

Brussels, 27 April 2020

## Feedback on the EU Taxonomy

ESWET acknowledges the EU Taxonomy as an important step to ensure that investments are more and more aligned with the needs of the green transition to reach the Commission's 2050 environmental objectives.

In this regard, the potential of waste management in greenhouse gas reduction should not be underestimated: according to Eurostat's data, waste was in 2017 the fourth largest source sector of emissions (3%) behind fuels (77%), agriculture (10%) and industrial processes (8%). A significant amount of these emissions is related to landfilling. When waste is landfilled, the organic material in the waste decomposes and produces methane, a greenhouse gas that is up to 86 times more potent than carbon dioxide over a 20-year period.

That is why **landfill diversion is at the core of decarbonisation** in this sector: between 1995 and 2017, while the total amount of municipal waste treated increased by 13%, the amount of landfilled waste fell by 60% and greenhouse gas emissions from waste dropped by 42% according to EEA estimates<sup>1</sup>. It is important to note that, though they are obviously significant, landfill diversion is not limited to the development of reuse and recycling. Indeed, everything is not recyclable, and it is **Waste-to-Energy's mission to safely treat residual non-recyclable waste**.

Residual waste covers the fraction of waste which is of poor quality (degraded materials after being recycled several times), waste that is rejected from the recycling facilities, and polluted waste that would contaminate the recycling cycle. Energy recovery is the solution to take care of this waste that is not fit for recycling and would otherwise be dumped in landfills and open fires in Europe or overseas. In that sense, the Commission acknowledged that **Waste-to-Energy has a role to play in the transition to a circular economy** as a complementary tool to recycling<sup>2</sup>.

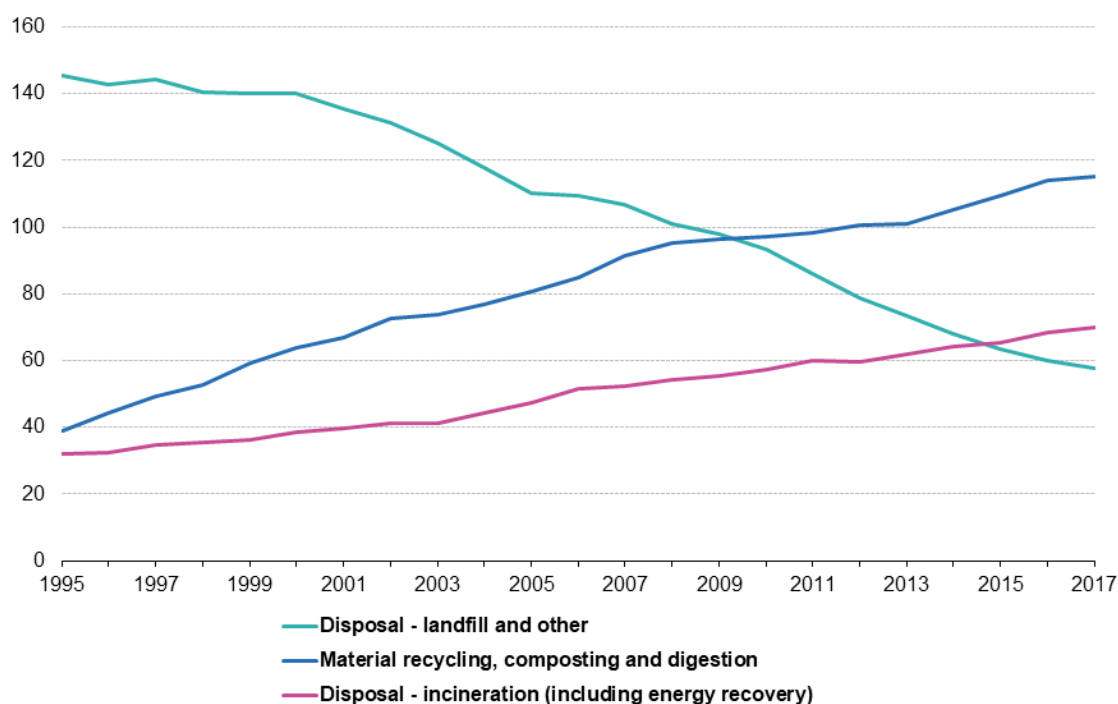
This complementarity between recycling and Waste-to-Energy as **key drivers of landfill diversion** is highlighted in the following diagram.

