Economy Bill](#) from 30 May 2022 to 22 August 2022 and [has published submitted responses](#).

An [analysis of consultation responses was published](#) by the Scottish Government on 30 November 2022.

The Scottish Government had previously published a consultation on proposals for a Circular Economy Bill in 2019, with a view to introducing a Bill in 2020. This was delayed by the pandemic.

Context: consultation on a 2025 circular economy routemap

In tandem with the consultation on proposals for the Bill, the Scottish Government also [consulted on Delivering Scotland's circular economy A Route Map to 2025 and beyond](#), aimed to be complementary consultations. The routemap provides the wider context for the Bill, noting that the Scottish Government already has significant powers under a range of legislation for circular economy interventions, many interventions are non-legislative in nature, and a number of important interventions are taking place at a UK-wide level (more information below).

The draft 2025 routemap was published on 30 May 2022 alongside other supporting documents, including a [Business and Regulatory Impact Assessment \(BRIA\)](#) and a [Review of High Performing Recycling Systems](#) (an independent report commissioned by the Scottish Government).

Context for the Bill

What is a circular economy?

Often the model of consumption and production is linear - resources are extracted or harvested, materials are produced consuming energy, products and services are used, and then waste products are discarded. This is sometimes described as a "take, make and dispose" model. Despite efforts to disrupt this model of consumption e.g. through efforts towards more reuse and recycling, globally it is still the dominant model, with associated environmental, economic and social implications (explored further below).

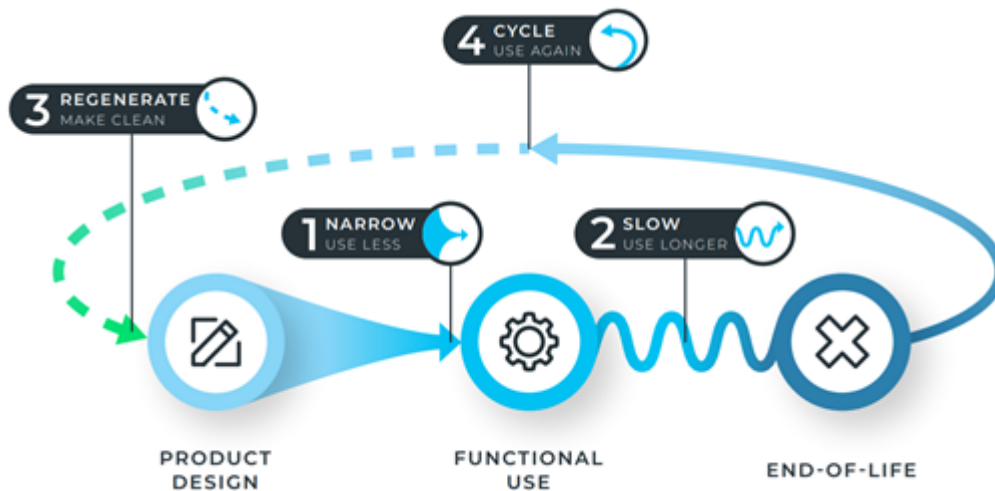
A circular economy refers to an economic model which has moved away from "take, make and dispose" to one where resources are kept in circulation for longer, and we are not unsustainably drawing down our natural resources, [sometimes called our 'natural capital'](#). Essentially, in a circular economy, waste is either completely designed out, or is minimal and the impacts of waste disposal do not threaten [our 'planetary boundaries' - the environmental limits within which humanity can safely operate](#). Global studies suggest [we are currently overshooting six of the nine boundaries crucial to the health of our planet](#) - including in relation to climate change, chemical pollution and biodiversity loss - putting people and nature at risk. ¹

Exact definitions or models of how a circular economy is expressed can differ, but generally the emphasis is on circularity of resource use, minimising or designing out waste, and doing so in a way that addresses the twin climate and nature crises.

For example, the [Ellen Macarthur Foundation defines a circular economy as follows](#):

“ The circular economy is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting. The circular economy tackles climate change and other global challenges, like biodiversity loss, waste, and pollution, by decoupling economic activity from the consumption of finite resources.”

The [2023 global Circularity Gap Report](#) sets out a 'four flows' model for a circular economy where we (1) 'narrow' by using less material in product design, (2) 'slow' the flow of resources by using resources for longer, (3) 'regenerate' products and materials for use again, and (4) 'cycle' materials for use again (see Figure 1 below).

Figure 1: The 'four flows' to achieve circular objectives

Source: [Circle Economy 2023 Circularity Gap Report](#)

Definitions of a circular economy can also emphasise socio-economic opportunities. For example [the United Nations Economic Commission for Europe \(UNECE\)](#) states:

“ The circular economy is a new and inclusive economic paradigm that aims to minimize pollution and waste, extend product lifecycles, and enable broad sharing of physical and natural assets. It strives for a competitive economy that creates green and decent jobs and keeps resource use within planetary boundaries.”

The Policy Memorandum for the Bill states that "A circular economy gives us an alternative economic model that can benefit everyone within the limits of our planet" and that a circular economy:

- cuts waste, carbon emissions and pressures on the natural environment
- opens up new market opportunities, improves productivity, increases self-sufficiency and resilience by reducing reliance on international supply chains and global shocks
- strengthens communities by providing local employment opportunities and lower cost options to access the goods Scotland needs.

Why do we need a circular economy?

As described above, the current, dominant global 'linear' model of consumption and disposal of resources is threatening our planetary boundaries. Unsustainable consumption and production is a global issue with diverse environmental and socio-economic impacts. The [United Nations](#) states:

“ Unsustainable patterns of consumption and production are root causes of the triple planetary crises of climate change, biodiversity loss and pollution. These crises, and related environmental degradation, threaten human well-being and achievement of the Sustainable Development Goals.”

The UN Sustainable Development Goals (SDGs) are UN countries' shared framework for promoting, pursuing and measuring sustainable development. Sustainable Development

Goal 12 is to 'Ensure sustainable consumption and production patterns'. As background, [the UN states that the material footprint per capita in high-income countries is 10 times the level of low-income countries](#). The UN states:

“ Responsible consumption and production must be integral to recovery from the pandemic and to acceleration plans of the Sustainable Development Goals. It is crucial to implement policies that support a shift towards sustainable practices and decouple economic growth from resource use.”

As well as clearly having direct relevance for the goal of promoting responsible consumption and production, a circular economy has also been described as a tool that could support progress towards multiple UN SDGs (see Figure 2 below showing all of the UN SDGs).

Figure 2: The UN Sustainable Development Goals



Source: The UN SDGs

Unsustainable consumption in Scotland

If everyone on Earth consumed resources as we do in Scotland, the Scottish Environment Protection Agency (SEPA) state that [we would need three planets](#) to support this level of consumption. This is because our consumption of products often relies on unsustainable use of resources. Unsustainable use of resources can relate to:

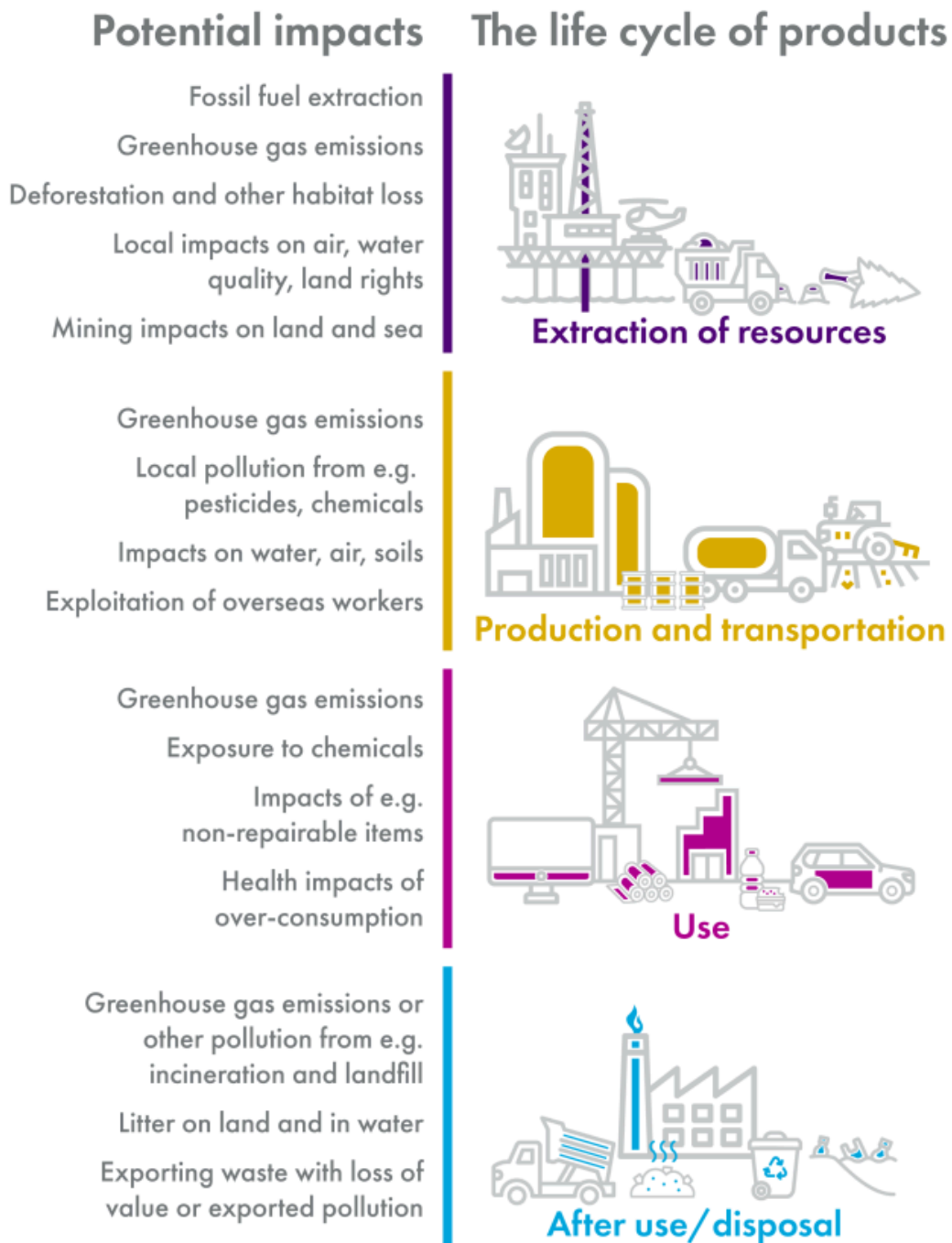
- the **climate impacts** of extraction of resources, production, use and disposal of products
- other **environmental impacts** across the lifecycle of products we consume- from

extraction through to production, use and disposal - including on biodiversity, air quality, and the water environment - which in turn can have implications for our health and wellbeing

- the **socio-economic impacts** of how we consume products. Although the socio-economics of consumption can be positive e.g. where we use products to support our wellbeing, or by supporting livelihoods, unsustainable socio-economic impacts can take place where the extraction, production or disposal of products harms people and communities.

The above impacts can take place in Scotland, but often take place in other countries - where resources are extracted, or where production takes place, or where waste or used and recycled materials are exported. Some of the different aspects of the lifecycle of products, and key potential negative impacts of over-consumption are summarised in Figure 3 below.

Figure 3: The Lifecycle of Products



Source: SPICe (adapted from [European Environment Agency](#))

The Circularity Gap in Scotland - Scotland is 1.3% circular

Zero Waste Scotland and Circle Economy published [the Circularity Gap Report Scotland](#) in November 2022 ² stating:

“ Scotland is only 1.3% circular—leaving a Circularity Gap of more than 98%. This means that Scotland almost exclusively uses virgin resources to satisfy its residents' needs and wants, such as for Housing, Nutrition and Mobility. In 2018, the country consumed 117.8 million tonnes of virgin materials—around 21.7 tonnes per capita. This is nearly double the global average, which rests at 11.9 tonnes.”

And:

“ Despite representing just 0.073% of the world's population, it consumes a total of 119.4 million tonnes of materials per year—0.1% of the globe's virgin material use. In other words, the Scottish economy is largely driven by overconsumption.”

The complex implications of unsustainable consumption, and corresponding opportunities of a more circular economy are discussed further in below sections.

Tackling Scotland's carbon footprint (consumption emissions)

According to Zero Waste Scotland, [around 80% of our carbon footprint in Scotland comes from consumption](#) - "from all the goods, materials and services which we produce, use and in the case of products, often throw out after just one use"ⁱ. Research by Zero Waste Scotland also suggests that only one-fifth of people in Scotland are fully aware of the negative environmental impacts of our consumption of new products.³

There are two main ways of calculating a country's carbon emissions:

1. **Production-based emissions:** often referred to as territorial emissions, are calculated by adding up all the emissions that are produced within a country (e.g. emissions produced from industry, manufacturing, energy production, transport etc.).
2. **Consumption-based emissions:** often referred to as a "carbon footprint" are calculated by adding up all the emissions associated with the goods and services consumed within that country (e.g. emissions from the products and service we buy and consume).

Much of the focus of climate policy is on production-based emissions. This is because production-based emissions form the basis of national accounting for the purposes of the legally binding international treaty agreed under the [2015 Paris Agreement](#) and associated domestic legal targets implementing this treaty. Territorial emissions are therefore the basis for our legal emissions reductions and net zero target set out in the Climate Change (Scotland) Act 2009, as amended by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.

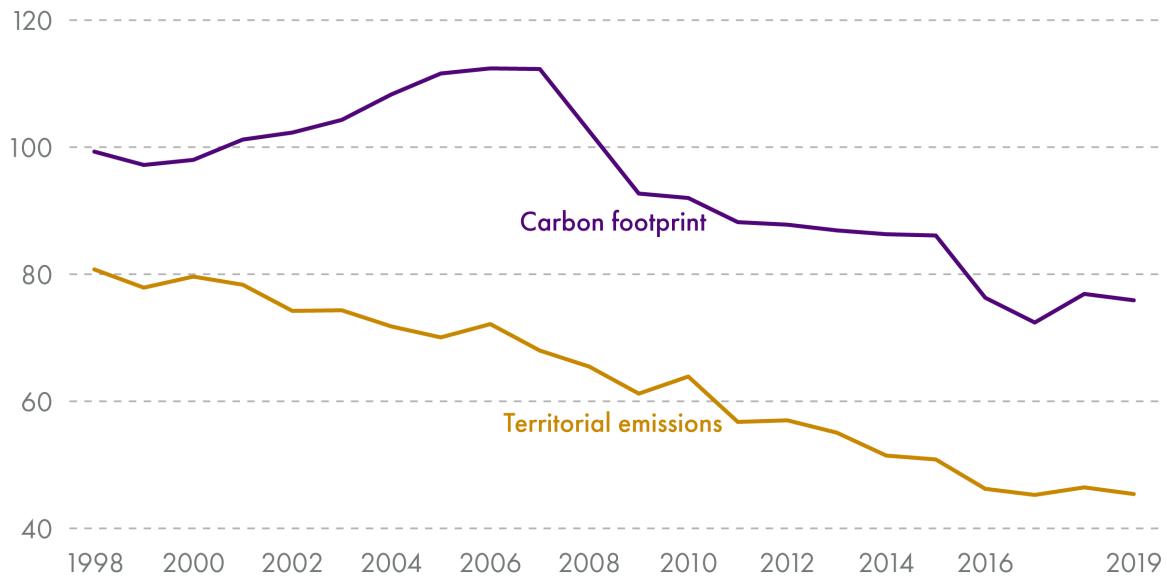
A significant challenge with this climate governance framework, centred around production emissions reduction targets, is where nations might reduce production emissions without reducing consumption emissions by decarbonising industry and increasing imports of the goods and services we consume. This is sometimes called 'offshoring'. For example, a country could close down its steel manufacturing industry and import the steel from another country to meet its consumption needs.

Section 37 of the Climate Change (Scotland) Act 2009 requires Scottish Ministers to report on annual emissions from Scottish consumption of goods and services. [The most recent report providing statistics on Scotland's carbon footprint](#) was published in March 2023 and provides estimates of Scotland's greenhouse gas emissions on a consumption basis for the period 1998 to 2019.

ⁱ Scotland's greenhouse gas emissions on a consumption basis can be broken up into three main categories: emissions embedded in imported goods and services, those embedded in UK produced goods and services and those directly produced by Scottish residents, through activities such as heating and motoring. The figure of "around 80%" refers to the proportion of total emissions from the first two of these three categories.

The report shows that Scotland's consumption emissions are notably larger than those based on production accounting. Whilst the carbon footprint (consumption emissions) fell by 23.6 per cent between 1998 and 2019, equivalent greenhouse gas emissions on a territorial basis (production emissions) fell by 43.8 per cent over the same time period. These trends are shown in Figure 4 below.⁴

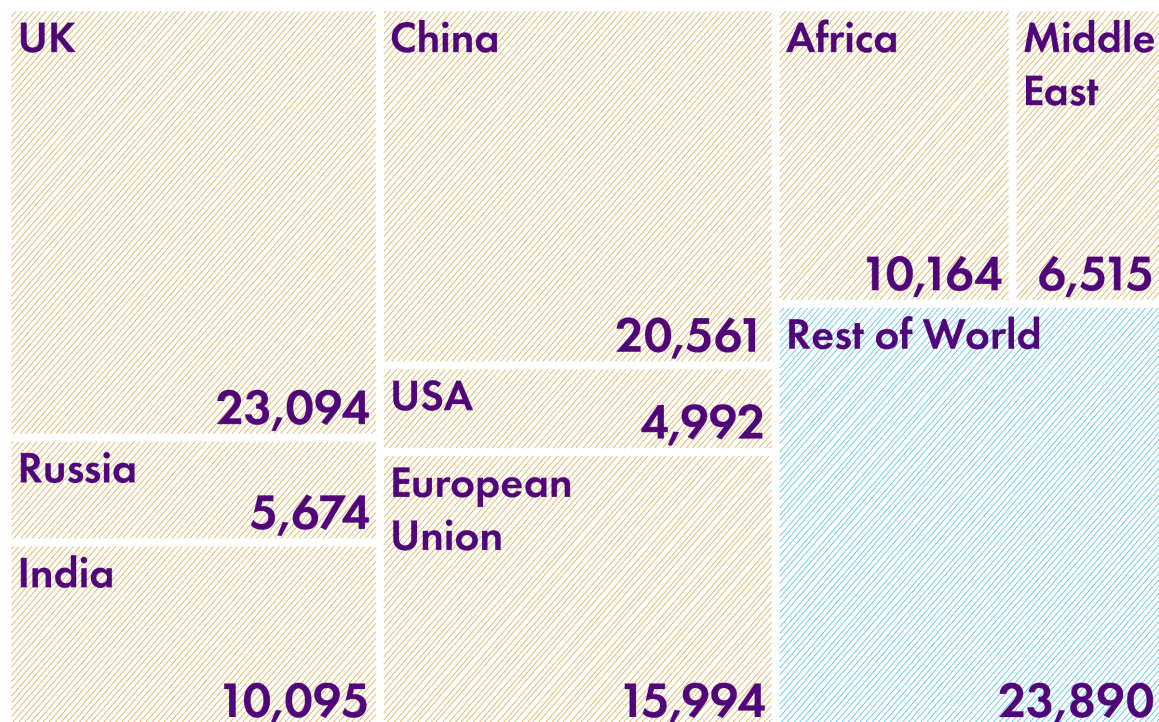
Figure 4: Comparison of Scotland's Carbon Footprint with its territorial greenhouse gas emissions: 1998 to 2019 (values in MtCO₂e).



Source: [Scottish Government](#)

The report also provides a calculation of the the embedded material requirements (goods and services that are produced outwith Scotland) by country of origin in 2019 associated with final consumption in Scotland. In other words, how much of the materials consumed in Scotland come from elsewhere. Figure 5 below provides a breakdown of these statistics.

