EXPLAINED:
ANNEX IVa OF THE EU WASTE FRAMEWORK DIRECTIVE

EXAMPLES OF ECONOMIC INSTRUMENTS AND OTHER MEASURES TO PROVIDE INCENTIVES FOR THE APPLICATION OF THE WASTE HIERARCHY

In 2018, EU Member States (MS) and institutions agreed on a comprehensive set of laws aimed at preventing household waste and boosting recycling. The new laws are part of four EU Directives: the Waste Framework Directive (WFD), the Landfill Directive (LD), the Packaging and Packaging Waste Directive (PPWD) and the Single-Use Plastics Directive (SUP). All MS are expected to reflect the agreed EU laws in their national legislation by July 2020.

Article 4 (3) WFD requires MS to use economic instruments in order to provide incentives for the effective application of the waste hierarchy. These instruments are primarily to be set up and used by MS, not at the EU level. These economic instruments are used to varying degrees for waste management in some MS, but they are not used systematically or to their full potential everywhere.

Annex IVa of the WFD lists examples of the advanced MS economic instruments, as well as other measures, that can be used to further implement the waste hierarchy and make reuse and recycling more economically attractive. This document provides case studies from different MS to show how these examples have been put into practice. The examples are listed in the same order as the Annex.
1. Charges and restrictions for landfilling and incineration of waste which incentivise waste prevention and recycling, while keeping landfilling the least preferred waste management option

Catalonia’s Landfill and Incineration Tax, with tax refund criteria

In Spain, the region of Catalonia introduced the Landfill and Incineration Tax, with tax refund criteria for municipalities. Waste management treatment fees need to respect the waste hierarchy in order to make landfill and incineration more expensive than recycling. Collected fees and taxes should finance further improvement in waste management that is in line with the waste hierarchy.

Catalan legislation encourages local authorities to enhance separate collection, and at the same time discourage disposal and incineration of mixed waste by making this more expensive than separate collection.

Catalonia introduced mandatory separate collection of biowaste for all municipalities in the region (Catalonia Law on Waste 9/2008).

This approach of subsidiarity in applying taxes at municipal/regional level was a recommendation of the European Commission’s Early Warning report for Spain. The Spanish Waste Act enabled Spanish regions to use economic incentives.

Catalonia diverts waste, with a particular focus on biowaste, away from landfilling and incineration through its Waste Disposal Tax (Law 8/2008). The tax refund criteria for municipalities was introduced to provide a financial incentive for better management of biowaste. The Catalan municipal solid waste disposal tax is the only tax in the EU that affects municipal solid waste, allowing the return of the revenue to taxpayers, according to their performance.

The Disposal Tax is set per tonne of municipal waste being sent to landfill or for incineration. For municipalities that have not begun the implementation of the separate collection of biowaste, there are higher taxes. The tax has been essential for boosting biowaste separate collection and recycling.

There has been a gradual increase in the disposal tax over the last few years to encourage the proper separation of waste at source, minimising disposal and incineration.

<table>
<thead>
<tr>
<th>Year</th>
<th>Landfilling tax</th>
<th>Incineration tax</th>
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<tbody>
<tr>
<td>2018</td>
<td>€35.60 per tonne</td>
<td>€17.80 per tonne</td>
</tr>
<tr>
<td>2019</td>
<td>€41.30 per tonne</td>
<td>€20.60 per tonne</td>
</tr>
<tr>
<td>2020</td>
<td>€47.10 per tonne</td>
<td>€23.60 per tonne</td>
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</table>
The disposal tax refund scheme is set by the law on financing the infrastructure of waste management and fees on the disposal of residual waste (No 8/2008). The amount refunded to municipalities depends on the quality of biowaste per tonne delivered to biological treatment plants.

Source: Agència de Residus de Catalunya
The collected disposal tax is being used for the further improvement of waste management. At least 50% of the money is allocated to biological treatment of biowaste and mechanical-biological treatment of residual waste. The remaining revenue is refunded to the local authorities according to their performance.

Taxes on landfill and incineration have increased the costs of these types of waste treatment, at the same time encouraging the implementation of separate collection of all waste streams. Results are showing that the municipal solid waste disposal tax has contributed to increasing recycling and reducing waste disposal in all the countries where it has been adopted. It is an effective measure that should become mandatory in all European countries and beyond.
2. ‘Pay-as-you-throw’ (PAYT) schemes that charge waste producers on the basis of the actual amount of waste generated and provide incentives for separation at source of recyclable waste and for reduction of mixed waste

**Italy’s Contarina PAYT system**

Contarina is a public company serving 554,000 inhabitants of the Veneto region of Italy. It **achieves 85% waste source separation and generates only 53kg of residual waste per inhabitant per year**. It provides door-to-door collection using a PAYT model. The Legislative Decree No. 22/1997, **Article 49 Establishment of the tariff**, enabled municipalities in Italy to set up PAYT schemes.

