



Finding a True Balance for Waste Management in the Taxonomy

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Regarding waste management and the existing EU legislation on waste it is clear that sustainable investment begins with investment in the top steps of the Waste Hierarchy and in all of the measures, techniques and technologies which will ensure the achievement of the legislative targets, a circular economy and reduce the emission of greenhouse gases.

As part of this, **non-hazardous waste incineration with energy recovery is a sustainable investment** provided the criteria of the waste hierarchy have been met. What does that mean?

The Taxonomy should be used to 'push' the implementation of the top echelons of the Waste Hierarchy, particularly in jurisdictions where good governance is lacking, by facilitating investment in activities supporting:

1. Waste Prevention: actions including leasing systems, sharing economies, eco-design
2. Repair and Reuse, Separate Collection: Sorting of dry recyclables, Recycling of materials, Composting and Anaerobic Digestion (followed by application to soil of digestate or composted digestate with shredded garden waste sequestering 110kg Carbon per ton of compost)

The Taxonomy should also empower the environmentally sound treatment of the **non-recyclable material, residual waste**¹. This is integral and essential to a truly Carbon Neutral Circular Economy.

The role of waste incineration in a holistic waste management system which follows the waste hierarchy is to treat mixed residual waste (non-recyclable waste remaining after separate collection and treatment) and to prevent it from becoming a source of pollution.

Despite the best efforts to prevent waste and to sort for recycling, there will always be a remaining fraction of non-recyclable residual waste which includes some biodegradable waste that should be treated in the most sustainable way ensuring the lowest possible emissions, as always, in accordance with the BREFs. Some examples include composite materials that can only be downcycled or waste that was already recycled many times or is contaminated and should not re-enter the economic cycle. This includes treated wood and paper as well as food and green waste remaining in the mixed waste fraction, which will decompose and generate biogas (primarily methane).

Treatment of this non-hazardous non-recyclable residual waste fraction by waste incineration complying with the R1 energy recovery criterion, allows the recovery of a significant part of the energy content of this residual waste at the same time as rendering it inert. By stabilising the waste residues in this way and by providing continuous electricity and/or heat mainly to District Heating and Cooling networks and to industry (also contributing to the diversification

¹ In this note, the term 'Residual Waste' describes the mixed municipal waste fraction and residues from sorting and recycling operations for non-hazardous waste that are not suitable for recycling

of energy supply), Waste-to-Energy installations are a key enabler of both the transition to a Circular Economy and the energy transition.

The discussion on waste incineration as a part of National Waste Management Plans and related Investment plans has never been a discussion on the appropriateness of the technology. It has always been a capacity discussion. All signatories to this paper are advocates of the use of the Taxonomy as a tool to support and promote the correct implementation of all steps of the waste hierarchy and achievement of the targets, as detailed in the Waste Framework Directive, Landfill Directive and above.

National Waste Management Plans as approved by the European Commission and proof of prior investments in waste prevention and separate collection pave the way to the achievement of reuse, recycling and landfill targets. Therefore, they should be used as criteria to enable investment in new incineration capacity where it is needed to treat the resulting non-hazardous residual waste.

This both acknowledges the need for steps 1 (waste prevention) and 2 (separate collection) to prevent waste where possible and to recover materials for the circular economy and takes responsibility for the waste that our economies generate which is not recyclable.

If the EU legislator does not take this responsibility, there could be, as a consequence, an increase of illegal dumping and illegal shipments to countries which have less stringent environmental protection criteria where EU waste will certainly have a negative environmental impact.

It is also worth highlighting that the numerous studies carried out at local level on the life cycle of waste management systems consistently show that lower environmental impacts are achieved through an energy recovery strategy which relies on the use of incineration of non-recyclable waste.

Proposed criteria for the inclusion of non-hazardous waste incineration with energy recovery in the Taxonomy:

Energy Recovery from non-hazardous, non-recyclable residual waste shall be deemed a sustainable investment under the Taxonomy Regulation, if the following conditions are fulfilled:

- the facility only treats non-recyclable waste. Only facilities treating exclusively mixed waste collected as a separate fraction within a separate collection system that forms part of an approved National Waste Management Plan (as above), non-recyclable waste residues from waste sorting and waste treatment facilities, or other non-recyclable wastes generated during a production process (e.g. monostream waste) would be eligible.
- the National Waste Management Plan is designed in such a way as to ensure the separate collection of all mandatory fractions as well as the achievement of waste prevention aims, reuse and recycling targets and is in the process of being implemented or implementation has been completed.
- the facility meets the R1 criterion.

With such conditions in place, waste incineration enables the treatment of non-hazardous, non-recyclable waste higher up in the waste hierarchy. It is the very much needed solution in

Member States where landfilling non-hazardous, recoverable, residual waste is still the dominant practice. Additionally it ensures the most sustainable treatment for non-hazardous residual waste by destroying pollutants embedded in the waste while recovering energy and clean materials from the bottom ash such as metals and aggregates. These conditions also avoid any “*significant increase in incineration*”, as prescribed by Art. 17 of the Taxonomy Regulation.

Waste incineration with energy recovery of the above-described non-hazardous residual waste fraction significantly contributes to:

- the circular economy and pollution prevention, as it keeps the material cycle clean and helps to take full responsibility for residual waste and not allow it to become a hidden problem.
- to climate change mitigation and the net zero Carbon goal by avoiding Methane emissions from landfill and saving CO₂ emissions through fossil fuel substitution (27 to 54 million tonnes CO₂eq saved per year) and metal recovery from bottom ash (over 3 million tonnes CO₂eq saved per year²).
- improving, through the production of heat for district heating, the air quality of urban centers, an increasingly important factor for medium / large cities with regard to substances such as NOx, SOx and dust.

Last but not least, the pandemic has also demonstrated the importance of WtE for the treatment of waste that cannot be sent to the material recovery chains, demonstrating the relevance of a technology of this type for the management of emergency situations.

Signatories of this common statement

CEWEP (Confederation of European Waste-to-Energy Plants) is the umbrella association of the operators of Waste-to-Energy plants across Europe. CEWEP’s members are committed to ensuring high environmental standards, achieving low emissions and maintaining state of the art energy production from remaining waste that cannot be recycled in a sustainable way.

www.cewep.eu



ESWET is a European association representing the European suppliers of Waste-to-Energy technologies, committed to foster the development and dissemination of Waste-to-Energy at the European level. ESWET also seeks to raise the awareness of the positive implications of the technology in terms of better waste management, energy and for the environment.

www.eswet.eu



FEAD is the European Waste Management Association, representing the private waste and resource management industry across Europe, including 19 national waste management federations representing 3,000 waste management companies.

www.fead.be



Municipal Waste Europe is the European umbrella association representing public responsibility for waste.

www.municipalwasteurope.eu



² Based on EdDE-Dokumentation 17, Metallrückgewinnung, October 2015