Figure 5: Scotland's material footprint by country of origin, 2019 (values in thousand tonnes).



Source: [Scottish Government](#) ⁴

Environmental Impacts

Environmental impacts of unsustainable consumption could include impacts on the water environment, soil and air quality, pollution of chemicals or plastics, biodiversity and habitat loss e.g. through deforestation and land use change. Those impacts can in turn impact on human health and wellbeing. Selected areas are discussed further below.

Nature conservation and restoration and biodiversity

The [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services \(IPBES\)](#) identifies that per capita consumption levels are emerging as a potentially more important driver of biodiversity and ecosystem change than population growth. Furthermore, pollution, climate change, land-use change and natural resource use and exploitation are all identified as key drivers of global biodiversity loss. These drivers are also intrinsically linked to human consumption under a linear economic model. ⁵

The **Scottish Government states in its draft 2025 circular economy routemap** that "90% of global biodiversity loss and water stress is caused by resource extraction and processing" ⁶. The [draft Biodiversity strategy](#) also states:

“ The global use of natural resources has more than tripled since 1970 and continues to grow. This, in turn, has led to a huge increase in waste of raw and manufactured food and other goods, and an entire industry based on recycling the materials and embodied energy they represent. Both increased consumption and, in response, production is an outcome of people's increasing distance from, and understanding of how the products they consume are produced and their impact on biodiversity and the natural environment more generally. ⁷ ”

A [2023 research report published by NatureScot, Understanding the Indirect Drivers of Biodiversity Loss in Scotland](#), underlines the multiple ways in which consumption is a key driver of biodiversity loss. For example it states:

- "Around 30% of threatened species have been linked to the impacts of global trade and the UK is the 5th ranked country in exporting its biodiversity footprint to other countries: *reducing imports with poor sustainability records, improving certification schemes and moving towards a zero-waste society and a circular economy will reduce Scotland's global biodiversity footprint, whilst reporting the environmental impact of imported materials will enable consumers to make choices based on sustainability*".

A [2021 report by the Ellen MacArthur Foundation](#) identifies how overarching principles of a circular economy can tackle root causes of biodiversity loss:

- **Eliminating waste and pollution to reduce threats to biodiversity:** E.g. eliminating unnecessary plastics and re-designing products to have value post-use so they can circulate in the economy rather than polluting the environment.
- **Circulating products and materials - to leave room for biodiversity:** Reducing demand for natural resources e.g. business models that keep cotton clothing in use for longer could reduce the amount of land needed to grow cotton.
- **Regenerating nature - to enable biodiversity to thrive.** Circular economic activity could rebuild biodiversity. For example, regenerative agricultural approaches such as agroecology and agroforestry. ⁸

Reduced pollution - including plastic pollution

Potentially harmful releases to the environment associated with production and consumption include air pollutant and greenhouse gas (GHG) emissions, effluent discharges to water bodies, soils and waste, and burdens that are less well recognised, such as noise and light pollution. Releases can occur across every stage of economic activity — from raw material extraction to goods production, consumption and use, and waste material management. ⁹

One area where it is hoped that a circular economy could have a significant impact is on reducing plastic pollution in the marine environment. [According to the International Union for Conservation of Nature \(IUCN\)](#), at least 14 million tons of plastic end up in the ocean every year, and **plastic makes up 80% of all marine debris found from surface waters to deep-sea sediments**. [The Marine Conservation Society state that](#) Beachwatch Volunteers recorded an average of 346 items of litter per 100m of beach surveyed in Scotland during the 2021 Great British Beach Clean.

Plastic pollution harms marine species through ingestion and entanglement ¹⁰. Plastic pollution also affects many aspects of human well-being: affecting the aesthetics of beaches, blocking drainage and wastewater engineering systems, and providing a breeding ground for disease vectors ¹¹. There is also increasing public concern and research about the impacts of microplastics on human health (both via inhalation and ingestion through our diets), although our understanding of impacts is still limited ¹².

According to a 2020 study, without meaningful action, **by 2040 municipal solid plastic waste is set to double, plastic leakage to the ocean is set to nearly triple and plastic stock in the ocean is set to quadruple**. It found that that current government and industry commitments to tackle plastic pollution add up to a 7 per cent reduction in plastic pollution to the ocean by 2040 relative to business as usual. However, a **more ambitious approach, utilising technology and circular economy approaches, could reduce plastic pollution by 78% by 2040**. ¹¹

Chemicals

Stakeholders highlight that sustainable use and robust regulation of chemicals is inter-linked with achieving a circular economy. For example, [environmental NGO Fidra states in response to the Bill](#):

“ Critical to the success of this Bill will be the need to reduce the use of harmful chemicals in products and materials and improve their transparency and traceability to ensure products remain in use for as long as possible and are able to be safely repurposed or recycled. If this doesn’t happen, we will continue to see items such as sofas having to be incinerated due to their persistent organic pollutant contamination which can cause harm to human health and the environment. In Scotland, that is over 125,000 sofas per year.”

Chemicals regulation for environmental purposes is a devolved area but intersects with a number of reserved areas, and in practice most regulation takes place at UK-level. A UK Chemicals Strategy is expected to be published in 2023.

ChemTrust and Wildlife & Countryside Link [have published a briefing, A UK Chemicals Strategy That’s Fit for Purpose](#), which underlines the linkages between chemicals regulation and circular economy goals, stating that "Knowing the use to which a chemical will also be put is increasingly challenging as the UK moves towards a circular economy promoting re-purpose, and recycling of goods and materials. Chemicals often end up as contaminants in recycled goods". Policies proposed to be required in order to enable a safe circular economy include more emphasis on transparency of chemicals in products, as well as phasing out hazardous chemicals from non-essential uses.

Socio-economic drivers

The [Scottish Government's draft 2025 circular economy routemap states](#):

“ a circular economy is not only about protecting our natural environment nor is it just about waste management and cutting our emissions. It holds huge opportunities for our economy, by improving productivity and opening up new markets, and for our communities by providing local employment and access to the goods we need. And a more circular economy is also more self-sufficient – it reduces our reliance on imported goods and materials, and provides increased economic resilience.”

Wellbeing economy

The [Scottish Government's Economic Recovery Implementation Plan](#) published in 2020 as a response to the pandemic explicitly recognised the linkages between the development of a wellbeing economy, investing in natural capital and transitioning to a circular economy - and states that these are necessary for economic resilience.¹³ The Scottish Government's [National Strategy for Economic Transformation](#) published in March 2022 committed to achieving its vision of a wellbeing economy which is defined as *"a society that is thriving across economic, social and environmental dimensions, and that delivers prosperity for all Scotland's people and places. We aim to achieve this while respecting environmental limits, embodied by our climate and nature targets."*¹⁴ In November 2022, the Scottish Government published its [Wellbeing Economy Toolkit](#) which further links transitioning to a circular economy as a necessary component to achieve a wellbeing economy¹⁵.

Supply chain resilience

Our current linear economy relies heavily on the supply of virgin raw materials. Events in recent years such as changes to customs processes associated with EU exit, the COVID-19 pandemic and the war in Ukraine have demonstrated the vulnerability of supply chains when the global supply of raw materials is interrupted, with resulting impacts on increasing costs. It is suggested that a circular economy can potentially offer more localised, diversified, and distributed production—through repair, refurbishment, re-manufacturing, and local production¹⁶.

A 2020 report by [Circle Economy](#) assessed the opportunities and risks to resilience associated with a circular economy. It found that several circular economy policies can increase resilience e.g. by:

- in cycling resources, increasing the diversity of raw material supply
- in sharing resources, increasing localised management and participation.

It also explored risks to resilience of circular economy policies, for example if designing out redundancies and over-supply in supply chains might increase supply chain vulnerability.¹⁷

Job creation and security

The 2020 resilience assessment by Circle Economy found that labour markets in a circular economy require ample skills transferability, and could increase the labour market's recovery in times of crises of shocks. It suggests that in supporting lifelong learning, individuals and companies can quickly develop solutions, experiment and be less at risk of job-loss.¹⁷

The Scottish Government's circular economy routemap also recognises opportunities for

job creation in a circular economy:

“ Delivering a circular economy provides local employment opportunities and lower cost options to access the goods we need. 10,000 tonnes of waste can create up to 296 jobs in repair and reuse, compared to 1 job in incineration, 6 jobs in landfill or 36 jobs in recycling. This represents a profound opportunity to support communities and stimulate job creation.”

Consumer benefits

A circular economy approach may provide benefits to consumers such as:

- More durable and innovative products through emphasis on re-use and repairability and discouraging practices such as planned obsolescence (a business strategy in which the obsolescence of a product is planned and built into it).¹⁸
- Reduced costs through emphasis on practices like buying used items and leasing or renting instead of owning.¹⁹

Health and wellbeing benefits

Potential health benefits of circular economy approaches have been suggested. For example, a [2022 report by Public Health Wales](#) identified potential "positive impacts of reduce, reuse, and recycle, as part of a wider circular economy approach" as including:

- improved air quality
- an "indirect" pathway to addressing the climate emergency with associated health benefits of avoiding catastrophic climate change
- improvements to diet through more sustainable production of food
- improved mental health and wellbeing.

There is also an increasing body of evidence that excessive materialism and consumerism has links to poorer mental health^{20 21 22}.

Value recovery

Circular economy interventions can seek to ensure or encourage that more of the maximum value is extracted from products - for example by consumers themselves or in how product disposal is handled and value recovered e.g. as opposed to valuable materials being landfilled, incinerated or exported without recovering value.

The Scottish Government's [2016 Making Things Last Strategy](#) for example stated that between 2016 and 2020, in Scotland we were expected to import "about £50 million worth of gold into Scotland hidden away in our TVs, mobile phones and computers", but expected to recover "just a tiny fraction of that".

Existing circular economy policy, laws and targets

Key circular economy and waste policy

The Scottish Government's intention to support the development of a circular economy is already set out in a number of key government strategies, including:

- **Scotland's Environment Strategy: Vision and Outcomes** (published 2020) - an overarching framework for climate and environmental policy strategies. It recognises **the need for Scotland to transition to a circular economy**, and includes commitments to reduce the global impact of our consumption, end 'throwaway' culture, and gather evidence on the nature of Scotland's international environmental impact.
- **Making Things Last - Scotland's First Circular Economy Strategy**. The Scottish Government published its first Circular Economy Strategy in 2016 stating that the transition to a circular economy was "an economic, environmental and moral necessity".
- The **Scottish Government published 'Delivering Scotland's circular economy A Route Map to 2025 and beyond' for consultation in May 2022**. This routemap provides wider context for the Bill given a number of circular economy interventions are being planned or pursued using existing powers or non-legislative means. Proposed priorities in the route map are to:
 - Promote responsible consumption and production including reducing consumption of single-use items, promoting product design and stewardship and mainstreaming reuse
 - Reduce food waste from households and businesses
 - Improve recycling from households and businesses
 - Embed circular construction practices
 - Minimise the impact of disposal of waste that cannot be reused or recycled
 - Strengthen data and evidence, sustainable procurement, skills and training
- **The Scottish Government's Economic Strategy, Delivering Economic Prosperity** (published March 2022) identifies the circular economy as one of Scotland's 'current and future key industries', with opportunities for creating new markets, innovation and jobs.
- **The 2020 Climate Change Plan update** (published December 2020) included a number of circular economy commitments, including:
 - To embed circular economy principles in to the wider green recovery
 - Recognising the importance of tackling consumption emissions
 - Milestones for 2032 and 2045, where by 2045 "we will have moved completely from a 'take, make and dispose' linear economy to a fully circular economy".

- The [fourth National Planning Framework \(NPF4\)](#) (published 13 February 2023) seeks to support the circular economy through policies aimed at transitioning to a more circular construction sector, as well as policies on waste management infrastructure.

Key circular economy policy interventions to date

Some significant policy interventions made by the Scottish Government aimed at supporting the transition to a circular economy include:

- A ban on biodegradable municipal waste going to landfill by 2025. The following section of the briefing shows progress towards this. The landfilling of biodegradable municipal waste was banned from 2021 under [the Waste \(Scotland\) Regulations 2012](#). The Scottish Government subsequently delayed enforcement until 2025.
- In 2022 [a single-use plastics ban came into force](#) for a number of items including plastic cutlery, plates and stirrers.
- Current and previous funding includes:
 - The Scottish Government launched [a £70 million five-year Recycling Improvement Fund in 2021](#) to provide capital funding grants for local authorities to improve recycling infrastructure and services
 - Now closed, an £18 million [Circular Economy Investment Fund](#), was disbursed by Zero Waste Scotland (originating from European Regional Development Funds), to Small Medium Enterprises (SMEs) for circular economy business innovation.
- Zero Waste Scotland provides various forms of support through [its Circular Economy Business Support Service](#).
- Regulations were approved by the Scottish Parliament in 2020, following a consultation in 2018, with a view to introducing a Deposit Return Scheme (DRS) for single-use drinks containers. The introduction of the scheme, originally planned for 2021, has been delayed by a number of factors, including most recently [the question of interoperability of UK schemes under the market access principles of the UK Internal Market Act](#), which led the Scottish Government to delay implementation of the scheme until earliest October 2025.
- The Scottish Government [commissioned a review of Energy from Waste infrastructure](#) due to concerns about the compatibility of levels of incineration of waste with net zero and other environmental goals. As part of its response to this review, updated planning policies in relation to energy from Waste (EfW) infrastructure were [set out in the fourth National Planning Framework \(NPF4\)](#).

UK-wide interventions (in devolved areas)

Some key circular economy interventions have taken place, or are being developed, at UK-level. In some areas such as eco-design standards for products, there can be a complex mix of devolved and reserved competence. In the [draft 2025 circular economy route map](#), the Scottish Government states:

“ The Bill will increase the levers we have available to us and the Route Map sets out actions to accelerate progress within devolved competence, but some of the policy measures required to drive the transition to a fully circular economy are dependent upon UK Government action. We are working with the UK Government and other Devolved Administrations on some key measures, like reform of the packaging producer responsibility system, but it is vital the UK Government steps up to accelerate action in other areas.”

Extended Producer Responsibility (EPR) schemes are currently being developed across the UK for packaging, waste electrical and electronic equipment (WEEE), batteries, and accumulators. EPR schemes set out to make producers responsible for the environmental costs of the items that they place onto the market, for example in order to incentivise product design change. [Plans in this area are summarised in the consultation on the proposed circular economy routemap to 2025 and beyond.](#)

Other devolved areas relevant to the circular economy, but which tend to be organised on a UK-wide basis (and again can engage a mixture of reserved and devolved areas), include [UK-wide approaches to chemicals regulation](#) and [the UK Emissions Trading Scheme](#) (for example the [draft 2025 circular economy routemap](#) sets out proposals to consult with other UK governments on expanding the UK Emissions Trading Scheme to include Energy from Waste).

The UK and devolved Governments have also set out [a provisional Common Framework setting out how they plan to work together on resources and waste.](#)

Reserved areas relevant to the circular economy

A number of potential levers for supporting the transition to a more circular economy are reserved, such as reserved fiscal and economic policy e.g. VAT, product labelling, aspects of energy policy and global trade policy. Examples of [key interventions in reserved areas include a plastics packaging tax which came into force in 2022.](#) There has also been disagreement between the Scottish and UK Governments about the extent of devolved competence in areas such as mandatory due diligence requirements for business and finance to tackle the environmental impacts of global supply chains ([highlighted for example when the UK Government imposed requirements on UK businesses to assess their supply chains for 'forest-risk commodities' via the Environment Act 2021, which the Scottish Government considered to be a devolved area](#)). There is potentially still a discussion around what the scope of devolved levers are to tackle global supply chain impacts on the environment.

Scottish waste targets and trends

To date, targets in circular economy policy have centred around waste and recycling. Key Scottish Government targets are to:

1. **reduce Scotland's waste by 15% by 2025 (against 2011 levels)**
2. **recycle 70% of all waste by 2025**
3. **recycle 60% of all household waste by 2020 (this target has been missed)**
4. **reduce food waste by 33% by 2025 (against 2013 levels)**

5. **reduce the percentage of all waste sent to landfill to 5% of all waste by 2025**
6. **end the landfilling of biodegradable municipal waste - with a ban coming into force from 31 December 2025.**

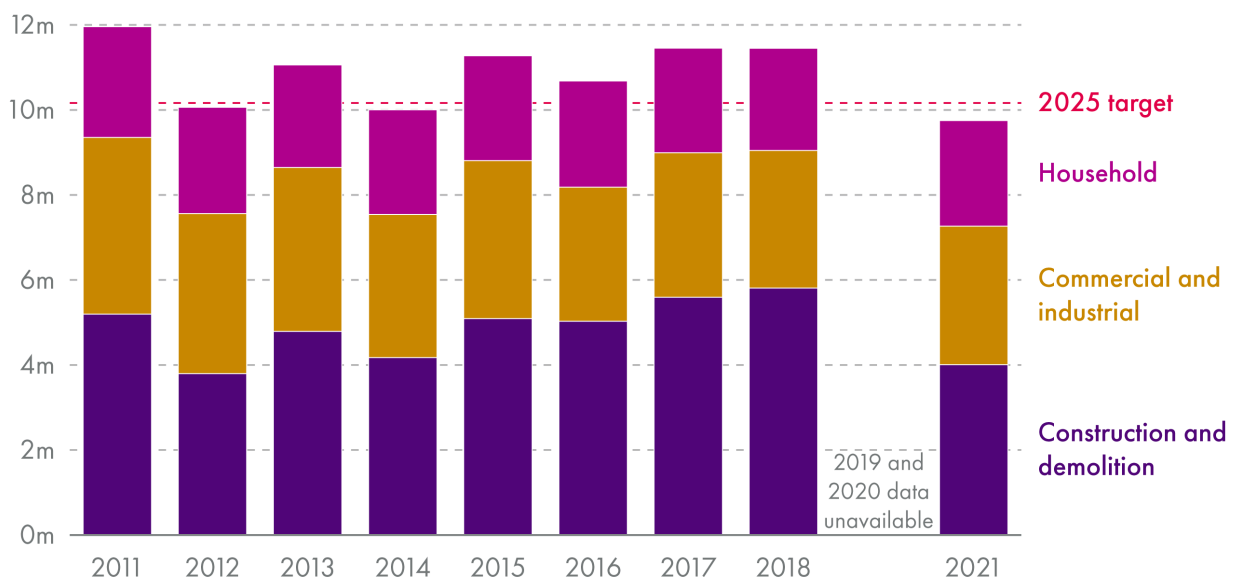
The Scottish Government has stated in its draft 2025 circular economy route map that 2025 waste and recycling targets are unlikely to be met without **large-scale, and rapid system change**.

The following sections summarise progress against each of these targets alongside selected other waste data. SEPA is responsible for reporting national waste statistics and [publishes various annual waste and recycling data](#). Waste data reporting was disrupted by [a cyberattack on SEPA in 2020](#), resulting in some data gaps for 2019 and 2020. Given that key waste data is lacking for this period, and during 2021 the Scottish economy was significantly disrupted by the pandemic, SEPA suggest care should be taken in comparing recent waste data with longer term trends.

1. **To reduce Scotland's total waste by 15% by 2025 (against 2011 levels).**

The estimated total quantity of Waste From All Sources (WFAS) generated in Scotland in 2021 was **9.75 million tonnes**, a reduction of 14.8% (1.70 million tonnes) from 2018 and a reduction of 18% compared to the baseline year of 2011. Figure 6 below shows the composition of Scottish WFAS by category and progress against the 2025 target to reduce waste by 15% by 2025 from 2011 levels.