Contarina’s PAYT splits the fee for waste generation into a fixed part and a variable part. The **fixed fee** is based on the number of household members. The **variable fee**, charged on top of the fixed fee, is based on the number of residual waste bin and garden waste bin collections. Households doing home composting get a reduction of 30% on the variable fee.

Every household, depending on the number of people, has a fixed number of collections during the year. They can empty their residual waste bin a certain number of times before paying more for extra collections. Separately collected waste is collected by the door-to-door system and is free of additional charges.

This kind of PAYT system minimises waste generation as well as promoting home composting. The less residual waste households generate, the less money they pay.

<table>
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<tr>
<th><strong>DOMESTIC USERS</strong></th>
<th><strong>NON-DOMESTIC USERS</strong></th>
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<tr>
<td><strong>FIXED FEE</strong></td>
<td><strong>VARIABLE FEE</strong></td>
</tr>
<tr>
<td>60%</td>
<td>40%</td>
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<tr>
<td>Amount related to the class of the user area and volume of supplied bins</td>
<td>Based on the number of residual waste bin removals + fixed quota for garden waste</td>
</tr>
<tr>
<td>Based on the number of household members</td>
<td>Based on the number of residual waste bin removals + fixed quota for garden waste</td>
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- 30% for home composting
- Fixed quota for garden waste
Also in Italy, the municipality of Treviso uses PAYT waste tax tariffs in its Regulation Tax on Waste and Services (TARES). It defines a fixed and variable fee of the waste tax for domestic and non-domestic users. The regulation also provides fiscal incentives for home composting.

Article 19 of TARES explains that for domestic users who dispose of compostable waste by home composting, there is a 20% reduction in the variable portion of the tax rate. This takes effect from 1 January of the year following the submission of a specific request which certifies that home composting will be carried out for the following year on an ongoing basis.

3. Fiscal incentives for donation of products, in particular food

Italy, Milan’s discounted Waste Tax for businesses that donate food

In 2018 the Milan Municipal Council changed the Waste Tax Regulation (TARI) and provided a discount to those food businesses (supermarkets, restaurants, canteens, producers, etc.) that donate their food losses to charities.

Article 22 of the TARI Regulation states that the tax reduction will be granted in proportion to the quantity of food donated. Companies must submit a declaration by April of each year containing an estimate of the quantities they intend to donate. They must also give an indication of the organisations to which the surpluses will be delivered, together with documents signed by the subjects who receive the products, certifying their qualification. Commercial and industrial companies that produce and distribute food goods can obtain reductions of up to 50% on the variable part of the waste tax. The discount is applied in the following year.
4. Extended producer responsibility (EPR) schemes for various types of waste and measures to increase their effectiveness, cost efficiency and governance

EPR is a key market-based instrument used to apply the ‘polluter pays’ principle to the management of certain waste streams (Article 8 WFD). MS must set up EPR measures requiring producers of products to bear financial and/or organisational responsibility for the management of the waste stage of a product’s life cycle, including separate collection, sorting and treatment operations. This can also include a responsibility to contribute to waste prevention and to the reusability and recyclability of products.

The EPR general minimum requirements must be established by 5 January 2023 (Article 8a WFD). More specifically, when it comes to packaging, a mandatory EPR scheme has to be established for all packaging by 2025 (Article 7(2) PPWD).

France is a global leader in EPR schemes

France has a broad EPR scheme under which businesses are made accountable for their products and any associated packaging, even after they've been sold. France has one of the most advanced EPR systems in the EU with 20 schemes covering different types of products. These include end-of-life vehicles (ELV), waste electrical and electronic equipment (WEEE), batteries and accumulators, household packaging, fluorinated refrigerant fluids, pharmaceuticals, lubricants, tyres, graphic papers, textiles, infectious healthcare waste, furniture, dispersed hazardous waste and gas canisters.

The French EPR also includes the implementation of eco-modulation of fees. This means that producers will pay a differentiated fee according to how their products perform against environmental criteria, including the quantity of material used, the incorporation of recycled material, the use of renewable resources managed sustainably, durability, repairability, the possibilities of reuse, recyclability, and the absence of ecotoxicity and of dangerous substances (Article L541-10-3).

Article L541-10 of the French Environmental Code states that sectors are subject to EPR and sets out schemes related to waste prevention, reuse and repair.

As part of the French 'Circular Economy Roadmap' new EPR schemes are planned for toys, sports and leisure equipment, and gardening equipment, in order to develop reuse and repair activities. EPR schemes for cigarettes, to cover the littering cost, are also in place, as well as schemes for building materials in order to allow this waste to be collected free of charge.