Figure 6: Waste From All Sources (WFAS) in Scotland from 2011 - 2021 by composition, and against 2025 target to reduce WFAS by 15%

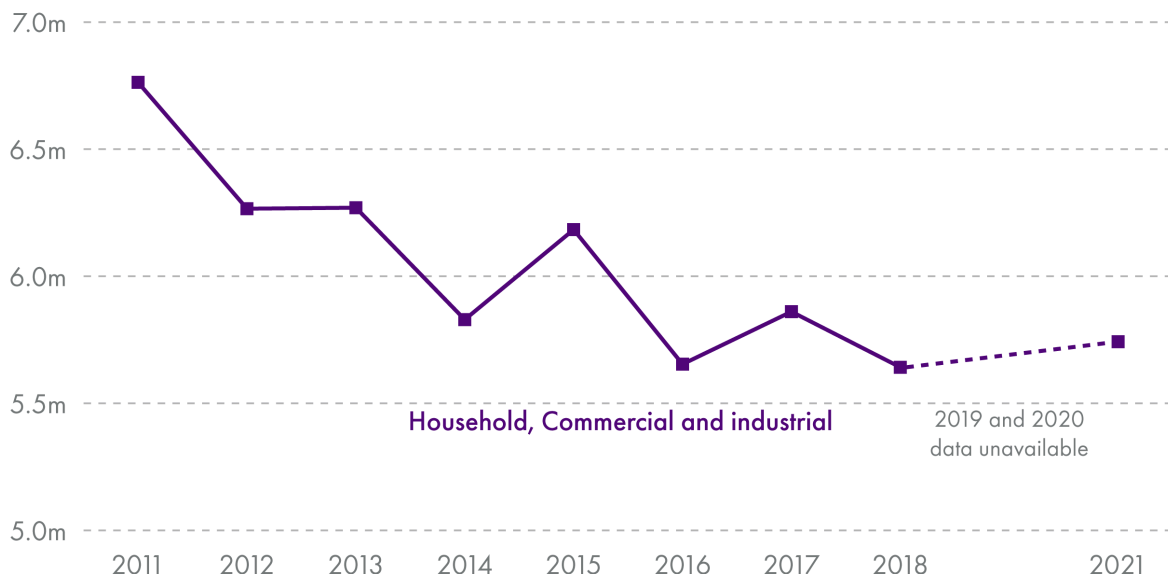


Source: adapted from [SEPA waste data](#)

Whilst the 2025 target was met in 2021, and two of the other eight years in the above graph, SEPA emphasise that waste generated year-on-year **is strongly influenced by fluctuations in Construction and Demolition waste**, which is sensitive to large projects which can cause significant year-on-year variations. This can lead to challenges in interpreting the general waste trend. When Construction & Demolition waste is excluded, the waste generation trend has been generally downward for the 2011 – 2021 period, a

reduction of around 15% (see Figure 7 below).

Figure 7: Waste From All Sources (WFAS) in Scotland excluding construction and demolition waste, 2011 to 2021



Source: adapted from [SEPA waste data](#)

2. To recycle 70% of all waste by 2025.

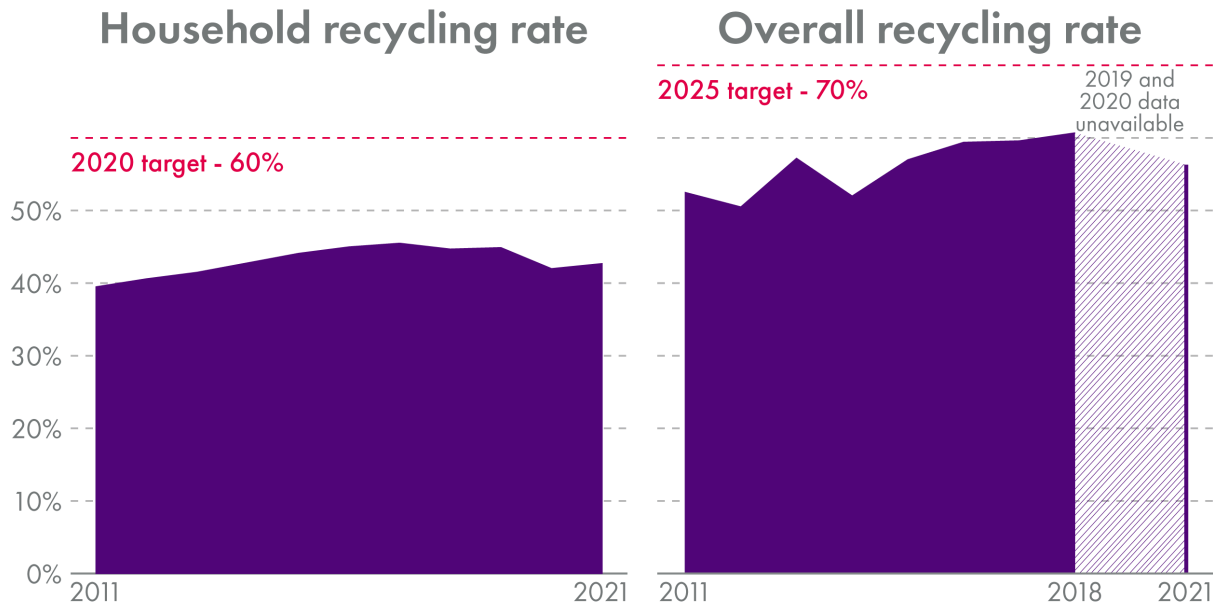
The WFAS recycling rate in 2021 was **56.3%**, a decrease from the 60.7% of waste recycled in 2018. SEPA state that the reduced recycling rate "reflects a marked reduction in waste in construction and demolition wastes, such as soils and mineral wastes, which typically have a relatively high recycling rate".

Whilst long-term progress has been made with recycling towards the target of 70% by 2025 (from 52% in 2011 to 61% in 2018), progress has also somewhat flatlined over the past few years of available data, and according to 2021 figures has fallen to pre-2015 levels (see Figure 8 below). In 2021, a drop in the recycling rate to 56% was observed. This was the first available data point following the onset of the pandemic, which SEPA states is likely to have impacted on recycling levels.

3. To recycle 60% of all household waste by 2020 - target missed.

The 2020 target to recycle 60% of household waste has been missed with rates stalling for several years following previous increases from 40% in 2011 to 46% in 2017. In 2021, the household recycling rate was 42.7%, a slight increase from the 42% figure in 2020 (see Figure 8 below), with both years likely to have been impacted by the pandemic. The highest level was in 2017 when the household recycling rate was 45.5%.

[SEPA state that the](#) small "increase in waste recycled between 2020 and 2021 is likely due to a bounce back from the impact of the COVID-19 lockdown and other restrictions in 2020, in which the amount of waste recycled and the waste recycling rate was the lowest recorded since 2013".

Figure 8: Recycling rates in Scotland 2011 to 2021 and progress against targets

Source: adapted from SEPA waste data ([2021 WFAS data](#) and [Scottish household waste summary data](#))

4. To reduce food waste by 33% from the 2013 baseline by 2025.

[Zero Waste Scotland's report 'How much food waste is there in Scotland?' published in 2016](#) is considered to provide the best insight to date on the scale of food and drink waste. In 2013 (with a view to establishing the baseline for a target), an estimated 987,890 tonnes of food and drink in Scotland was wasted, broken down as follows:

- Household (solid and liquid waste) – 598,946 tonnes (60.6%)
- Food and drink manufacturing – 248,230 tonnes (25.1%)
- Other sectors – 140,714 tonnes (14.2%)

Food losses incurred in primary production are currently excluded from these baseline figures. [Zero Waste Scotland state that:](#)

“ The report shows that just under half of food waste comes from households, with the majority arising from industry and commercial enterprise. It highlights the need to work with business to reduce food waste from farm to fork.”

Zero Waste Scotland also estimate that household food waste accounts for 2,240,000 tonnes CO₂e which represents 2.9% of Scotland's carbon footprint. ²³

There are currently very little data on progress towards reducing food waste in Scotland. On 22 June 2023, [Gillian Martin MSP, Minister for Energy and the Environment](#) stated that the Scottish Government "aim to publish an estimate on food waste levels in Scotland in the coming months". The draft 2025 circular economy routemap states:

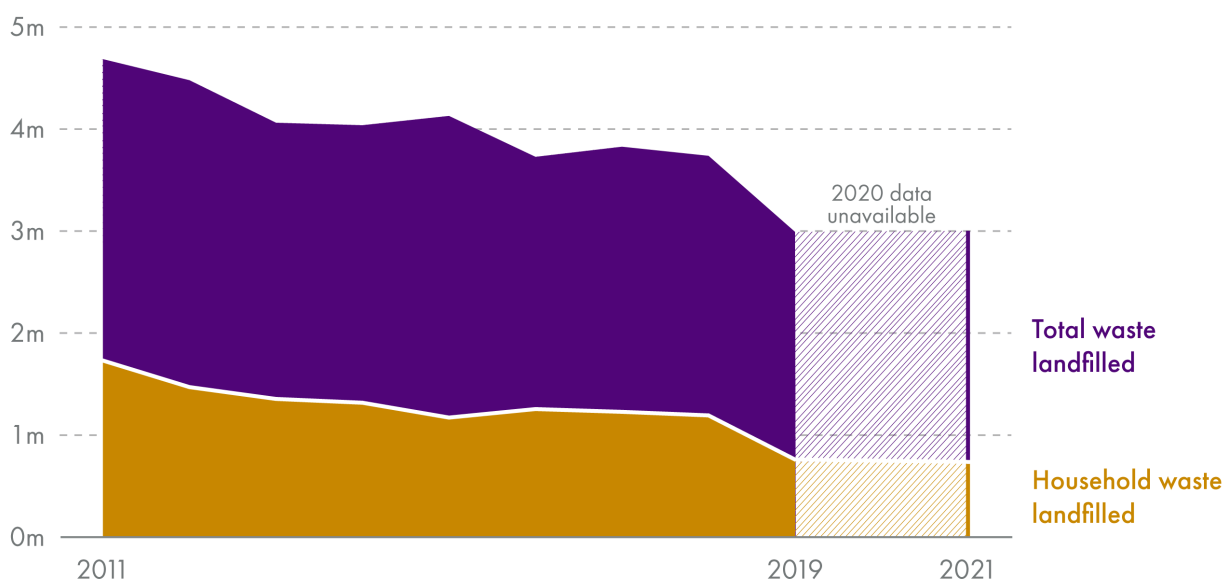
“ In 2018, food waste in Scotland was estimated to be 4% below the 2013 baseline, broadly in line with the UK reduction reported by WRAP. There is some evidence that the COVID-19 lockdown in March 2020 led to a 43% reduction in household food waste across the UK, but this appears to have rebounded as lockdowns have relaxed. While there is a high degree of uncertainty around food waste data, we are clear that we are not seeing the speed and scale on change we would need to meet the 33% target.”

Food waste is not just an environmental issue. **In 2021, 9% of adults surveyed were worried about running out of food due to a lack of money or other resources.** Levels of food insecurity did not change significantly between 2017 and 2021. ²⁴

5. To reduce the percentage of all waste sent to landfill to 5% of all waste by 2025.

In 2021, **Scotland sent 3.00 million tonnes (Mt) of waste to landfill**, a slight increase of 11,000 tonnes (0.4%) from the 2.99 million tonnes landfilled in 2019. The longer-term trend is of decreasing disposal to landfill (see Figure 9 below), from 4.7 million tonnes in 2011 to 3.0 million tonnes in 2019. In percentage terms, in 2021 30.2% of all waste was sent to landfill. This proportion has been slowly dropping towards the 5% target (see Figure 10 below), but clearly, as recognised in the 2025 routemap, the 2025 target is unlikely to be met without rapid changes.

Figure 9: Scottish WFAS disposed to landfill by waste category 2011 - 2021

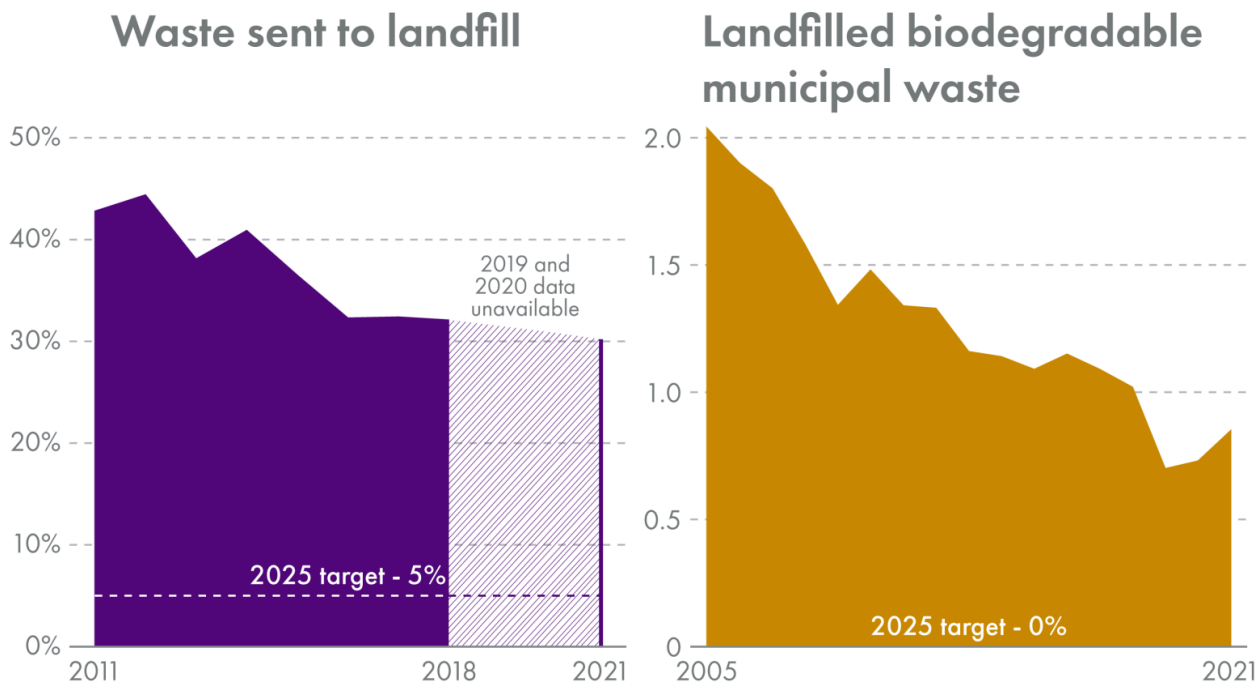


Source: adapted from SEPA data ([Waste from all sources – Summary data 2021](#))

6. To end the landfilling of biodegradable municipal waste - with a ban coming into force on 31 December 2025.

In 2021, 0.85 million tonnes of biodegradable municipal waste (BMW) was sent to landfill. Between 2005 and 2020, the amount of BMW sent to landfill has more than halved, with a significant drop between 2018 and 2019, however there has been a slight increase since 2019 (see Figure 10 below). The overall trend is considered to reflect increased recycling, [the impacts of Scottish landfill tax](#) and other preparations for the 2025 ban on BMW being sent to landfill - including diversion to incineration.

Figure 10: Progress towards 2025 landfill target and landfill ban

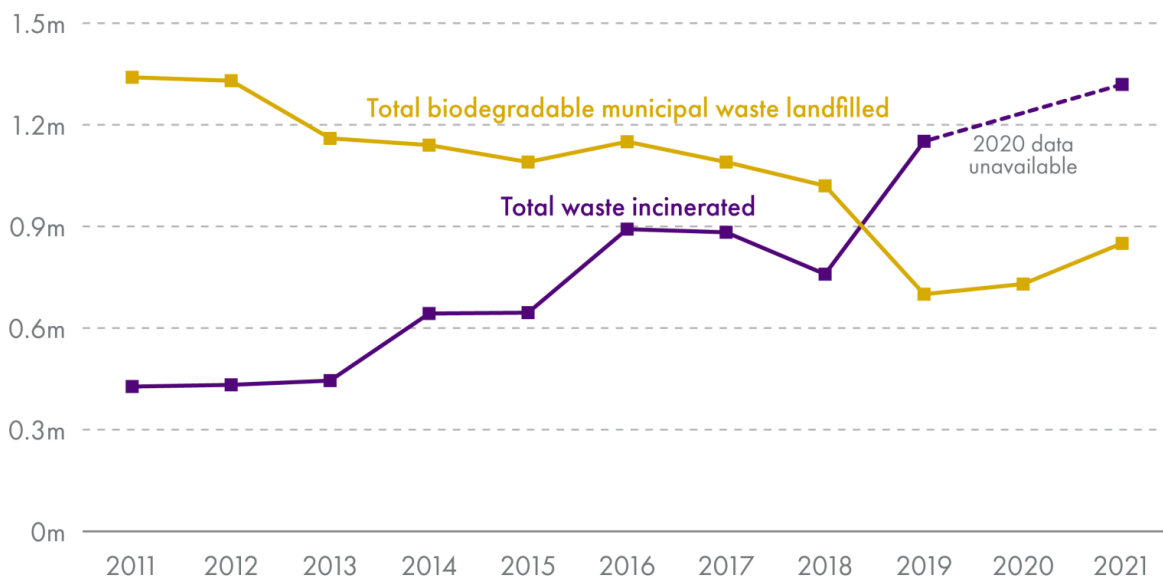


Source: adapted from SEPA data ([Waste from all sources – Summary data 2021](#))

Incineration trends and 2022 review

Over the same period in which total BMW landfilled has decreased, there has been an increase in incineration in Energy from Waste facilities in Scotland. In 2021, 1.32 million tonnes of Scottish waste was incinerated, an increase of 168,000 tonnes (14.6%) from 2019, following the longer-term trend of increasing incineration of waste (see Figure 11 below).

Figure 11: Waste incinerated in Scotland 2011-2021 (in million tonnes) plotted against total biodegradable municipal waste landfilled



Source: adapted from SEPA data ([Waste from all sources – Summary data 2021](#))

In May 2022, the Scottish Government published an independent Review of the Role of Incineration in the Waste Hierarchy in Scotland.²⁵ The aim of the review was to ensure that the management of residual waste in Scotland aligns with Scotland's carbon reduction ambitions. The review provided a view on how incineration should be managed in the context of a circular economy transition:

“ Incineration should be thought of as a transitional technology that helps Scotland bridge the gap from mass landfill to a low waste, low carbon, more circular economy. We are currently in the growth phase, but as set out by several stakeholders, if Scotland is to meet its resource and waste management and climate change mitigation targets, there will be a corresponding future phase down. Planning by central and local government for how to manage this is essential to avoid unnecessary expense or environmental damage.”

Key related legislation

Waste legislation including the waste hierarchy

Whilst the concept of the circular economy is only more recently becoming embedded in policy and legislation, the concept is closely related to the 'waste hierarchy' (see Figure 12 below) which has been embedded in Scottish law since 2008 in relation to production and disposal of waste - introduced to transpose requirements of [the EU Waste Framework Directive](#).

Under the waste hierarchy, waste prevention through efficient use and reuse of resources, recycling and recovery of value should be prioritised in that order, with landfill or other disposal a last resort (see Figure 12). Section 34 of [the Environmental Protection Act 1990](#) (as amended) makes it the duty of everyone (with the exception of occupiers of domestic properties as respects the household waste produced at those properties) who produces, keeps or manages controlled waste, or as a broker or dealer has control of such waste, to take reasonable measures to apply the waste hierarchy. Producers of waste also have a duty under the Act to take reasonable steps to increase the quantity and quality of recyclable materials.

Figure 12: The Waste Hierarchy

Source: adapted from [Scottish Government](#)

Climate legislation

The [Climate Change \(Scotland\) Act 2009](#) gave Scottish Ministers powers in a number of areas relevant to the transition to a circular economy including to:

- establish Deposit Return Schemes (DRS)
- require specified persons to produce waste prevention or management strategies
- require specified persons to report on waste produced
- set targets for the reduction of packaging
- require charging for the supply of single-use carrier bags.

The [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2019](#) amended the 2009 Act to include a requirement for a climate change plan - which must include policies and proposals in specified sectors including in waste management (although circular economy policies could cut across all sectors specified, not just waste management).