France sets the EPR for furniture, with reuse targets

France's EPR scheme for furniture waste covers household and corporate furniture waste. It helps to develop furniture reuse and recycling, e.g. mattress and wood recycling, which were not profitable enough to generate sustainable activities before the scheme. It also promotes furniture reuse by involving the social economy.

The legislation “Specification annex for EPR relating to the accreditation procedure and specification for “eco-organisms” of waste furniture sector” sets the EPR for furniture.

Chapter 6 sets the reuse target for furniture:

The share of furniture waste collected separately needs to be provided to social and solidarity associations for preparation for reuse in the following percentages.

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<tr>
<th>Deadline</th>
<th>Furniture waste collected separately from household waste</th>
<th>Furniture waste collected separately from non-household waste</th>
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<tr>
<td>2021-2023</td>
<td>1.5%</td>
<td>5%</td>
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The waste holders need to provide good quality furniture waste to social organisations who can repair it and reuse at least 60% of the provided tonnage. The law also grants social enterprises access to furniture collection points so that they may assess items suitable for repair/reuse.

France obliging online sellers to finance collection and recycling of waste

France is setting new rules obligating online sellers to ensure that the collection and recycling of waste arising from their products is properly financed, as part of a new law related to anti-waste and circular economy (No 2020-105). Online retailers will need to prove that all of the products sold through their platforms have had an 'eco-contribution' paid on their behalf.

Through Article R.543-180 of the Environment Code, France obliged online sellers and physical stores to take back household used electrical or electronic equipment for free when customers are buying a similar product.

5. Deposit-refund schemes and other measures to encourage efficient collection of used products and materials

New collection targets set out in the EU's Single-Use Plastics Directive (SUP)

1. Separate collection targets for single-use plastic bottles – 77% from 2025, 90% from 2029, Article 9 SUP
2. Recycling of PET bottles – bottles made of PET must have a recycled content of at least 25% from 2025, and at least 30% from 2030, Article 6 (4a)SUP.

Targets for packaging recycling

Article 6 PPWD sets targets for packaging recycling from 2025: for plastics at least 50%, for aluminium 50% and for glass 70%. From 2030 at least 55% for plastics, 60% for aluminium and 75% for glass.

The waste directives recognise deposit return systems (DRS) as a way to achieve EU recycling and reuse targets. DRS is the most efficient system to bring circularity to packaging. It results in high collection rates, enabling refill options as well as high value material recycling, and it virtually eliminates packaging littering.

DRS is a waste prevention measure when used as a return-refill scheme.

Article 5 (1) PPWD is listing DRS as a “measure to encourage the increase in the share of reusable packaging placed on the market and of systems to reuse packaging in an environmentally sound manner without compromising food hygiene or the safety of consumers.”

Finnish DRS has one of the highest beverage package return rates in the world

The scheme collects refillable, one-way glass, PET bottles and cans with an overall return rate above 90% in 2018. The return rate for refillable glass bottles is 97%. They are refilled approximately 33 times. Deposit amounts range from €0.10 to €0.40 depending on the type of container.

The Finnish Waste Act and the related Decree on Collection Systems for Returnable Drinks Packaging (180/2005) establish a DRS obligation for retailers to receive empty containers from consumers: “a distributor of certain beverages sold in containers with a deposit must accept empty beverage containers belonging to the same return system, in a quantity deemed reasonable as regards the quantity of packaged beverages for sale, and must pay the deposit to the party returning the containers.”
The DRS system is supported by the **Beverage Packaging Tax** (2004) which taxes the manufacture of certain types of drinks packaging. Importers and producers have to pay packaging tax of €0.51 per litre for packages in glass, plastic or aluminium for water, soft drinks and alcohol. By becoming members of DRS, beverage manufacturers and importers are exempted from the beverage packaging tax. Any retail outlet selling deposit packages is obliged to take back empties (exemption on volume related to sales).

PALPA, the administrator of the system, is a non-profit company. The manufacturers and importers of beverage packages pay a membership fee and package-specific recycling fees. The fees collected from the members are used to cover the expenses of the return systems.

By providing a financial incentive to citizens, the problem of littering and pollution is also solved. In Finland all packages are recycled into new packages or raw materials for other industries.

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6. **Sound planning of investments** in waste management infrastructure, including through Union (EU) funds

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**Portugal increases investments in waste hierarchy**

Portugal has revised its Municipal Solid Waste Strategic Plan (PERSU 2020+) and allocated no funds to incineration, while focusing on increased investment in effective separate collection systems and recycling, thus following the EU waste hierarchy principle.

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7. **Sustainable and green public procurement** to encourage better waste management and the use of recycled products and materials

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**Italian government makes GPP mandatory across the Italian public sector**

Even though Green Public Procurement (GPP) at the EU level is a voluntary instrument, with the new Procurement Code (Legislative Decree 50/2016) Italy has established mandatory usage of GPP. Italy now requires all of its public entities to include a minimum set of environmental criteria in their public procurement actions that covers 16 of the most relevant product and service areas. These are mandatory for the procurement of all goods, services and works.