In preparing climate change plans, the 2019 Act requires that Scottish Ministers must have regard to both just transition principles, and the climate justice principle. The climate justice principle is defined as including the importance of taking action to reduce global emissions of greenhouse gases. In other words, the importance of tackling Scotland's consumption emissions is recognised in existing climate legislation.

Environmental Protection Act 1990

The [Environmental Protection Act 1990](#) gives Scottish Ministers powers to prohibit or restrict the importation, use, supply or storage of "injurious substances or articles", where that is considered appropriate for the purpose of preventing "pollution of the environment or harm to human health or to the health of animals or plants". These powers were used by the Scottish Government for example [to ban certain single-use plastics in 2021 via the](#)

[Environmental Protection \(Single-use Plastic Products\) \(Scotland\) Regulations 2021.](#)

UK Environment Act 2021

Whilst [the UK Environment Act 2021](#) largely does not apply to Scotland, Scottish Ministers have powers under the Act (these powers are concurrent with the UK Secretary of State who could introduce UK-wide regulations with devolved administrations' consent) to introduce regulations for:

- establishing producer responsibility schemes
- setting resource efficiency requirements for products placed on the market
- requiring that resource efficiency information is available on products.

Public body duties

Some existing legal duties on Scottish Ministers and other public bodies are potentially relevant to the development of a circular economy, notably:

- The **sustainable procurement duty** set out in the [Procurement Reform \(Scotland\) Act 2014](#).
- [Public body duties under Part 4 of the Climate Change Act 2009](#). [Scottish Government guidance on these duties states](#) that "Waste management is a key area as all organisations produce waste and all bodies can, through their own waste treatment decisions, influence the way waste is managed in society and businesses".

UK Internal Market Act 2020

The [UK Internal Market Act \(2020\)](#) or 'UKIMA' established two Market Access Principles of mutual recognition and non-discrimination to preserve the ability to trade unhindered in every part of the UK. This was a post EU exit measure, to seek to provide a replacement framework for the UK internal market, which was previously underpinned by membership of the EU Single Market. There is [background to the Act and its potential implications for circular economy policy in a 2020 SPICe blog](#). The mutual recognition principle for goods provides that goods which have been produced or imported into one part of the UK, and which can be sold or supplied there without contravening any relevant requirement, can be sold in any other part of the UK, free from any relevant requirements which would otherwise apply.

The Act means that where the Scottish Government wishes to introduce new, divergent standards in pursuit of a circular economy which are different from the rest of the UK (or being introduced earlier than the rest of the UK, such as the single-use plastics ban), and engage these two principles, this may require agreement with the UK Government on an exclusion from the UK Internal Market Act principles. The [process for this is set out in a SPICe blog](#). The full implications of UKIMA on the future development of circular economy policy, how the UK and devolved governments will work together to advance a circular economy under the UKIMA framework, and what level of policy divergence across the UK will be possible, largely remains to be seen. There have been early examples of significant disagreement (e.g. the Deposit Return Scheme) as well as apparent agreement (e.g. the single-use plastics ban).

International developments (including EU Circular Economy Programme and 'keeping pace' considerations)

EU Circular Economy Programme

Following the UK's departure from the EU there is no longer a requirement to continue to comply with EU law. However, Scottish Ministers have indicated that, where appropriate, they would like to see Scots Law continue to align with EU law. The [Scottish Government's Environment strategy: Vision and Outcomes](#) states "We will seek to maintain or exceed EU environmental standards".

EU waste and circular economy policy has been a key driver of Scottish and UK-wide legislation and policy. The [Waste Framework Directive](#), for example, which has now been subject to many amendments, established the waste hierarchy, minimum waste targets, and frameworks in areas such as producer responsibility. The [Ecodesign Directive](#) established a framework for reducing the energy intensity of a number of products. The [WEEE Directive](#) introduced rules with the aim of reducing the environmental impacts caused by end-of life electronic and electrical items.

The European Commission adopted a [new circular economy action plan \(CEAP\)](#) in March 2020. It is one of the main building blocks of the [European Green Deal](#), Europe's new agenda for sustainable growth. The CEAP policy framework is focussed around three key principles:

- **Designing sustainable products:** a sustainable product legislative initiative to widen the [Ecodesign Directive](#) beyond energy-related products, with aims to improve product durability, reusability, upgradability and repairability, addressing the presence of hazardous chemicals in products, and increasing energy and resource efficiency.
- **Empowering consumers and public buyers:** proposals include a revision of EU consumer law to ensure that consumers receive trustworthy and relevant information on products including on their lifespan and on the availability of repair. The Commission will also consider further strengthening consumer protection against green washing and premature obsolescence, and the Commission has committed to work towards establishing a 'right to repair'.
- **Circularity in production:** Proposals include assessing options for further promoting circularity in industrial processes.

Since March 2022, the European Commission has adopted a package of measures proposed in the circular economy action plan. This includes:

- **A Sustainable Products Initiative:** including the proposal for the [Ecodesign for Sustainable Products Regulation](#).
- **EU strategy for sustainable and circular textiles.**
- **Proposal for a revised Construction products Regulation** : including requirements for greener and safer construction products.
- **Proposal for empowering consumers in the green transition** : aims to ensure

consumers get adequate information on products' durability and repairability before purchasing.

- **Revision of EU rules on Packaging and Packaging Waste** including measures such as:
 - targets for packaging waste reduction in Member States and mandatory reuse or refill targets in sectors such as retail and catering
 - EU-wide standards for over-packaging
 - design criteria for all packaging to increase recycling rates
 - mandatory compostability for some packaging
 - mandatory deposit return system for plastic bottles and aluminium cans
 - Labels on all packaging to facilitate correct waste sorting by consumers.
- **Communication on a policy framework for biobased, biodegradable and compostable plastics** with the aim of improving the understanding around these materials.
- **Proposal on common rules promoting repair of goods** which introduces a 'right to repair'.
- **Proposal for a Directive on green claims** to stop companies from making misleading claims about environmental merits of their products and services.
- **Measures to reduce the impact of microplastic pollution on the environment.**

Other international developments - Irish Circular Economy Bill

The [Circular Economy and Miscellaneous Provisions Act 2022](#) was passed in Ireland in 2022 and:

- defines the Circular Economy for the first time in Irish domestic law
- incentivises the use of reusable and recyclable alternatives to a range of single-use disposable packaging and other items (including through powers to set levies)
- re-designates Ireland's existing Environment Fund as a Circular Economy Fund, which will be ring-fenced to provide support for environmental and circular economy projects
- introduces a mandatory segregation and incentivised charging regime for commercial waste, similar to what exists for the household market. This aims to increase waste separation and support increased recycling rates
- provides for the use of a range of technologies, such as CCTV for waste enforcement purposes, to support efforts to tackle illegal dumping and littering
- places Ireland's Circular Economy Strategy and National Food Loss Prevention Roadmap on a statutory footing, establishing a legal requirement for governments to develop and periodically update these policies

- consolidates the Irish Government's policy of keeping fossil fuels in the ground – by introducing prohibitions on exploration for and extraction of coal, lignite and oil shale.

On introducing new levies on single-use items, the [Irish Government states that](#):

“ As it passed through the Dáil, the Act received broad cross-party support to introduce levies on all single-use packaging over time and where more sustainable alternatives are available and it comprises more social protections, including measures to protect low-income households and people with disabilities.”

The Irish Government also states that under the Act, over time, a range of single-use disposable products will be phased out. The process will begin with a ban on the use of disposable coffee cups for sit-in customers in cafés and restaurants, followed by introduction of a charge on disposable cups that can be avoided completely. The Act also allows for levies on all single-use packaging to be introduced.

Debates leading up to the passing of the Irish Act include discussions of the function and impact of national legislation on the circular economy in the context of [international markets, supply-chains and market forces](#), and [the potential for environmental issues to continue to be exported](#) e.g. where waste can be exported to avoid increasing restrictions - highlighting the need for global as well as national action.

Other international developments - regional circular economy laws

In March 2023, the Regional Government of Andalusia in Spain passed [Law 3/2023 of 30 March on the Andalusian Circular Economy \(Ley 3/2023, de 30 de marzo, de Economía Circular de Andalucía\)](#) - the first circular economy law to pass in the country. Amongst other things, the new legislation provides for:

- the creation of the Andalusian Office of Circular Economy and preparation of a Andalusian Strategy for the Circular Economy
- the incorporation of environmental and circular clauses for public procurement
- increased analysis of the life cycle of products, public works and services - including establishing an Andalusian Public Registry of Life Cycle Analysis.

Securing circular economy benefits - academic critique of the circular economy model

A circular economy is not an end in itself - it is generally expressed as transition that is necessary to tackle the negative environmental and socio-economic impacts of unsustainable consumption.

Some research on the circular economy model highlights a risk that circular economy interventions which seem intuitively beneficial, unless carefully designed, may not have the intended benefits, or could even have unintended negative consequences. This can be described as the possibility for 'rebound effects'²⁶.

For example, secondary production of goods using recycled material could increase overall demand or supply of goods rather than displace primary production e.g. increasing

our consumption of used clothes may not displace our consumption of virgin textiles if that displacement is not incentivised. This potential risk of 'rebound effects' has led some academics to [argue that a circular economy will only have environmental benefits where it fundamentally reduces production and consumption](#) ²⁶ .

Even more broadly, there is discussion around to what extent, circular economy interventions will be able to successfully tackle the twin climate and nature crises within economic systems that prioritise growth. A [2023 NatureScot research report on drivers of biodiversity loss highlights challenges](#) of tackling cultural factors where we have strong ties to increasing consumption, and consumption which depletes nature has been strongly linked to measurements of economic growth.

The Scottish Government's economic strategy aims to deliver economic growth but also commits to creating a wellbeing economy acknowledging that *"the narrow pursuit of growth at all costs, without resolving the structural inequalities in our communities or respecting environmental limits, is reductive."* ¹⁴

There is an argument that circular economy interventions, where they result in circularity of resource use, act to 'decouple' economic growth from consumption of finite resources, and is regenerative by design, creating the foundations for sustainable economic growth ²⁷ . ²⁸

However, recent academic debate has also questioned the circular economy concept on the grounds that it will not be able to decisively reduce environmental impacts where it supports economic growth. Some researchers have argued that both energy and material consumption are so tightly linked to economic activity that the circular economy in its current form is not likely to be able to decouple this link. ²⁹ A recent research article argues that past experience has shown that efforts to increase resource efficiency have not led to the desired reduction in resource consumption, because efficiency gains can drive further increases in consumption (known as Jevons' Paradox). ³⁰ Some academics consider the only long-term viable solution is a post-growth or steady state approach to our economies. ³⁰

A full discussion of rebound effects, and whether a circular economy is compatible with goals of economic growth is outwith the scope of this briefing. It is likely however, that these issues will be subject to further academic debate and research as more countries adopt, define and seek to measure the impact of circular economy strategies.

Circular Economy Strategy

What the Bill does - sections 1 - 5

Sections 1 to 5 of the Bill set out requirements for Scottish Ministers to prepare a circular economy strategy and related requirements.

Section 1 requires Scottish Ministers to prepare a circular economy strategy which must set out:

- Scottish Ministers' objectives relating to developing a circular economy
- Scottish Ministers' plans for meeting those objectives (including priorities for action)
- arrangements for monitoring progress towards meeting the objectives.

The strategy also may set out any other matters relating to developing a circular economy that the Scottish Ministers consider should be included.

Whilst the Bill itself does not technically include a definition of 'a circular economy', section 1 (3) sets out that in preparing the circular economy strategy, the Scottish Ministers must have regard to the desirability of the economy being one in which:

- processes for the production and distribution of things are designed so as to reduce the consumption of materials
- the delivery of services is designed so as to reduce the consumption of materials
- things are kept in use for as long as possible to reduce the consumption of materials and impacts on the environment
- the maximum value is extracted from things by the persons using them
- things are recovered or, where appropriate, regenerated at the end of their useful life.

The above criteria are repeated again later in the Bill as underpinning considerations for setting circular economy targets - in practice therefore the Scottish Government is framing a circular economy as meaning these aspects. The Bill does not refer to the waste hierarchy.

In considering priorities for action within the circular economy strategy, the Bill requires Scottish Ministers to have particular regard to sectors and systems most likely to contribute to developing a circular economy.

Consistency with other strategies including the Climate Change Plan

The circular economy strategy must be prepared with a view to achieving consistency, so far as practicable, with:

- the climate change plan prepared under section 35 of the Climate Change (Scotland) Act 2009
- the environmental policy strategy prepared under section 47 of the UK Withdrawal

from the European Union (Continuity) (Scotland) Act 2021, and

- any other strategy or plan which the Scottish Ministers consider to be relevant.

Other requirements

Other key requirements in relation to the circular economy strategy are:

- introduction of a **duty on Scottish Ministers to have regard to the circular economy strategy** in making policies (including proposals for legislation)
- A **requirement to consult** on a draft strategy and lay a copy of the strategy before the Scottish Parliament (within 2 years of relevant provisions of the Bill coming into force)
- Scottish Ministers must **review and revise the strategy at least every 5 years**
- Scottish Ministers must **report on progress** made against objectives and plans included in the strategy, "as soon as practicable after the end of each reporting period" - where "reporting period" means 30 months i.e. 2.5 years since the strategy was last published. Reports must be laid in the Scottish Parliament.

Background

The draft 2025 circular economy routemap (published May 2022) sets out context for the statutory circular economy strategy, stating that it:

"...would sit within the framework of Scotland's Environment Strategy, supporting the delivery of its vision and outcomes, meet requirements outlined in the Waste Framework Directive and also link to the forthcoming Biodiversity Strategy. As part of the strategy it is also proposed that Resource Reduction Plans are developed for key sectors..."

And:

"A Circular Economy Strategy would also include, or signpost to, a new monitoring and indicator framework that will allow for tracking of Scotland's consumption and wider measures of circularity. In turn this could be used to establish relevant targets to drive targeted action."

The draft routemap also sets out a range of proposed or ongoing areas of work designed to underpin the development of the strategy and inform circular economy policy more broadly, such as:

- A strategy to improve waste data
- A programme of research in 2022 and 2023 on waste prevention, behaviour change, fiscal incentives and material-specific priorities.

Interaction of Circular Economy strategy with other strategies

The Circular Economy Strategy sits within a framework of a large number of environmental and economic strategies (set out in above background sections), where there are potential

inter-linkages, relationships and a need for coherence.

The Scottish Government has stated that Scotland's Environment Strategy will seek to provide "an overarching framework" to bring multiple environmental strategies and plans together and identify strategic priorities and opportunities - including the circular economy strategy.

The Scottish Government [published an Environment Strategy for Scotland: Vision and Outcomes on 25 February 2020](#) and is required by the UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021 to prepare and publish an environmental policy strategy. The Vision and Outcomes are set out in a Box below.

Scotland's Environment Strategy: Vision and Outcomes

By 2045: by restoring nature and ending Scotland's contribution to climate change, our country is transformed for the better – helping to secure the wellbeing of our people and planet for generations to come.

The six Outcomes:

- Scotland's nature is protected and restored with flourishing biodiversity and clean and healthy air, water, seas and soils.
- We play our full role in tackling the global climate emergency and limiting temperature rise to 1.5°C.
- We use and re-use resources wisely and have ended the throw-away culture.
- Our thriving, sustainable economy conserves and grows our natural assets.
- Our healthy environment supports a fairer, healthier, more inclusive society.
- We are responsible global citizens with a sustainable international footprint.

Interaction with Climate Change Plans (and previous Parliamentary scrutiny)

As mentioned in a previous section, [the 2020 Climate Change Plan \(CCP\) update](#) (published December 2020) included a number of circular economy commitments, and a new CCP is expected in the coming months. The CCPu committed to embedding circular economy principles across sectors, prioritising areas considered to have the most opportunities: construction; agriculture/food and drink; energy and renewables; procurement; skills and education; and plastics.

In its scrutiny of the draft CCPu, [the Scottish Parliament's Environment, Climate Change and Land Reform \(ECCLR\) Committee recommended](#) in 2021 that the plan should include tangible commitments to deliver circular economy strategies for each of the priority sectors identified in the plan. In response, [the Scottish Government noted that](#) "Work is underway on the development of roadmaps for each of the priorities listed, which will be taken forward alongside the development of the 2025 Routemap."

Tensions between climate and circular economy policy?

In considering the compatibility or coherence across Climate Change Plans and any future

Circular Economy Strategy produced under the framework of the Bill - questions may arise around possible tensions between drivers to reduce terrestrial emissions vs consumption emissions. The clear driver for policies in the CCP is to reduce terrestrial emissions to progress Scotland towards net zero. The drivers for actions in a Circular Economy Strategy may be more aligned with reduction of consumption emissions, or reducing the extent to which we, in Scotland, export other environmental impacts of our consumption.

There are possible strategic actions (e.g. increasing reprocessing of waste in Scotland, increasing local food production) that could support the transition to a more circular economy, which could reduce Scotland's carbon footprint, but have a negligible impact on terrestrial emissions (or even, conceivably, *increase* terrestrial emissions). There are also likely to be clear opportunities for win-wins e.g. reducing food waste, reducing overall consumption - where outcomes are likely to be both a reduction of terrestrial and consumption-based emissions.

Stakeholder views

The [analysis published by the Scottish Government of consultation responses](#) on proposals for the Bill sets out that:

- Many respondents endorsed the proposal to introduce a duty to develop a Circular Economy Strategy.
- On strategic focus, some respondents highlighted specific issues to cover including planning, the built environment, investment, the just transition, procurement, waste, materials, skills, education the marine litter, data collection and end-of-life waste.
- A small number suggested that plans for the circular economy should be incorporated to a wider economic strategy.
- Some respondents highlighted the need for cross-sectoral working to develop and implement any new Circular Economy strategy.

Circular Economy Targets

What the Bill does - section 6

Section 6 of the Bill gives the Scottish Ministers a power to impose targets by regulations relating to developing a circular economy.

Subsection (2) sets out particular aspects of the circular economy to which Ministers must have regard in considering imposing targets in regulations under subsection (1). This includes:

- processes for the production and distribution of things are designed so as to reduce the consumption of materials
- the delivery of services is designed so as to reduce the consumption of materials
- things are kept in use for as long as possible to reduce the consumption of materials and impacts on the environment
- the maximum value is extracted from things by the persons using them
- things are recovered or, where appropriate, regenerated at the end of their useful life.

Subsection (3) provides further illustrative provision about what targets set in regulations may relate to including:

- reducing the consumption of materials
- increasing reuse
- increasing recycling
- reducing waste.

It also allows the regulations to make provision for review of the targets.

Subsection (5) requires the Scottish Ministers to consult appropriate persons, and the general public, before laying a draft of regulations under subsection (1) before the Scottish Parliament.

Subsection (6) allows for regulations under subsection (1) to make the ancillary provision listed there, including e.g. different provision in relation to different areas of Scotland, and transitional and saving provision to manage the transition should the targets change.

The Scottish Government recognises that robust data on waste is required to set evidence-based circular economy targets. The Policy Memorandum highlights consultation responses that indicated that targets should be "science-based and relevant to identified outcomes".

The Scottish Government further explains its reservations for including targets for carbon and material footprint on the face of the Bill, as suggested by responses to the consultation, is due to a lack of consensus on methodologies and datasets to inform targets:

“ [...] the Scottish Government believes targets should be set on the basis of a developed monitoring and indicator framework that considers a range of circular economy measures. This should be underpinned by rigorous stakeholder engagement to ensure there are no unintended consequences of target setting. This is a developing field, particularly in relation to consumption reduction, with no firm consensus on methodologies and datasets; for example, the recently published Circularity Gap Report and the Material Flow Accounts arrive at different, albeit similar, figures for Scotland’s Material Footprint. The recently published report by the Scottish Science Advisory Council noted that “Complex, interconnected, and circular material flows require a robust universal system of digital data recording with free and open sharing”. The UK Government has taken a similar approach to setting resource efficiency targets through secondary regulations under powers in its Environment Act 2021.³¹ ”

Background

As described earlier in the briefing, the [Circularity Gap report highlights that the Scottish Economy is driven by overconsumption](#). The consultation paper and policy memorandum note the following context for introducing proposals for circular economy targets:

- The Scottish Government's commitment to reduce consumption and waste by embracing society-wide resource management and reuse practices in response to Scotland's Climate Assembly and Children's Parliament recommendations in December 2021.
- The European Parliament calling on the European Commission to consider EU targets for 2030 to significantly reduce the EU material and consumption footprints and to introduce a suite of indicators to measure resource consumption.
- Zero Waste Scotland's publication in May 2021, of Scotland's first Material Flow Accounts and other potential existing high-level indicators that could be used to measure consumption to set targets.^{32 31}

Draft 2025 circular economy routemap

The Scottish Government's [draft 2025 circular economy routemap](#) gives some further detail on work planned to support the development of future targets using these powers. It states that "any targets will need to be underpinned by a robust monitoring and indicator framework that gives holistic tracking of Scotland’s consumption levels and wider measures of circularity which would need to be developed first". It also notes this is "consistent with calls from the European Parliament for a suite of indicators to measure resource consumption"

The draft routemap also states the Scottish Government will investigate a reuse target:

“ We propose to investigate the feasibility and impact of setting reuse targets in Scotland by 2025 in order to encourage measures that extend product lifespan, mainstream opportunities for reuse, and support progress towards metrics that monitor consumption. Few countries have national, legislated reuse targets, but a range of initiatives to implement re-use and preparation for re-use targets are underway throughout Europe . In Scotland, we know that a wide range of reuse activities already take place, from formal redistribution networks to informal sale or exchange. However, we currently have no way to monitor the type, volume or impact of this activity.”

Arguments for more emphasis on consumption emissions

Some reports have recommended that the climate governance framework in Scotland should give more emphasis to consumption emissions. SPICe commissioned research published in 2022, [Environmental Fiscal Measures for Scotland: learning from case studies and research to create a potential strategic approach](#), states:

“ Over time the measurement of climate related emissions may move from a territorial basis to a carbon footprint basis; thereby including the embedded carbon in materials and products as well as direct emissions. This will lead to a bigger emphasis on circular economy fiscal measures...”

The [Report of the Advisory Group on Economic Recovery](#) (established by the Scottish Government to advise on Covid-recovery) argued there was a case for more emphasis to be put on reducing Scotland's carbon footprint rather than focusing on terrestrial emissions:

“ Taking carbon out of our economy and out of our lifestyles will require sustained investment and the creation of new jobs, industries and supply chains. And we must do this in a way which ensures that global emissions are reduced, not simply relocated. This is a potential unintended consequence of Scotland’s net-zero target which is based on territorial emissions, and there is a case for having a more explicit focus on consumption-based emissions (e.g. carbon footprint). This could be in the form of new or additional targets, or a greater role for those consumption-based measures in government decision-making and could provide an opportunity to embed the principles of a circular economy within government.”

Stakeholder views

Respondents to the Scottish Government's consultation expressed support (86% approved) for the proposal to provide enabling powers to set statutory circular economy targets. The consultation analysis found that there was a common acknowledgement that voluntary waste-based and resource consumption targets had largely been ineffective and focused too narrowly on recycling.³³ Respondents also stated that targets should take into account the impact of the Scottish economy abroad, for example the impact of imported goods. There were suggestions that statutory targets should be set as soon as possible and no later than 2025. Suggestions for targets included material and carbon footprint targets, a reuse target and a more ambitious food waste target of 50% by 2030.

In a [position paper published in April 2022](#), Scottish Environment Link called for the inclusion of a headline material footprint target to be included in the Bill.

“ The Bill must require annual publication of Scotland's material footprint and set long term, interim and year on year reduction targets, based on scientific advice. Scotland's material footprint covers the raw materials used for all goods consumed in Scotland. It includes metals, fossil fuels, non-metallic minerals and biomass, for example timber. Scotland must aim for sustainable levels of material use, estimated at about 8 tonnes per capita per year. We suggest an interim target for metals, minerals and fossil fuels of 50% reduction by 2030 (following the Netherlands) with a target for biomass to be developed to ensure that increased demands for biomass do not result in habitat destruction and biodiversity loss. ³⁴ ”

Improving waste and consumption data

SEPA is responsible for reporting national waste statistics to the Scottish Government. In October 2017, SEPA published [a strategy for improving waste data in Scotland](#). The aim of the strategy is *"to identify and deliver the waste data needs of Scotland, meeting current and future requirements."* The strategy sets out the following objectives:

- collect and report waste data that is reliable and relevant and share it on a timely basis in an integrated, coherent and open format
- explore new approaches to collect and report data, embracing digital solutions and innovative ways of working
- further develop the use of non-weight based measures, e.g. carbon assessment, to increase our understanding of the economic, environmental and social impacts of waste
- identify what waste materials we need to track and the methods required to measure and monitor the movement of waste flows.

The strategy pre-dates the 2020 cyber attack on SEPA, so it is not clear to what extent this has impacted on progress in improving waste data.

Circular economy targets in other countries

In 2022, [Zero Waste Scotland published research on the status of consumption-based targets in other countries](#) ³⁵. Key results of this research were:

- The existence of a consumption reduction target is currently rare and no examples were found of legally binding targets. No consumption reduction targets were found to have legal backing.
- Of 18 countries analysed, only Finland, the Netherlands, Spain, and the Wallonia region of Belgium had consumption reduction targets that would reduce the aggregate amount of material being consumed. Almost every other target identified focused on increasing the productivity of resources or reducing the circularity gap.
- Proxy targets regarding recycling rates and reductions in sectoral waste were common but were rarely packaged as a framework for addressing consumption reduction itself.

Further information on outcomes of this research is set out in the Box below.

Circular economy targets in Finland, Spain, the Netherlands and Wallonia region of Belgium (Source: [Zero Waste Scotland](#)).

- **Finland:** [Finland's Strategic Programme to Promote a Circular Economy 2021](#) has three consumption reduction targets:
 - **1.** The consumption of non-renewable natural resources will decrease and the sustainable use of renewable natural resources may increase to the extent that the total consumption of primary raw materials in Finland in 2035 will not exceed what it was in 2015. Natural resources used to manufacture products for export are not covered by the objective*. (*The objective takes into account Finland's total consumption that includes imported products needed for people's everyday lives, infrastructure and the consumption of domestic raw materials.)
 - **2.** The productivity of resources will double by 2035 from what it was in 2015.
 - **3.** The circular material use rate (CMU) will double by 2035.
- **Spain:** In 2020 the Spanish government released their [national circular economy strategy España Circular 2030](#). The **headline target is the reduction of the national consumption of materials by 30% by 2030, using 2010 as the reference year**. The region of País Vasco region, otherwise known as the Basque region also has a circular economy strategy with the following targets:
 - Increase resource productivity by 30% by 2030.
 - Increase the circular material use rate by 30% by 2030.
- **The Netherlands:** In 2016 the [Netherlands launched a program for a completely Circular Dutch Economy by 2050](#), with an intermediary target of halving the use of primary abiotic raw materials by 2030 (e.g. minerals, metals, fossil raw materials). Regional governments have also developed targets for example, circular procurement targets.
- **Wallonia (Belgium):** Belgium devolves responsibility for creation of consumption reduction and circular economy plans to the regional level. There are three main regions: Brussels, Flanders, and Wallonia. Regional targets include:
 - Increasing resource productivity by 25% from 2020-2035.
 - Reducing direct material input and domestic material consumption by 25% by 2030 (compared to a 2013 baseline).
 - Reduce material footprint by 30% by 2030.

Restrictions on the disposal of unsold consumer goods

What the Bill does - section 8

Section 8 of the Bill inserts a new section 78A into the Climate Change (Scotland) Act 2009 ("the 2009 Act"). Section 78A(1) gives the Scottish Ministers a power to make regulations imposing prohibitions or restrictions on the disposal of unsold consumer goods.

The term "consumer goods" is defined by section 78A(2) as those intended to be purchased, used or consumed by a consumer (as defined in section 78A(4)). Section 78A(3) provides that goods are unsold if they have not been sold to, or have been returned by, a consumer. Regulations under subsection section 78A(1) will be subject to the affirmative Parliamentary procedure.

The Bill does not specify what type of products will be subject to regulation. The policy memorandum explains that regulations could be "focused on goods where there is the most significant environmental impact and be informed by improved data collection".

Section 78A(5) makes further provision about the content of any regulations, with section 78A(6) making particular provision about enforcement, including that Regulations may create offences and make provision for the issue of fixed penalty notices for breaches of the restrictions in the regulations.

Section 78A(7) requires Scottish Ministers to consult appropriate persons before laying a draft of any regulations before the Scottish Parliament.

Section 78A(8) provides that enforcement authorities must have regard to any guidance by the Scottish Ministers in relation to the functions conferred by the regulations.

Background

When products are unnecessarily destroyed, it is also the energy and resources used to produce these goods that are wasted. It is estimated that the destruction of unsold goods generates 5 to 20 times more greenhouse gas emissions than reuse.³⁶

In June 2021, the issue of disposal of unsold goods became the focus of media attention in Scotland after [undercover filming by ITV News](#) appeared to show unsold goods being sent to landfill at an Amazon warehouse in Dunfermline. Unsold items such as smart TVs, laptops, drones, hairdryers, headphones, computer drives, books and sealed face masks were apparently sorted into boxes marked "destroy". The story claimed that documents uncovered during the investigation indicated that in one week, more than 124,000 items were marked 'destroy' compared to 28,000 items in the same period that were labelled 'donate'. Amazon's response to the report was that the landfill site also has a recycling centre and that none of their items go to landfill in the UK.³⁷

On 11 March 2022, the Minister for Circular Economy, Lorna Slater announced that the Scottish Government was considering proposals to introduce a ban on the destruction of

unsold goods as part of the consultation on the Circular Economy Bill. The Minister stated:

“ This proposal is a direct response to the public concerns about what happens to items that go unsold. By pursuing a ban, we can make sure they make it into the hands of those that need them, and help Scotland reduce its carbon footprint. ³⁸ ”

The statement explained that the proposals would make sure Scotland keeps pace with Europe (see Box below for information on EU developments) and referred to France's recently enacted ban on the disposal of unsold goods (see Box below for more information).

Case Study: France's ban on the disposal of unsold goods

In 2020, France adopted legislation on the fight against waste and the circular economy ('[Loi relative à la lutte contre le gaspillage et à l'économie circulaire](#)'). This new law encourages businesses across various sectors, municipalities, and citizens to eliminate waste and adopt more circular practices. The law also aims to promote a societal transformation and support the '[solidarity economy](#)'. It introduced several measures that are a world first, such as the ban on the destruction of unsold goods and the reparability index.

It has been estimated that around EUR 630 million worth of unsold products are destroyed in France every year and media reports have revealed that large retailers and online commercial platforms are systematically destroying at scale everyday products such as clothes, books, and household appliances that are not being sold. It is also estimated that nearly EUR 180 million worth of hygiene and beauty products are destroyed annually in France, although three million French people regularly lack basic hygiene products.

For all products covered by an Extended Producer Responsibility scheme, the ban will enter into force by the end of 2021 and for all other products by the end of 2023. The measure aims to encourage companies to rethink their stock management and production. Rather than landfill or incinerate unsold goods, companies will have to reuse, donate, or recycle their unsold products. Under the law, all goods considered to be of first necessity, such as hygiene products, will have to be donated to charitable organisations. ³⁶

The Business and Regulatory Impact Assessment (BRIA) sets out the potential cost savings associated with the policy:

“ Based on French research, on a per capita basis, the amount of goods destroyed via landfill and incineration could have a total value of approximately £22 million (although any regulations would require further Scotland based research). Businesses would avoid costs associated with the destruction of goods via landfill or incineration, with average costs of around £125-180 per tonne for landfill and £90-110 per tonne for incineration. ³⁹ ”

In terms of potential costs, the BRIA further states that some businesses may have to change existing business practices and there would be enforcement costs for SEPA, estimated between £30,000- 200,000 per year depending on the enforcement model. ³⁹

Keeping pace - EU developments on regulating the destruction of unsold goods

In March 2022, the European Commission put forward a proposal for a regulation establishing a framework for setting ecodesign requirements for sustainable products ([Proposal for a Regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC](#)).

The regulation includes a proposal to ban the destruction of unsold goods. Article 20 of the proposed regulation would require companies that discard unsold consumer products would be subject to transparency requirements and would have to publish:

- the number of discarded products
- the reasons for discarding them, and
- how many of the discarded products were prepared for reuse, remanufacturing, recycling, energy recovery and disposal.

Companies would need to disclose the information publicly. The Commission would be empowered to ban the destruction of particular groups of products that have significant environmental impacts through delegated acts. In principle, these rules would not apply to Small and Medium Enterprises, unless specified otherwise.⁴⁰

The proposal is currently subject to negotiation between the Council and the European Parliament. [In May 2023, the European Council adopted its position on the proposed regulation](#). The Council position extensively amends the chapter on the destruction of unsold consumer products by introducing a direct prohibition on the destruction of unsold apparel and clothing accessories, with a 4-year exemption (after entry into force of the regulation) for medium-sized companies, and a general exemption for small and micro-companies. The Council also excludes motor vehicles from the scope of the proposed regulation.

Stakeholder views

There was a high-level of support (86% of respondents) for this proposal in responses to the Bill consultation. [The consultation analysis](#) states:

“ It was felt that there may be teething problems for businesses in the short term, but long-term they would see the benefits of better stock management practices. It was noted that consumers should be educated on areas like inbuilt obsolescence, and that the proposal could potentially be combined with EPR [Extended Producer Responsibility] measures. Respondents also felt that the proposal could have a social impact, as unsold goods could be donated to vulnerable members of society. However, some stated their doubt that the goods would end up being used. For those not in favour, reasons included the need for a more robust definition and scope of ‘durable goods’, increased costs for businesses, lack of enforcement and investigation potential, the risk of loopholes, and lack of storage for unsold goods.³³ ”

With regards to what products should be included, plastics, food, furniture, textiles and electrical goods were mentioned most frequently.

Charges for single-use items

What the Bill does - section 9

Section 9 of the Bill introduces delegated powers for Scottish Ministers to require imposition of charges for single-use items.

It does so by amending [the Climate Change \(Scotland\) Act 2009](#), adding a section 87A on 'Charges for supply of single-use items'. New section 87A gives Scottish Ministers powers to, by regulations, require suppliers of goods to charge for items specified in the regulations, and to apply net proceeds raised "to the advancement of environmental protection or improvement or to any other purposes that may be reasonably regarded as analogous".

Regulations may include provision about:

- The circumstances in which the requirement to apply a charge applies.
- The suppliers to whom the requirement applies.
- The minimum amount to be charged for an item specified in the regulations.
- How the net proceeds raised by the charge are to be ascertained.
- The particular purposes to which those net proceeds are to be applied.
- The enforcement authority, enforcement functions and arrangements, including the keeping of records and their production.
- Offences in relation to failures to comply with requirements.

What kind of items could be subject to charges?

Regulations may only specify items which are:

- manufactured
- provided as a container or packaging for goods, or to be used in connection with the consumption or use of goods, and
- likely to be used for that purpose only once, or for a short period.

Proposed use of the powers - initially for single-use beverage cups followed by a "prioritised approach"

The Policy Memorandum sets out that the policy aim of such charges would be "reducing the consumption of such items, and therefore reducing the environmental harm caused". It also states that the Scottish Government intends an early use of the new powers will be to introduce a minimum charge on single-use disposable beverage cups. It states that currently around 380 million single-use cups are placed on the market in Scotland each year.

The [Scottish Government's draft 2025 circular economy routemap](#) proposes that a charge

on single-use cups will be introduced by 2025, and states it will "Develop a prioritised approach to charges and bans on environmentally damaging products". The draft routemap states that the Scottish Government "recognise that these measures may have disproportionate impacts on some businesses and individuals, and we will work with affected sectors to understand the implications of introducing any charges or bans".

The Policy Memorandum states that any regulations made under section 9 would "require further stakeholder engagement and consultation, including detailed impact assessments".

UK Internal Market Act implications

The draft 2025 routemap states that a charge on single-use cups will be introduced by 2025 "subject to the UK Internal Market Act", implying the Scottish Government considers that an exclusion from the free market principles in [the UK Internal Market Act 2020](#) (UKIMA) will be required for the planned charge to be effective. More information on the UK Internal Market Act 2020 and the process for agreeing such as exclusion [is set out in a previous SPICe blog](#) and in the background sections to this briefing.

This may imply that an exclusion to the free market principles in UKIMA may be required for any use of the powers being introduced by this section of the Bill. There may be a question around how, in practice, such exclusions might be pursued by the Scottish Government - i.e. on a case by case basis or potentially through a wider, more strategic agreement.

Fairer Scotland Duty Assessment

The Policy Memorandum notes the relevance of the cost of living crisis in relation to posing additional costs through single-use item charges and that this was highlighted in [the Fairer Scotland Duty Assessment produced for the Bill](#). This Assessment states:

“ Evidence shows that people on low incomes may not purchase quality goods as part of a budgeting strategy. This implies a reliance on cheaper, potentially less durable goods or that people on lower incomes are doing without entirely or borrowing items or money where they can't do without . This may mean that low-income households face budget pressures if they are unable to avoid environmental charges (for example, by purchasing a reusable coffee cup) or if retailers respond to the introduction of restrictions on the destruction of unsold consumer goods by moving away from stocking entry-level or bargain products. Whether these issues occur will depend on the design of secondary legislation and should be considered further prior to the design of secondary legislation. It is possible that measures may be needed to support households purchasing long-lasting goods that will be more cost- effective in the longer term but are initially unaffordable.”

Background

Single-use items can be any product intended to be used only once (or potentially a small or limited number of times) before being discarded. The [Scottish Government's Expert Panel on Environmental Charging and Other Measures \(EPECOM - more information below\)](#) state that:

“ Single-use items have become a defining feature of our modern-day economy and consumer culture. They have transformed the way products and services are provided. However, the rise in items that are discarded after a single use has also led to damaging environmental and social impacts.”

What is a single-use item charge? (and why is it not a tax?)

There is an important distinction between an environmental 'charge' and an environmental 'tax'. The Bill does not purport to introduce new taxes, which are collected by Government or a Government agency. A charge is required to be applied to a product or service, but is not collected i.e. it is not revenue-raising.

The importance of the distinction also relates to the powers of the Scottish Parliament. The Scottish Parliament's devolved powers in respect of charges or taxes are different. The Scottish Parliament has powers to introduce charges on particular products. The Scottish Parliament currently has only those powers over tax that are set out in the Scotland Act 1998 (as amended by the Scotland Acts 2012 and 2016)ⁱⁱ.

An example of an existing environmental charge on single-use items in Scotland is the 10 pence charge on single-use carrier bags. [The Single Use Carrier Bags Charge \(Scotland\) Regulations 2014](#) introduced a 5 pence charge for single-use carrier bags in 2014. [The Single Use Carrier Bags Charge \(Scotland\) Amendment Regulations 2021](#) increased the charge to 10 pence. The aim of the charge was to encourage reuse of bags and reduce litter. Zero Waste Scotland operates [Scotland's Carrier Bag Commitment](#), that asks retailers to report sales and donate money raised to good causes. [Research undertaken by Zero Waste Scotland after one year of the charge](#) suggested usage had dropped by 80% and raised approximately £6.7 million in that year.

Expert Panel on Environmental Charging and Other Measures (EPECOM)

The Scottish Government appointed an Expert Panel on Environmental Charging and Other Measures (EPECOM) in 2019 with a remit to examine how to reduce demand for single-use items, and tackle Scotland's 'throwaway' culture. The Panel published two reports before dissolving.