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8. **Phasing out of subsidies which are not consistent with the waste hierarchy**

One of the main disruptors of proper implementation of the waste hierarchy is subsidies for incineration. MS must not define mixed waste incineration as a renewable energy source and pay green energy subsidies to incinerator operators. The Renewable Energy Directive, Article 3(3) requires MS to terminate subsidies for energy produced from the incineration of waste if separate collection obligations are not fulfilled:
“Member States shall ensure that their national policies, including the obligations deriving from Articles 25 to 28 of this Directive, and their support schemes, are designed with due regard to the waste hierarchy as set out in Article 4 of Directive 2008/98/EC to aim to avoid undue distortive effects on the raw material markets. **Member States shall grant no support for renewable energy produced from the incineration of waste if the separate collection obligations laid down in that Directive have not been complied with.**”

### 9. Use of fiscal measures or other means to promote the uptake of products and materials that are prepared for reuse or recycled

**Reduced VAT on repairs**

- **Slovenia has reduced VAT by 9.5%** and the **Netherlands by 9%** on repairs of bicycles, shoes and leather goods, clothing and household linen.

**Sweden is shifting tax from labour to resources**

They are doing this using [an income tax deduction on repairs and maintenance work](#) on house appliances performed by professionals at the owner’s home. In Sweden, VAT is 25% but after 2017 the tax on labour and materials for repairs was halved. Anyone who has had an expense for repair work can deduct the amount of 50% of the labour cost (e.g. for the repair of a washing machine) from their annual tax report, up to a maximum of 50,000 Kr (ca. €4,700).

**Italy introduces a tax on plastics**

In order to provide fiscal incentives for recycling plastic, Italy has introduced a tax of €0.45 per kg on single-use plastic packaging manufactured in or imported to Italy. This will come into effect in the [state budget for the financial year 2020](#). The tax does not apply to plastic materials that have been produced from recycling processes.

### 10. Support to research and innovation in advanced recycling technologies and remanufacturing

**Ireland establishes ‘Innovation for a Circular Economy’ programme**

The programme was funded by the national Environmental Protection Agency (EPA), and is intended to help companies and organisations to develop solutions that encourage resource efficiency and a circular economy.
In the Netherlands struvite is being recovered from wastewater treatment plants and can be used as a fertiliser. The National Institute for Public Health and the Environment and water companies are conducting analyses of the precise types of medical residues and pathogens in materials, and whether struvite can be granted end-of-waste status.

**11. Use of best available techniques for waste treatment**

The EU Joint Research Centre has published the Best Available Techniques (BAT) Reference Document for Waste Treatment, which provides MS with the technical basis for setting permit conditions for installations.

**12. Economic incentives for regional and local authorities**, in particular to promote waste prevention and intensify separate collection schemes, while avoiding support to landfilling and incineration

Spain uses economic incentives to promote waste prevention and separate collection

Municipalities are responsible for the collection, transport and treatment of municipal waste. **MS can achieve EU waste targets by taxing and incentivising municipalities.**

**Article 16 of the Spanish Waste Act** enables Spanish regions to use economic incentives to promote waste prevention and separate collection, including the introduction of landfill and incineration taxes on municipal waste.

**13. Public awareness campaigns**, in particular on separate collection, waste prevention and litter reduction, and mainstreaming these issues in education and training

Slovenia’s e-cycling campaign

Slovenia launched an e-cycling campaign to promote the separate collection of WEEE and the importance of correct e-waste and waste battery management. An infrastructure was also established to simplify and facilitate separate collection of e-waste and waste batteries.
European Week for Waste Reduction

This campaign encourages citizens, local authorities and businesses to carry out awareness-raising actions about sustainable resource and waste management.

14. Systems for coordination, including by digital means, between all competent public authorities involved in waste management

Spain and the Czech Republic are implementing the traceability of the management of WEEE

Spain and the Czech Republic have implemented the LIFE project ‘WEEE TRACE’ using information and communications technology to ensure end-to-end traceability of WEEE. The aim is to increase collection levels, guarantee this type of waste is conveyed to the appropriate treatment plants and minimise illegal exports.

15. Promoting continuous dialogue and cooperation between all stakeholders in waste management and encouraging voluntary agreements and company reporting on waste

Voluntary agreement on secondary resources

The North Sea Resources Roundabout is an international voluntary agreement on secondary resources between France, Flanders, the United Kingdom and the Netherlands. Businesses, NGOs, public-private partnerships, policy makers, and inspection and enforcement teams are working together to tackle barriers that hamper the trade, transportation and uptake of secondary resources.
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