EPECOM's [first report was published 17 July 2019](#) focused on assessing whether a charge should be applied to single-use beverage cups (such as coffee cups) as an initial measure. Regarding the particular concerns about single-use cups, the report states:

“ According to calculations by Zero Waste Scotland, single-use disposable beverage cups generate circa 4,000 tonnes of waste in Scotland each year. Many disposable cups are made of paper with a waterproof plastic lining, and are difficult to recycle unless they are collected separately from other recyclable material and taken to specialist recycling facilities. As a result they are often incinerated or go to landfill, creating carbon emissions and contributing to climate change.”

The report also states that:

- Disposable beverage cups in Scotland produce an estimated 5,900 tonnes of CO₂e per year.

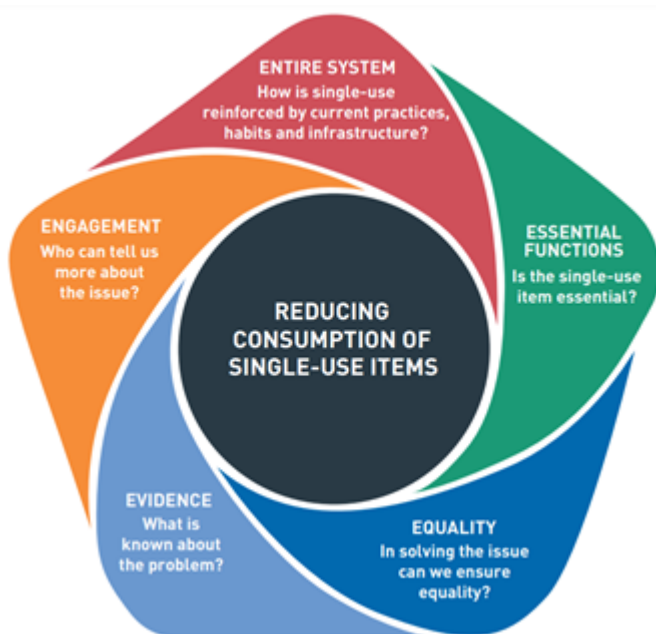
ⁱⁱ There is a mechanism to add new devolved taxes of any description via an 'Order in Council' under section 80B of the Scotland Act 1998 (in Part 4A which was inserted by the Scotland Act 2012). This is not directly relevant to the Bill, because, as described in the briefing, the powers introduced in the Bill relate only to charges.

- An estimated 40,000 disposable cups are littered in Scotland each year, making them one of the most commonly littered items.

The report **recommended introducing a charge for single-use cups, suggesting an initial minimum price of 20-25p per cup**. It notes evidence that charges have been found to be effective in other areas, such as the carrier bag charge (see more below), and that charges have been found to be more effective than discounts, due to differing consumer responses. The report also sets out recommended areas for further consideration by the Scottish Government, including more detailed consideration of business and equalities impacts.

EPECOM's [second \(and final\) report, published September 2020](#), explored how further policies to tackle single-use items should be developed and set out a recommended set of principles. The Panel recommends that the five principles - 'the 5Es' - be used when designing policy to reduce usage of single-use items (see Figure 13 below).

Figure 13: EPECOM's '5Es' principles for designing policy on single-use items



Source: 2020 EPECOM report

The EPECOM reports also set charging in the context of other potential policy interventions to reduce impacts of problematic single-use products, including bans, reusable borrowing schemes, and Extended Producer Responsibility, suggesting charging could be complementary to other measures in some circumstances.

This is aligned with Scottish Government statements in the Policy Memorandum for example that environmental charging for disposable cups could be combined in future with a mandatory takeback scheme being planned as part of UK-wide EPR reforms.

Stakeholder views

The [analysis of consultation responses on proposals for the Bill](#) included the following points about single-use charges:

The proposal for new powers for single-use charges had relatively high support.

- A number of respondents stated they would support an outright ban on all single-use

plastics (with possible exceptions for healthcare settings or needs, or infection control).

- Some suggested the need for charges to tackle fast fashion. Some expressed that prior to a charge/ban on single-use items, the Scottish Government must ensure the availability of sustainable alternatives such as reuse schemes.
- Lifecycle carbon assessment should be conducted to ensure the best option is prioritised. Reservations mainly surrounded the cost-of-living crisis – if imposing additional costs on consumers disproportionately affected more vulnerable members of society.
- The need to avoid charges incentivising alternatives with unintended consequences – for example if charges incentivised a switch to compostable plastics which can contaminate recycling streams.
- Suggestions that charges should be harmonised across the UK nations, and that sufficient time should be allowed to businesses to ensure compliance.

Environmental stakeholders have also called for urgent action and time-scaled commitments on how powers will be used. For example, [the Marine Conservation Society states in reaction to the Bill](#):

“ With an average of 160 litter items found per 100m of beach surveyed in Scotland, our volunteers continue to demonstrate the desperate need to move to a circular economy. We therefore welcome the proposed Circular Economy Bill, especially around introducing powers for charges, which we hope to see on single-use items like cups, and the intent to set targets to increase the amount of items we reuse. We hope to see clarity on the timings and details as the bill moves through parliament. Last year, our volunteers found over 30,000 wet wipes on Scottish beaches and plastic or polystyrene cups were recorded on 58% of our surveyed beaches. We need the Scottish Government to also introduce a ban on plastic in single-use wet wipes and disposable vapes, as well as the proposed legislation in this bill for charges. We know that charges, bans, deposit return schemes and targets all work to help increase how much we reuse items.”

Household waste (duty of care)

What the Bill does - section 10

Section 10 of the Bill amends [the Environmental Protection Act 1990 \(EPA 1990\)](#), to make it a criminal offence for a householder to breach their duty of care in relation to household waste.

The duty of care is set out in [section 34\(2\) of the EPA 1990](#) and requires that an occupier of domestic property must, "as respects the household waste produced on the property, take reasonable steps to secure that any transfer of waste is only to an authorised person or to a person for authorised transport purposes".

Any person who fails "without reasonable excuse" to comply with the duty of care will be liable, on summary conviction, to a fine not exceeding the statutory maximum, and on conviction on indictment, to a fine as set out in section 34(6) of the EPA 1990. Section 10 further inserts a new section 34ZB in to the EPA 1990 **to create a Fixed Penalty Notice regime** where:

- A fixed penalty can be imposed where "a constable or an authorised officer has reason to believe that a person has failed without reasonable excuse to comply" with the householder duty of care.
- The fixed penalty payable is £200 (with Scottish Ministers taking a power in the Bill to change this by regulations) and would discharge any liability to conviction for an offence under section 34(6).
- An authorised officer for these purposes means an authorised officer of a local authority or of Loch Lomond and the Trossachs National Park Authority.

The Policy Memorandum states that this provision will: "ensure that householders are clearer about their duties in regards to household waste and deliver a more consistent approach to enforcing duty of care obligations". It also states that the aim is "to aid in the prevention of fly-tipping where an offence is traced back to a particular household, and raise awareness of householder responsibilities when disposing of waste."

In [the Equalities Impact Assessment for the Bill](#), the Scottish Government states:

- "It is anticipated that the bulk of enforcement action will be by way of fixed penalty notice or, in the case of SEPA, fixed monetary penalty, rather than criminal prosecution. This proposal will also bring Scottish duty of care provisions in line with those in England and Wales".
- "Updated guidance for local authorities will be developed to ensure a greater understanding of enforcement responsibilities and will include clear guidelines on when enforcement action, including use of Fixed Penalty Notices would be considered reasonable".

Background - flytipping and the household duty of

care

As set out above, householders in Scotland have an existing duty of care in relation to household waste under [section 34 \(2\) of the Environmental Protection Act 1990 \(as amended\)](#), which states that an occupier of domestic property "shall, as respects the household waste produced on the property, take reasonable steps to secure that any transfer of waste is only to an authorised person or to a person for authorised transport purposes".

It is not a criminal offence to breach this duty in Scotland. It is a criminal offence in England and Wales, where there are fixed penalty regimes (established by [sections 34ZA and 34ZB of the Environment Act 1990 as amended](#)).

[Guidance on the householder duty of care published by the Scottish Government states:](#)

“ It is your responsibility to ensure that any waste produced on your property is only taken by someone who is authorised to carry that waste. In order to do this you should ask that person/company if they are a registered waste carrier. You may wish to confirm the registration is valid and this can be done by checking the SEPA public register. Only after you have confirmed such proof should you give your waste to them. It is advisable to ask where your waste is going. You should be suspicious of people or businesses offering unrealistically cheap waste services. This may be a sign that the waste is not being legally managed.”

And specifically regarding liability for flytipping, the guidance states:

“ If you have not made reasonable checks to ensure that waste produced on your property is carried by appropriately registered people and that waste is subsequently found to have been fly-tipped you may share liability with the fly-tipper and be subject to enforcement action. ”

There is [further guidance on complying with the existing duty of care on the SEPA website](#), including how to check whether a waste carrier is registered with SEPA.

Flytipping issues in Scotland

A key aim of the householder duty of care with respect to waste is to prevent flytipping. [The Scottish Government describes flytipping as](#) "the dumping of waste in the wrong place, and can be anything from a bin bag of household waste to large quantities of domestic, commercial or construction waste", and states that 26,000 tonnes of waste is flytipped annually. The "unauthorised or harmful deposit, treatment or disposal" of waste is a criminal offence under [section 33 of the Environmental Protection Act 1990](#).

The Scottish Government [states in its 2023 National Litter and Flytipping Strategy that:](#)

- There are over 60,000 incidents of flytipping reported each year in Scotland¹⁶, costing over £10 million of public money to clear up.
- Data is currently collected in a number of different ways and inconsistencies serve as a barrier to understanding the full scale of flytipping across the country.
- Evidence suggests that litter and flytipping can affect physical and mental health, alongside visible deterioration in quality of areas where people live and use key services.

Flytipping can cause a number of issues including: environmental harm due to risks to wildlife, leaching of chemicals, loss of amenity, risks to public safety or health, a burden on private landowners, and public costs associated with remediation, enforcement and investigation.

Those found responsible for flytipping can be subject to fixed penalty notices (currently £200, see [section 33A of the EPA 1990](#)), or if criminally convicted, a fine not exceeding £40,000 or a prison term not exceeding 6 months on summary conviction, or an unlimited fine or prison term not exceeding 2 years on indictment (set out in [section 33\(8\) of the EPA 1990](#)).

However, the Policy Memorandum for the Bill states that "Evidence of who is responsible for fly-tipped waste items can be difficult to obtain, resulting in the majority of costs incurred for clearing fly-tipped waste being borne by local authorities and landowners".

Consultation on flytipping and Members Bill

2021 consultation on litter and flytipping

In 2021, the Scottish Government, in partnership with Zero Waste Scotland, Keep Scotland Beautiful and SEPA, [published a consultation on a national litter and flytipping strategy](#) - to update [the 2014 strategy](#). It did not explicitly consult on making it a criminal offence for a householder to breach their duty of care under the EPA or on introducing fixed penalty notices - but more broadly one of the objectives set out was to "Develop a more effective enforcement model" for flytipping.

The Policy Memorandum for the Circular Economy Bill states that "An analysis of the National Litter and Fly-tipping Strategy consultation demonstrated strong support for a more robust fly-tipping enforcement regime" and that this was also seen in responses to [the 2022 Member's Bill consultation on flytipping](#) where there was strong support for the introduction of stricter liability on the generator of waste and for Scottish legislation to be more consistent with the position in England and Wales.

2022 consultation on Members Bill on flytipping

In March 2022, [a consultation was published by Murdo Fraser MSP on a Proposed Fly-tipping \(Scotland\) Bill](#), which set out "to reduce the incidence of flytipping by introducing new measures and strengthening existing measures to prevent it, including by improving data collection, improving enforcement procedures, increasing penalties for offenders, and by making changes regarding liability for the removal of fly-tipped waste". It set out that the Bill would "seek to introduce strict liability on the generator of the waste for its clear up and in respect of sanctions for its disposal", where a householder would only be absolved of liability for flytipped waste originating from their household if they could show they had paid for waste to be disposed of by a third party and checked they had the relevant waste disposal licence.

The [consultation on the Members Bill](#) also included proposals in other areas: including to review data collection, reporting and publication, a proposal to remove legal liability for clean-up of flytipped waste from the landowner where they are not at fault, and proposals to increase and standardise sanctions - including a suggested £2000 fixed penalty notice (currently £200).

2023 National Litter and Flytipping Strategy

In June 2023 the Scottish Government published the finalised National Litter and Flytipping Strategy alongside a 2023-24 Action Plan, after publishing a consultation analysis in July 2022.

The Action Plan for 2023-24 includes the following proposed actions on flytipping:

- A new fixed penalty regime to allow local authorities to issue Fixed Penalty Notices for breaches to householder duty of care obligations in relation to the disposal household waste (in the Circular Economy Bill).
- New powers to allow enforcement authorities to search and seize vehicles suspected to be involved in illegal waste activity (also in the Bill).
- Raise the current value of Fixed Penalty Notices which can be issued by local authorities to the current maximum in Scotland of £500.
- Resource sharing between key stakeholders and fora including the Litter Managers Network, Scottish Partnership Against Rural Crime and Flytipping Forum.
- Support stakeholders to review guidance on roles and responsibilities of SEPA, local authorities, national parks and Police Scotland in investigating and enforcing flytipping .
- Develop guidance and carry out trials to better support private landowners to deter and deal with flytipping affecting their land.
- Enhance use of research to identify unregistered waste carriers and rogue operators online.
- Conduct an evidence review of the enforcement of litter and flytipping offences.
- Work collaboratively with key stakeholders to scope options to improve the effectiveness, efficiency and consistency of prevention activity that could be trialled.
- Develop a Litter & Flytipping Data Strategy and simplify reporting channels.

Household waste (household waste requirements)

What the Bill does - section 11 (household waste requirements)

Section 11 of the Bill amends the Environmental Protection Act 1990 to introduce both the potential for both civil penalty charges (a non-criminal monetary penalty) and fixed penalty notices for incorrectly using waste collection services. This would enable local authorities to issue penalties for failure to comply with obligations in relation to household waste and recycling.

Under [section 46 of the EPA 1990](#), local authorities can already issue notices requiring household waste to be placed in the appropriate bin. Failure to comply with a notice is already an offence in Scotland, however there is currently no fixed penalty regime and no alternative means of enforcement such as civil monetary penalties. Penalty charges are already available in Wales and in England.

Key aspects of the penalty regimes established by section 11 of the Bill are:

- The power to require a person to pay a civil penalty charge or a fixed penalty notice is given to "an authorised officer of a waste collection authority" - the local authority or Loch Lomond and Trossachs National Park Authority.
- The amounts of the charges are not specified and would need to be set in further regulations - the fixed penalty charge may not exceed level 2 on the standard scale ([currently £500](#)).
- Scottish Ministers also take powers to make regulations on the procedures which are to apply to the imposition of charges, such as in relation to the period of payment, and the circumstances where a penalty may be withdrawn.
- A civil penalty notice or fixed penalty notice can be imposed for a failure to comply with a requirement in section 46(1), (3)(c) or (d) or (4) of [the EPA 1990](#), which includes requirements imposed by local authorities in relation to waste and recycling collection such as:
 - To place waste for collection in receptacles of a kind and number specified
 - How and when receptacles are placed and accessed for the purposes of emptying
 - The substances or articles which may or may not be put into the receptacles and precautions to be taken where particular substances or articles are put into them.
- A written warning must be given before a civil penalty charge can be imposed – which must identify and explain the failure to comply, and if ongoing, set a period of time within which the person must comply.
- Before being issued with a civil penalty notice, a person must be given notice of the

local authority's intention to do this, and given an opportunity to make representations which must be taken into account. There is also a right of appeal in relation to which Scottish Ministers can make regulations about the appeal procedure.

- Before issuing a written warning and or a civil penalty notice, the local authority must be satisfied that the person failed without reasonable excuse to comply with the requirements in section 46(1), (3)(c) or (d) or (4) of the EPA 1990.
- The Bill enables (but does not require) Scottish Ministers to issue guidance on the use of this penalty regime which waste collection authorities (i.e. principally local authorities) must have regard to if issued.

The Policy Memorandum states that civil monetary penalties are “**anticipated to be the primary means of enforcement**”, and the fixed penalty notice procedure would be “available for householders who persistently and deliberately do not comply with existing obligations in relation to household recycling, with the further option of criminal enforcement for more serious and persistent offending”.

The Policy Memorandum states that the current lack of provision for monetary penalties or sanctions in this area is considered by the Scottish Government "to be a gap in local authorities' enforcement powers and inconsistent with the powers available to them to address other issues (e.g. litter and flytipping)".

What the Bill does - section 12 (Code of Practice on Household Waste Recycling)

Section 12 of the Bill amends the Environmental Protection Act 1990 to insert a new section 44ZZA, requiring Scottish Ministers to prepare and publish a code of practice setting out the standards expected of and steps to be taken by, local authorities in carrying out their waste management functions in so far as they relate to the collection and recycling of household waste.

The Bill states that the code may in particular make provision about:

- the receptacles to be used for household waste collection
- the frequency of household waste collection
- the items of household waste that are to be recycled or composted
- managing contamination of household waste that is capable of being recycled or composted
- communicating with the public about the collection and recycling of household waste.

The Policy Memorandum states the aim that this code would seek to establish "consistent collection systems" and address issues such as consistent definitions of materials e.g. Paper, card, glass, plastics, metal and food.

Scottish Ministers must consult on the code in preparing it, explicitly including local authorities and SEPA, and must lay a draft code in the Scottish Parliament for a minimum

period of 40 days before its completion (with no account to be taken of time when Parliament is dissolved or in recess for more than 4 days).

There is an existing [Household Recycling Charter and Code of Practice](#), agreed in 2015 by [Scottish Government and the Convention of Scottish Local Authorities \(COSLA\)](#) which [local authorities can sign up to voluntarily](#). It aims to encourage more consistency in recycling services across different local authorities.

The Policy Memorandum states that whilst the voluntary Charter has been a valuable platform to develop more consistency, "only around one-third of local authorities have fully aligned their services to reflect Code of Practice standards", and notes significant variations in recycling rates across Scotland. The need for a mandated approach is also described as being closely linked to forthcoming changes in Packaging Extended Producer Responsibility. More information on these linkages can be found [in the Scottish Government's draft 2025 circular economy routemap](#).

What the Bill does - section 13 (Targets for local authorities relating to household waste recycling)

Section 13 of the Bill amends the Environmental Protection Act 1990, inserting a new section 47B, giving Scottish Ministers powers to, by regulations, set targets for local authorities in relation "to their carrying out of their waste management functions in so far as they relate to the recycling of household waste".

Any targets set cannot relate to the period before 1 April 2030.

Key provisions in relation to the use of these powers include:

- regulations may impose liability on a local authority to pay a penalty to the Scottish Government if a target imposed is not achieved (and may make further provisions about enforcement). Regulations may also provide for appeals against the imposition of such a penalty
- regulations may specify indicators to be used to measure progress against targets
- regulations may confer monitoring functions on SEPA, and provide for the keeping of records and reporting requirements.

Scottish Ministers must consult publicly, and explicitly must consult with local authorities and SEPA, before laying a draft of regulations using these powers.

The Bill also explicitly states that regulations may make different provisions for "different purposes, areas, or local authorities" - i.e. local authorities may not necessarily have the same targets.

Background - household recycling performance

Local authorities are responsible for collecting household waste. The [Waste \(Scotland\) Regulations 2012](#) amended the Environmental Protection Act 1990 to require local

authorities to provide a minimum recycling service to householders.

As described above, the [Household Recycling Charter and Code of Practice](#) are not legally binding but have been adopted by most local authorities, with a view to achieving a more consistent approach to the provision of recycling services across Scotland. However, as the Policy Memorandum states, currently "large quantities of recyclable materials are still sent for disposal when they could be recycled, and rates of non-participation by householders in correctly separating recyclable waste are high".

As set out in a previous section, the Scottish Government set a target for 60% of household waste to be recycled by 2020. This target was missed - household recycling rates have stagnated for several years and fallen from a peak 45.5% level in 2017. In 2021, [the Scottish household waste recycling rate was 42.7%](#) (an increase of 0.7 percentage points from the 42.0% rate achieved in 2020), see Table 1 below.

There is a wide range of household recycling rates across local authorities - from 16.9% (Shetland Islands) to 58.1% (East Renfrewshire). A [detailed breakdown of local authority recycling rates, total waste generated and total waste sent to landfill by area can be found in 2021 Scottish household waste SEPA data](#) (see Table 1).

Table 1: Scottish household waste recycling rates 2011-2021

Year	Percentage (%)
2011	39.5%
2012	40.6%
2013	41.5%
2014	42.8%
2015	44.1%
2016	45.0%
2017	45.5%
2018	44.7%
2019	44.9%
2020	42.0%
2021	42.7%

[SEPA waste data](#)

A [SPICe-commissioned briefing on environmental fiscal reform](#), in reviewing options for fiscal incentives in relation to household waste, states:

“ This system is essentially based on goodwill. Awareness and communications on the use of the system in each local authority is the main route to encourage recycling and reuse by householders. While penalties exist for not using these services appropriately, for example contaminating recyclate materials with other wastes, they are rarely used due to the difficulty of enforcement. A Council may instead choose to withdraw recycling services from a household or business instead of trying to enforce correct use of the services. It is well known that householders do not recycle or compost all the materials they potentially could and so a lot of “recyclates” or compostable materials are lost in non-recyclable waste collections; with a resultant negative impact on CO₂e emissions. Zero Waste Scotland estimated in 2014/15 that approximately 670,000 tonnes, or just under 60% of the residual waste, is made up of waste types that could typically have been recycled with existing kerbside recycling services ^{41 27} . ”

Issues with contamination of recycling - and reporting against the Materials Recovery Code

If recyclables are contaminated with non-recyclable waste e.g. food, nappies, or any non-recyclable materials, this causes barriers to the processing and sale of recyclables and increases processing costs. Ultimately contamination can lead to recyclable materials being landfilled or incinerated. Contamination reduces recycling rates and also increases the cost of recycling systems.

The Scottish Government [introduced a Materials Recovery Code in 2015](#) which requires recycling facilities [to sample waste and report on recycle quality to SEPA](#). SEPA data from 2017 found that that just under a fifth of everything put out for recycling by householders is non-recyclable.

Causes of contamination [are thought to include](#) confusion or lack of awareness caused by product labelling - such as recycle labels too small & faint to read, information in hard to reach places, different ways of displaying information, or a lack of recycling information.

SEPA's [2017 report on performance against the Materials Recovery Code](#) stated that work is needed to:

“ Find ways to reduce contamination at source, including addressing inadequate collection systems, communicating with waste producers, reducing confusion over what can be recycled and sharing examples of best practice.”

SEPA's [subsequent 2018 report on performance against the Materials Recovery Code](#) states that "the overall trend is that input quality is worsening".

Zero Waste Scotland best practice guidance for local authorities

In [February 2023](#), Zero Waste Scotland published [Embedding Circular Economy: An Outline Framework to Support Local Authorities](#) which sets out the crucial role of local authorities in supporting the transition to a circular economy. Specifically on waste management, guidance includes that local authorities should:

- deliver campaigns promoting reuse and recycling services to householders and businesses
- deliver internal campaigns to maximise capture of recyclable materials from offices, schools, depots, etc.
- work collaboratively with stakeholders and other authorities to identify and embed innovative resource management solutions to enhance capture rates, increase participation rates, expand the range of materials collected for reuse and recycling
- take steps to align with the Household Recycling Charter and Code of Practice
- enhance opportunities for reuse and repair at municipal sites
- enhance internal waste and recycling service to increase quality and capture of recyclable materials and expand the range of materials collected.

The guidance also emphasises the role of local authorities in many areas beyond household waste management in supporting the circular economy transition: including through their investment and procurement activities, in exercising planning functions, and

in leading and shaping strategic direction (through for example climate emergency declarations, net zero agenda and targets).

Stakeholder views

The Policy Memorandum states that the consultation on the Bill showed support for placing additional requirements on local authorities in order to increase recycling rates, and views that standardisation of waste collection should be a priority.

Linkages with funding requirements were raised i.e. the need for local authorities to have adequate funding to deliver high quality waste management services, meet additional requirements, and implement adequate behaviour change strategies.

Additionally, in relation to the introduction of fixed penalty notices for not properly using household recycling services, respondents indicated this would need to be combined with public awareness campaigns to support education on what can and cannot be recycled. The Scottish Government states in the PM that it "agrees with this view" and better education and communications and standardisation of high quality services are being taken forward through other provisions in the Bill, and through non-legislative measures, as outlined in the draft 2025 routemap.

International best practice in household recycling

The Scottish Government commissioned a 2021 review of international evidence practices that lead to high household recycling performance. [Key aspects of household recycling schemes considered to be best practice are summarised below:](#)

Service Design

- Providing as many households as possible with access to a full range of recycling services, including kerbside collections of common dry materials (paper/card, plastic, metal, glass). Where possible, a wider range of materials should be collected at kerbside e.g. textiles, plastic film, small waste electrical equipment, batteries.
- Separate food waste collections, including for rural areas and communal bins.
- Garden waste collections where required, although composting should be incentivised.
- Communal bin properties present a challenge because it is difficult to constrain access to residual i.e. non-recyclable waste capacity – a major driver for improved recycling. Where possible, communal collections should be avoided and where required should be supported by practices to encourage proper use of recycling facilities. This could include restricting access to containers e.g. with swipe cards, and to allow data to be gathered that would enable communications to be targeted on households that produce the most waste.
- Services should be complemented by recycling centres or other service provision such as mobile recycling centres, especially in dense urban and highly rural areas.
- Alongside these services there is a need to incentivise effective participation.

Residual Waste (non-recyclable waste)

- Steps to disincentivise production of residual waste are effective in increasing recycling rates.
- A key measure by which this can be done is to restrict residual waste capacity. For door-to-door collections, this can be achieved by emptying residual waste containers less frequently or by reducing their size. For communal bin properties, it is more challenging, but can be achieved by limiting access to waste containers.
- 'Pay as you throw' for residual waste can be an effective incentive.
- Residual waste can be reduced through advanced mixed waste sorting.

Other Incentives

- Incentives can be applied to municipalities (to encourage them to adopt effective services) or to householders (to encourage them to make full use of services).
- For local authorities, Scottish Government could consider setting binding targets, perhaps doing so in a way that takes account of authorities' current performance and any constraints on what they could reasonably be expected to achieve.
- The Scottish Government should make funding and support available to help authorities improve services and incentivise authorities to reach targets.

Communication and Engagement

- A consistent feature of high-performing systems is the use of high-quality, frequent communication to remind householders how to use the system properly.
- EPR will assist with funding, but the Scottish Government may need to supplement this prior to EPR coming on stream, and where a focus is required on non-packaging materials such as food waste.

Littering from vehicles

What the Bill does - section 14

Section 14 of the Bill amends [the Environmental Protection Act 1990 \(EPA 1990\)](#) by inserting new sections 88C and 88D. They add a new enforcement power in respect of an offence of littering under section 87 of the 1990 Act, where the act of littering is from a vehicle.

The new sections of the EPA 1990 gives a litter authority a power to impose a civil penalty charge on the registered keeper of a vehicle, meaning that the registered keeper would be held responsible for any littering offences committed from within that vehicle.

Background

The Scottish Government's [2014 National Litter Strategy](#) made a commitment to remove barriers to enforcement in relation to littering from vehicles.⁴² The Policy Memorandum highlights the scale of the problem, referring to data from a [2022 publication by Keep Scotland Beautiful](#) which found that **94% of roadsides are impacted by litter with 50 tonnes abandoned on Scotland's roadsides each month.**⁴³

The explanatory notes set out that current legislation for littering offences requires the person leaving the litter to be identified before enforcement action can be taken. This presents a barrier to enforcement because it requires litter authorities to identify an individual, which is difficult when littering takes place from a vehicle. These provisions would also bring Scotland into alignment with equivalent enforcement powers already available in England and Wales.

Stakeholder views

The Policy Memorandum explains that the majority of respondents to the consultation thought there should be a new fixed penalty regime introduced for littering from vehicles and also generally supported the proposal to allow the registered keeper of a vehicle to be held responsible for littering from that vehicle. However, it also notes reservations regarding the challenge of effectively enforcing the regime in practice, the ability to provide clear evidence that an offence had occurred and the potential expense of surveillance.

The [consultation analysis set out issues](#) were also raised around the lack of police resource and a tendency to ignore low level infractions. Suggestions for alternative approaches included:

- to focus efforts on educational campaigns on the impacts of roadside littering, while also providing more roadside bins to make waste disposal more convenient
- to record points on the driving licences of those caught littering from their vehicles.

Enforcement powers in respect of certain environmental crimes

What the Bill does - sections 15 - 16

Section 15 of the Bill introduces four new sections to the Environment Act 1995, sections 110A to 110D, which give to persons authorised by SEPA and to constables various powers in respect of the search and seizure of vehicles believed to be used in the commission of certain environmental offences.

These powers are:

- the power to stop the vehicle (but only a constable in uniform may stop a vehicle on a road)
- the power to require any occupant of the vehicle to give the official—
 - the occupant's name and address,
 - the name and address of the person in whose name the vehicle is registered under the Vehicle Excise and Registration Act 1994,
 - any other information the official reasonably requests
- the power to enter premises (but not premises used for residential purposes) at a reasonable time for the purpose of searching or seizing the vehicle
- the power to search the vehicle
- the power to seize the vehicle and any of its contents.

Section 16 of the Bill amends the Control of Pollution (Amendment) Act 1989, the Environmental Protection Act 1990 and the Pollution Prevention and Control (Scotland) Regulations 2012 to set out offences for which the powers in the Bill can be exercised.

These offences relate to the transport of controlled waste without registering and unauthorised or harmful deposit, treatment or disposal of waste. In other words, waste crime typically associated with flytipping.

Background

The purpose of these proposals are to tackle the problem of waste crime such as flytipping. The Policy Memorandum highlights that waste crime is estimated to cost nearly £1 billion each year to the UK economy, and sets out the Scottish Government's intentions for this proposal:

“ The Scottish Government is committed to ensuring that Scottish enforcement authorities (SEPA and local authorities) have the necessary powers to enforce legal requirements effectively and to deter or restrict those illegal activities that hinder and damage the rest of the waste industry in Scotland. There are currently gaps in the powers available in Scotland compared to those available in the rest of the UK and it is proposed to use this Bill to address that issue.”

Current powers are more limited than the rest of the UK. The Policy Memorandum explains that existing legislation does not allow an authorised officer of SEPA to seize a vehicle, without firstly obtaining a warrant to do so, where there are reasonable grounds for believing a specified offence has been committed and that the vehicle was used in the commission of that offence.

With regards to alignment with the rest of the UK, the Policy Memorandum further sets out that environmental regulators in England and Wales have more flexible powers such as being able to seize vehicles for a wider range of suspected offences and it is not necessary for them to obtain a warrant to seize a vehicle in relation to a specified waste crime, provided certain conditions are met.

There is further background on flytipping in a previous section of the Bill on household waste.

Stakeholder views

Respondents to the previous Bill consultation in November 2019 expressed a high level of support for the proposal (91% support). The 2022 consultation asked if there was any new context or evidence that needs to be taken into account when considering the proposal. Some respondents questioned the ability to enforce the measure with current resources and suggested that investigation powers should be strengthened and the reporting process should be reviewed. The consultation analysis also notes some reservations that the measure is extreme. Some respondents suggested that awareness training and education should be given before, or in place of, criminal prosecution.

Some respondents also highlighted that for more vulnerable groups, the loss of a vehicle may impact their ability to work or sustain themselves whereas for others with more disposable income, or for organised illegal waste carriers, the proposal may not act as a deterrent. Additional suggestions from respondents included:

- fines should be high, with vehicles at risk of destruction in the case of repeated offences.
- camera footage from nearby vehicles and bikes could be used in prosecution.
- there should be scope to appeal.

Reporting on waste, surpluses, etc.

What the Bill does - section 17

Section 17 of the Bill introduces a new power for Scottish Ministers to impose a duty on businesses to report publicly on waste and surplus. It modifies the [Regulatory Reform \(Scotland\) Act 2014](#) ("the 2014 Act") by adding a new purpose for which regulations under section 18 of that Act may make provision. [Section 18 of the 2014 Act](#) allows Scottish Ministers to make regulations relating to protecting and improving the environment.

The new purpose under the 2014 Act allows regulations to be made to require persons to make publicly available information on anything stored or disposed of by them, or by someone else on their behalf, except in relation to their domestic activities.

The regulations may provide for enforcement and for offences for failure to make the information publicly available, subject to the maximum penalties already set out in [schedule 2 of the 2014 Act](#).

Background

The Policy Memorandum sets out the Scottish Government's intent for this provision:

“ The Scottish Ministers are keen to encourage innovation to tackle wasteful practices and increase efficiencies. The Scottish Ministers believe that a key way to encourage changes in practices and more targeted action is to enable more effective monitoring and management of waste, by placing duties on businesses to report publicly on waste and surplus.”

The Business and Regulatory Impact assessment states that intention is for this initially to be applied to information about food waste, then extended to other sectors. The policy memorandum further highlights food waste and surplus as a particular area of concern regarding its contribution to greenhouse gas emissions. It states:

“ The Scottish Government has focused on this issue through the development of the Food Waste Reduction Action Plan (“FWRAP”), which sets out the measures required to achieve the Scottish Government's target of reducing food waste by 33% by 2025. While the Scottish Government is aware that a number of companies already report on food surplus / redistribution and the destination for waste stock (e.g. through WRAP's UK-wide Courtauld Commitment), this voluntary approach is unlikely to lead to action at the required scale to address the critical goal of reducing food waste by 33% by 2025 and 50% by 2030.”

Stakeholder views

The Policy Memorandum states that responses to the 2022 consultation regarding this provision were varied. A majority of respondents were in favour of food waste being prioritised but also raised concern that the proposal could be burdensome to smaller organisations.

Responses in support of the proposal also advocated for certain criteria to be specified in relation to this provision, such as prioritising reporting on waste and surplus of items with the highest life-cycle impact, environmental and social costs, and re-use potential.

Respondents to the 2019 consultation who were supportive of the proposal also supported reporting requirements being extended to other types of waste and surplus such as:

- textiles and clothing
- plastic
- electronics
- packaging
- construction.

Consultation proposals not taken forward in the Bill (and expected amendments on Zero Waste Scotland at Stage 2)

Summary of proposals consulted on but not in the Bill

Some of the proposals in the Scottish Government's consultation in advance of the Bill have not been included in the Bill as introduced. These are summarised below, along with reasons provided by the Scottish Government for their omission from the Bill where given.

Proposal for a circular economy public body - and reclassification of Zero Waste Scotland

The 2022 consultation sought views on proposals to establish a circular economy public body. The consultation lists the following statutory duties that this public body might perform:

- Provision of expert advice to Scottish Ministers and leadership in the development of Circular Economy priorities and strategies.
- Pro-active support in the form of funding and advice to stakeholders in meeting national Circular Economy targets and ambitions, particularly cross-sector stakeholders.
- Where appropriate, delivery of key Scottish Government initiatives and programmes to progress Circular Economy ambitions nationally.
- Commissioning and/or production of progressive and leading research that will support and inform the strategic direction of Circular Economy policy in Scotland.

The consultation highlights Zero Waste Scotland — which operates as a not-for-profit company with a limited guarantee — as a key Scottish Government delivery partner with regards to responsible consumption and production. Zero Waste Scotland receives Scottish Government grant award funding to deliver a range of strategic circular economy programmes.

The consultation states that “One of the primary advantages of a public body structure relates to governance and the high levels of assurance which public bodies are required to meet, particularly in relation to effective delivery and stewardship of public funds.”

The [consultation analysis found that respondents were relatively split on the establishment of a dedicated circular economy public body](#) (60% expressed support for the proposal).

Reservations included:

- more detail was required regarding its duties, powers and accountabilities
- disagreement as to whether such a body should have legal/regulatory powers or operate in an advisory capacity
- not enough distinction between the role of this new body and existing organisations such as SEPA, Zero Waste Scotland and Scottish Enterprise

- not clear whether a new body would have additional benefits, and some respondents felt that it would have an additional administrative burden and public cost.

The Policy Memorandum explains that the Scottish Government does not consider that there is a strong rationale for the approach of creating a new body as most of the functions identified in the consultation are already undertaken by Zero Waste Scotland, and Environmental Standards Scotland is responsible for monitoring compliance and effectiveness of environmental law which would cover considering the effectiveness of a circular economy strategy and targets.

However, the Scottish Government does state that it sees merit in transitioning Zero Waste Scotland into a public body to *“allow for governance arrangements consistent with other public bodies to be put in place, without having an impact on ZWS’s delivery capacity or areas of expertise.”*

This also follows [a reclassification of Zero Waste Scotland by the Office for National Statistics \(ONS\) in April 2023](#). The ONS assessed the classification status of Zero Waste Scotland (at the request of the Scottish Government) and concluded that the body is subject to public sector control (for so long as Scottish Ministers are a member of the company, and appointment of directors must be approved by the Scottish Ministers in advance), and is a "non-market producer, as it is majority funded by the Scottish Government and covers less than 50% of its production costs from sales". As such, Zero Waste Scotland Limited has been classified by the ONS as a public sector organisation.

In its policy memorandum, the Scottish Government states an intention to introduce amendments at Stage 2 to confer on Zero Waste Scotland the relevant powers and duties which apply to other public bodies.

Expanded powers for waste charging

The 2022 consultation sought views on incentivising household recycling. Expanded powers for waste charging are not explicitly proposed but Proposal 10 suggests a review of waste charging:

“ Through the Route Map consultation, we are proposing to conduct a review of waste and recycling service charging by 2024 to ensure that we have the right incentives to reduce waste and maximise use of recycling and reuse services. At the moment households in Scotland can be charged for collection of certain waste streams, such as garden waste or uplift of larger items: as a result, householders are effectively being charged for recycling services, which may be acting as a disincentive to recycling. This review will investigate whether the current position incentivises the behaviour that we want in line with the waste hierarchy, or delivers the most value for local authorities, including the highest quality recycle. We are seeking views regarding further enabling powers for Scottish Ministers in the Circular Economy Bill, and if appropriate, local authorities, to incentivise positive household behaviours, to support waste reduction and increased recycling.”

Household waste and recycling collection services are primarily funded via Council Tax. The UK Local Authority Recycling Advisory Committee (LARAC) in its 2018 report, [The Future of Local Authority Waste Funding](#), states:

“ The approach to UK kerbside recycling has been one of encouragement rather than enforcement. Recycling is perceived by many as an additional service with the residual collection as core. To achieve sustainable long term behavioural changes, recycling needs to be considered as an integrated part of the service and not an optional added extra. The EU has set a 50% target for recycling municipal waste by 2020 which the Circular Economy Package proposes to increase to 65% by 2030 (and which the UK government has indicated it will apply). Without fundamental changes to the way in which household waste collections are funded achieving 65% will be a real challenge. Alternative funding approaches to municipal waste collections and integration of other waste collection and reprocessing responsibilities which offer long term self-sustaining solutions must be considered.”

A [SPICe-commissioned briefing on environmental fiscal measures \(published 28 February 2022\)](#) reviewed options for fiscal measures in relation to waste collection and set out:

- At a household level there are limited fiscal measures used to encourage appropriate sorting of recyclable materials. Local authorities are in limited circumstances empowered to charge for the collection of household waste under [the Controlled Waste Regulations 1992](#), most notably for garden waste or bulky waste.
- The application of these charges could be seen as a distortion or imbalance of incentives i.e. charging householders for the collection of green waste but not non-recyclable waste. While previously free, more Councils in Scotland have started charging for green waste collection due to budget pressures.
- The protection of key services elsewhere in Council portfolios is putting pressure on waste service budgets and funding for information campaigns, which are essential for a goodwill-based system.
- Direct charging schemes, also called Pay as You Throw (PAYT) are in place in many other countries to encourage household recycling. Studies have found that weight-based systems are generally the most successful for reducing residual waste; there are different ways to charge such as choice of container size, frequency of collection, and weight of material collected.
- The UK Local Authority Recycling Advisory Committee (LARAC) considers that: "Charging for household waste at source provides an opportunity for essential funds to be raised to support household recycling collections. Applying a higher charge for residual waste and lower or zero charge for recyclables provides a financial incentive for the waste hierarchy principles to be adopted by residents ⁴⁴ .
- Work by Zero Waste Scotland has shown that areas achieving a household recycling rate of 65% and above use a combination of stretching targets, comprehensive collections, incentives to recycle and some form of direct charging for residual waste collections. ⁴⁵

The review also notes a wider context of various pressures and forthcoming changes which are likely to influence how local authorities manage waste and recycling collection. These include:

- increasing budget pressures
- expected introduction of the Deposit Return Scheme, which will reduce the amount of

recyclable drinks containers collected meaning Council services will require to be adjusted to accommodate this

- pressures to improve food waste collections given the significance of this waste stream to carbon emissions
- forthcoming changes to Extended Producer Responsibility schemes for packaging which could result in an income stream for local authorities.

The Policy Memorandum does not provide detail on why expanding powers for waste charging is not included in the Bill. The draft 2025 routemap sets out a proposal to "undertake a review of waste and recycling service charging by 2024, and are seeking views on what further powers, if any, should be considered to support households to reduce waste and recycle more, by 2028".

Proposal for business recycling collection zoning

The consultation also sought views on proposals that would involve contractors competing to undertake all commercial collection in a particular 'zone'. The consultation states this could potentially provide *"opportunities for greater collaboration, cost savings, service standardisation, reducing traffic, transparent charges and added benefits such as bin weighing, carbon accounting and end-destination reporting as part of the contract."*

This would provide an alternative model to the current approach where there are a *"variety of business waste collection providers in an area, operating different collection infrastructure and uplift times impacts on the local environment, including air quality, noise and emissions from multiple vehicles entering the same area to service different clients with similar waste."*

The consultation analysis found that 66% of respondents supported the proposal but some stakeholders raised significant concerns regarding likely impact on small and medium sized enterprises. The policy memorandum states that a review of international models of zoning completed since the initial consultation did not indicate that mandatory approaches to zoning were more successful than voluntary approaches at increasing recycling. It further states:

"Without strong evidence to indicate that voluntary approaches would not achieve recycling improvements or that mandatory approaches would be more successful, and given stakeholder feedback, the Scottish Government does not consider there to be sufficient evidence to pursue mandatory zoning as the preferred approach at this stage."

The Scottish Government sets out its intention to work with stakeholders to develop voluntary approaches to improve commercial recycling.

Topical areas (not directly included in the Bill) - single-use vapes

In [its 2023-24 Programme for Government](#), the Scottish Government announced it would

“ Take action to reduce vaping among nonsmokers and young people and to tackle the environmental impact of single-use vapes, including consulting on a proposal to ban their sale and other appropriate measures.”

In January 2023, [the Scottish Government announced that it had commissioned Zero Waste Scotland to carry out a review of the environmental impact of single use vapes](#) and potential policy options for addressing the problems that they cause.

The [review was published in June 2023](#). Key headlines of the report included:

- In 2022 10.8% of the adult population were regular users of e-cigarettes and that of these, more than a quarter (27%) were estimated to be users of single-use e-cigarettes (SU-ecigs).
- In the 52 weeks to early April 2023, the number of disposable vapes consumed in Scotland was estimated to be between 21 and 26 million units.
- The lithium polymer batteries used in some of the most popular e-cigarettes could be recharged 500 times if the product allowed for such.
- The total emissions associated with single-use vapes in 2022 was estimated to be between 3375 and 4292 tonnes carbon dioxide equivalent (CO₂e).
- The weight of packaging and materials discarded as a result of single-use e-cigarette consumption in Scotland is currently between 800 and 1,000 tonnes per year.
- Water use linked to the manufacture of SU-ecigs was estimated to be between 18761 and 23877 m³ in 2022.
- Despite limited data it is estimated that around 10% of SU-ecigs are littered. In 2022 this was between 21 and 79 tonnes.

The review provided a shortlist of nine policy options considered to best meet the aims of improving management and safe recycling of SU-ecigs and reducing their undesirable impacts:

- **Policy Option 1:** Setting design criteria for e-cigarettes.
- **Policy Option 2:** Requiring that batteries can be removed and be replaced (potentially to all WEEE [Waste Electrical and Electronic Equipment] items).
- **Policy Option 3:** A ban on the sale of SU-ecigs.
- **Policy Option 4:** Charging a deposit for SU-ecigs to be refunded on return for recycling.
- **Policy Option 5:** A tax linked to recycling performance.

- **Policy Option 6:** Changes in the WEEE Regulations relating to the scope of cost recovery, a separate WEEE category for e-cigarettes, costs of management of e-cigarettes and setting targets.
- **Policy Option 7:** A levy or charge on sales payable by the consumer.
- **Policy Option 8:** A ban on flavoured e-cigarettes.
- **Policy Option 9:** Tightening of enforcement of existing law in relation to underage sales.

It is not clear whether the report and Programme for Government announcement has any direct implications for the Bill. The Scottish Government already has some powers to ban products considered to be harmful, for example in the Environmental Protection Act 1990 (used to introduce Regulations on single-use plastics in 2021).

A number of the other policy options set out by Zero Waste Scotland may be achievable through existing powers for secondary legislation, non-legislative approaches or may be reserved or interact with reserved areas. In the case of the policy option for a charge, the Bill includes powers for Scottish Ministers to introduce charges on single-use items, by regulations, as it stands. A number of these approaches could involve consideration of UK Internal Market Act implications.

[Lorna Slater MSP, Minister for Circular Economy, Green Skills and Biodiversity](#) has also set out plans to discuss options with the UK Government and other devolved Governments:

“I will take action and will engage with those affected, including young people, over the coming months, with a view to setting out a way forward in the Autumn. Single use vapes are an issue across the UK, so I have invited Ministers from the other UK governments to meet to discuss the findings of the report and what we can do in response.”

Other [countries in Europe have also announced intentions to ban single-use vapes](#), including France, Germany and Belgium. There are also [recent media reports that the UK Government is considering a ban](#).

Bibliography

- 1 Stockholm Resilience Centre. (n.d.) All planetary boundaries mapped out for the first time, six of nine crossed. Retrieved from <https://www.stockholmresilience.org/research/research-news/2023-09-13-all-planetary-boundaries-mapped-out-for-the-first-time-six-of-nine-crossed.html> [accessed 21 September 2023]
- 2 Circle Economy. (2022, November). The Circularity Gap Report Scotland. Retrieved from <https://www.circularity-gap.world/scotland> [accessed 18 July 2023]
- 3 Zero Waste Scotland. (2021, September 9). Everything we buy has a carbon cost. Retrieved from <https://www.zerowastescotland.org.uk/resources/carbon-cost> [accessed 11 July 2023]
- 4 Scottish Government. (2023, March 21). Scotland's Carbon Footprint 1998 – 2019. Retrieved from <https://www.gov.scot/publications/scotlands-carbon-footprint-1998-2019/documents/> [accessed 11 July 2023]
- 5 IPBES. (n.d.) Models of drivers of biodiversity and ecosystem change. Retrieved from <https://www.ipbes.net/models-drivers-biodiversity-ecosystem-change> [accessed 20 July 2023]
- 6 Scottish Government. (2022, May). Delivering Scotland's circular economy A Route Map to 2025 and beyond. Retrieved from <https://www.gov.scot/binaries/content/documents/govscot/publications/consultation-paper/2022/05/consultation-delivering-scotlands-circular-economy-route-map-2025-beyond/documents/delivering-scotlands-circular-economy-route-map-2025-beyond/delivering-scotlands-circular-economy-route-map-2025-beyond/govscot%3Adocument/delivering-scotlands-circular-economy-route-map-2025-beyond.pdf> [accessed 20 July 2023]
- 7 Scottish Government. (2022, December 13). Biodiversity strategy to 2045: tackling the nature emergency. Retrieved from <https://www.gov.scot/publications/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland/> [accessed 20 July 2023]
- 8 Ellen MacArthur Foundation. (2021). The Nature Imperative: How the circular economy tackles biodiversity loss. Retrieved from <https://ellenmacarthurfoundation.org/biodiversity-report> [accessed 20 July 2023]
- 9 European Environment Agency. (2022, December 8). Production and Consumption introduction. Retrieved from <https://www.eea.europa.eu/publications/zero-pollution/production-consumption> [accessed 21 July 2023]
- 10 International Union for Conservation of Nature (IUCN). (2021, November). Marine plastic pollution. Retrieved from <https://www.iucn.org/resources/issues-brief/marine-plastic-pollution> [accessed 20 July 2023]
- 11 Lau W.W.Y. et al., . (2020). Evaluating scenarios toward zero plastic pollution. *Science*, 369(6510), 1455-1461. doi: DOI: 10.1126/science.aba9475
- 12 World Health Organisation. (2022). Dietary and inhalation exposure to nano- and microplastic particles and potential implications for human health. Retrieved from <https://www.who.int/publications/i/item/9789240054608>

- 13 Scottish Government. (2020, August). Economic Recovery Implementation Plan. Retrieved from <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2020/08/economic-recovery-implementation-plan-scottish-government-response-to-the-advisory-group-on-economic-recovery/documents/economic-recovery-implementation-plan-scottish-governments-response-advisory-group-economic-recovery/economic-recovery-implementation-plan-scottish-governments-response-advisory-group-economic-recovery/govscot%3Adocument/economic-recovery-implementation-plan-scottish-governments-response-advisory-group-economic-recovery.pdf> [accessed 23 August 2023]
- 14 Scottish Government. (2022, March 1). Scotland's National Strategy for Economic Transformation. Retrieved from <https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation/documents/> [accessed 23 August 2023]
- 15 Scottish Government. (2022, November 22). Wellbeing economy toolkit: supporting place based economic strategy and policy development. Retrieved from <https://www.gov.scot/publications/wellbeing-economy-toolkit-supporting-place-based-economic-strategy-policy-development/documents/> [accessed 23 August 2023]
- 16 Ellen MacArthur Foundation. (n.d.) Shaping incentives to enable a circular, low-carbon economy. Retrieved from <https://ellenmacarthurfoundation.org/covid-19-shaping-incentives-to-enable-a-circular-low-carbon-economy> [accessed 20 July 2023]
- 17 Circle Economy. (2020, September 7). RESILIENCE AND THE CIRCULAR ECONOMY: OPPORTUNITIES AND RISKS. Retrieved from <https://www.circle-economy.com/resources/resilience-and-the-circular-economy-opportunities-and-risks> [accessed 2023 July 2023]
- 18 Kramer, K.L. (2012). User Experience in the Age of Sustainability. [No description]. doi: <https://doi.org/10.1016/B978-0-12-387795-6.00001-9>.
- 19 TonToTon. (n.d.) 5 BENEFITS OF A CIRCULAR ECONOMY. Retrieved from https://tontoton.com/5-benefits-of-a-circular-economy/#4_Provides_benefits_for_the_consumer [accessed 28 August 2023]
- 20 Dittmar, H., Bond, R., Hurst, M., & Kasser, T. (2014). The relationship between materialism and personal well-being: A meta-analysis. Retrieved from <https://psycnet.apa.org/record/2014-44347-005>
- 21 Twenge, J.M, and Kasser, T. (2013). Generational Changes in Materialism and Work Centrality, 1976-2007: Associations With Temporal Changes in Societal Insecurity and Materialistic Role Modeling. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/0146167213484586>
- 22 Kahneman, D. & Deaton, A . (2010). High income improves evaluation of life but not emotional well-being. Proceedings of the National Academy of Sciences. Retrieved from <https://www.pnas.org/doi/abs/10.1073/pnas.1011492107>
- 23 Zero Waste Scotland. (2023, March 14). Scotland's Food Waste Reduction Action Plan. Retrieved from <https://www.zerowastescotland.org.uk/resources/scotlands-food-waste-reduction-action-plan> [accessed 23 2023]

- 24 Scottish Government. (2022, November 8). The Scottish Health Survey 2021 - volume 1: main report. Retrieved from <https://www.gov.scot/publications/scottish-health-survey-2021-volume-1-main-report/pages/9/#:~:text=Levels%20of%20food%20insecurity%20have,between%208%25%20and%209%25.> [accessed 23 August 2023]
- 25 Scottish Government. (2022, May). Stop, Sort, Burn, Bury? Independent Review of the Role of Incineration in the Waste Hierarchy in Scotland. Retrieved from <https://www.gov.scot/binaries/content/documents/govscot/publications/independent-report/2022/05/stop-sort-burn-bury-independent-review-role-incineration-waste-hierarchy-scotland/documents/stop-sort-burn-bury-independent-review-role-incineration-waste-hierarchy-scotland-report/stop-sort-burn-bury-independent-review-role-incineration-waste-hierarchy-scotland-report/govscot%3Adocument/stop-sort-burn-bury-independent-review-role-incineration-waste-hierarchy-scotland-report.pdf> [accessed 28 August 2023]
- 26 Zink, T., and Geyer, R . (2017). Circular Economy Rebound. Retrieved from <https://onlinelibrary.wiley.com/doi/am-pdf/10.1111/jiec.12545#:~:text=Energy%20rebound%20occurs%20when%20increases,levels%20of%20production%20and%20consumption.>
- 27 Lassi, A. (2020). Economic growth and circular economy?. Retrieved from <https://projects2014-2020.interregeurope.eu/reduces/news/news-article/10730/economic-growth-and-circular-economy/>
- 28 Ellen MacArthur Foundation. (n.d.) The circular economy in detail: Deep dive. Retrieved from <https://ellenmacarthurfoundation.org/the-circular-economy-in-detail-deep-dive#:~:text=A%20circular%20economy%20is%20a,the%20consumption%20of%20finite%20resources.> [accessed 28 August 2023]
- 29 Weidmann, T.O., Schandl, H., Lenzen, M., Moran, D., Suh, S., West, J., ... Kanemoto, K. (2015). The material footprint of nations.. *Proceedings of the National Academy of Sciences*, 112(20), 6271-6276. doi: <http://dx.doi.org/10.1073/pnas.1220362110>
- 30 Bauwens, T. (2021). Are the circular economy and economic growth compatible? A case for post-growth circularity. . *Resources, Conservation and Recycling*,, 175(105852). doi: <https://doi.org/10.1016/j.resconrec.2021.105852>
- 31 Scottish Government. (2023, June 13). Circular Economy (Scotland) Bill: Policy Memorandum. Retrieved from <https://www.parliament.scot/-/media/files/legislation/bills/s6-bills/circular-economy-scotland-bill/introduced/policy-memorandum-accessible.pdf> [accessed 18 July 2023]
- 32 Scottish Government. (2022, May 30). Delivering Scotland's circular economy - proposed Circular Economy Bill: consultation. Retrieved from <https://www.gov.scot/publications/delivering-scotlands-circular-economy-consultation-proposals-circular-economy-bill/> [accessed 18 July 2023]
- 33 Scottish Government. (2022, November 30). Delivering Scotland's circular economy: Proposed Circular Economy Bill - Consultation analysis. Retrieved from <https://www.gov.scot/publications/delivering-scotlands-circular-economy-proposed-circular-economy-bill-consultation-analysis/documents/> [accessed 14 July 2023]

- 34 Scottish Environment Link. (2022, April). CALL FOR A STRONG CIRCULAR ECONOMY BILL FOR SCOTLAND. Retrieved from <https://www.scotlink.org/wp-content/uploads/2022/04/CE-Bill-call-for-April-2022-FINAL-1.pdf> [accessed 19 July 2023]
- 35 Zero Waste Scotland. (2022, January). Consumption Reduction Targets: Legal Status Research. Retrieved from <https://www.zerowastescotland.org.uk/resources/consumption-reduction-targets-legal-status-research> [accessed 18 July 2023]
- 36 Ellen MacArthur Foundation. (2021). France's Antiwaste and Circular Economy Law: eliminating waste and promoting social inclusion. Retrieved from https://emf.thirdlight.com/file/24/kLSzgapkL.2CJxQkLb3XkLQIS7_/Case%20Studies%20-%20French%20Anti%20Waste%20Law.pdf [accessed 13 July 2023]
- 37 ITV News. (2021, June 22). Amazon destroying millions of items of unsold stock in one of its UK warehouses every year, ITV News investigation finds. Retrieved from <https://www.itv.com/news/2021-06-21/amazon-destroying-millions-of-items-of-unsold-stock-in-one-of-its-uk-warehouses-every-year-itv-news-investigation-finds> [accessed 18 July 2023]
- 38 Scottish Government. (2022). Reducing waste. Retrieved from <https://www.gov.scot/news/reducing-waste/> [accessed 18 July 2023]
- 39 Scottish Government. (2023, June 14). Circular Economy (Scotland) Bill: business and regulatory impact assessment. Retrieved from <https://www.gov.scot/publications/circular-economy-scotland-bill-business-regulatory-impact-assessment-bria/documents/> [accessed 18 July 2023]
- 40 European Parliament. (2023). Ecodesign for sustainable products. Retrieved from [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733524/EPRS_BRI\(2022\)733524_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733524/EPRS_BRI(2022)733524_EN.pdf) [accessed 21 August 2023]
- 41 Zero Waste Scotland. (2017). The composition of household waste at the kerbside in 2014-15 Summary of findings. Retrieved from <https://zerowastescotland.org.uk/sites/default/files/The%20composition%20of%20household%20waste%20at%20the%20kerbside%20in%202014-15.pdf> [accessed 25 January 2022]
- 42 Scottish Government. (2014). Towards a litter-free Scotland: a strategic approach to higher quality local environments. Retrieved from <https://www.gov.scot/publications/towards-litter-free-scotland-strategic-approach-higher-quality-local-environments/> [accessed 4 August 2023]
- 43 Keep Scotland Beautiful. (2022). Roadside litter knows no boundaries. Retrieved from <https://www.keepsotlandbeautiful.org/news/oct-2022/roadside-litter-knows-no-boundaries/> [accessed 4 August 2023]
- 44 LARAC. (2018, April 11). THE FUTURE OF LOCAL AUTHORITY WASTE FUNDING: A LARAC POLICY PAPER. Retrieved from <https://larac.org.uk/sites/default/files/LARAC%20POLICY%20PAPER%20The%20future%20of%20LA%20Waste%20Funding%200418.pdf> [accessed 25 January 2022]

- 45 Zero Waste Scotland. (n.d.) Household recycling rates. Retrieved from <https://www.zerowastescotland.org.uk/content/household-recycling-rates> [accessed 25 January 2022]

Scottish Parliament Information Centre (SPICe) Briefings are compiled for the benefit of the Members of the Parliament and their personal staff. Authors are available to discuss the contents of these papers with MSPs and their staff who should contact Damon Davies on telephone number 85456 or Damon.Davies@parliament.scot, Alexa Morrison on telephone number 85416 or Alexa.Morrison@parliament.scot.

Members of the public or external organisations may comment on this briefing by emailing us at SPICe@parliament.scot. However, researchers are unable to enter into personal discussion in relation to SPICe Briefing Papers. If you have any general questions about the work of the Parliament you can email the Parliament's Public Information Service at sp.info@parliament.scot. Every effort is made to ensure that the information contained in SPICe briefings is correct at the time of publication. Readers should be aware however that briefings are not necessarily updated or otherwise amended to reflect subsequent changes.