<sup>1</sup> [Greenhouse gas emissions from waste](#), Eurostat.

<sup>2</sup> [Communication COM\(2017\)34](#) on 'the role of waste-to-energy in the circular economy', Section 5

## Municipal waste treatment, EU-28, 1995-2017

(million tonnes)



Source: Eurostat (online data code: env\_wasmun)

eurostat 

Waste-to-Energy technology ensures that residual waste is hygienised and that pollutants are safely removed from the eco-cycle by the flue gas cleaning systems, in line with EU stringent requirements<sup>3</sup>.

But waste hygienisation is not its only role, Waste-to-Energy can also act as a carbon sink:

- **Waste-to-Energy provides a substitute to fossil fuel**, as waste is used to generate energy which is then converted into electricity and heat;
- **It prevents the carbon-intensive extraction of virgin raw materials**, thanks to mineral and metal recovery;
- **It diverts non-recyclable waste from landfills**, preventing methane emissions while it ensures that the waste is still used a resource instead of being dumped and, quite literally, wasted.

CO <sub>2</sub> -equivalent emission <sup>4</sup>	Kg CO <sub>2</sub> -e per tonne	Tonnes CO <sub>2</sub> -e per year (500,000 tpa plant)
<b>WtE direct and indirect emission</b>	455	228 000
<b>Offset metal production</b>	-40	-20 000
<b>Offset electricity production</b>	-783	-392 000
<b>Offset landfilling of waste (avoided methane emission)</b>	-292	-146 000
<b>Total climate impact</b>	-660	-330 000

<sup>3</sup> Waste incineration and co-incineration plants are covered by the Industrial Emissions Directive.

<sup>4</sup> Source: Ramboll, according to method by UK-DEFRA 2014 (department of environment food and rural affairs)

**The role of Waste-to-Energy in landfill diversion has been recognised by the European legislators** in the final political agreement on the EU Taxonomy Regulation with the last sentence of Article 12(d) stating that activities leading to a significant increase in incineration do not significantly harm the environmental objectives “*where the long-term disposal of waste may cause significant and long-term harm to the environment*”.

Similarly, Article 9(i) states that an activity contributes substantially to the transition to a circular economy when “**minimising incineration and avoiding disposal (including landfilling) of waste, in accordance with principles of the waste hierarchy**”, the priority order established in Article 4 of the Waste Framework Directive. Understanding the logic behind this difference in wording is crucial here: while landfills should be avoided and only be a last resort option, incineration and in particular **Waste-to-Energy capacity should simply amount to what is necessary to fulfill its mission**, namely the safe treatment of residual non-recyclable waste that would otherwise be landfilled.

And **the need for investment in Waste-to-Energy capacity should not be overlooked**: 70% of waste is still landfilled or dumped worldwide<sup>5</sup> and, while being a leader in landfill diversion, the EU is not spared by this issue with several Member States landfilling more than 70% of their municipal waste<sup>6</sup>. The current Waste-to-Energy capacity is around 90 million tonnes but, according to peer-reviewed calculations<sup>7</sup>, **142 million tonnes of residual waste treatment capacity will be required by 2035** to match EU targets for the treatment of municipal waste and safely treat commercial/industrial waste streams that are not yet covered by these targets.

Accordingly, the Technical Expert Group on sustainable finance invited the future Platform for Sustainable Finance to further discuss the matter and consider Waste-to-Energy<sup>8</sup> in view of the publication by the Commission of delegated acts establishing technical screening criteria.

### ESWET recommendation:

ESWET supports the Technical Expert Group’s call and thus invites the Platform and the Commission to define technical screening criteria taking into account **Waste-to-Energy’s contribution to the circular economy and climate change mitigation** as well as the investments required to complete landfill diversion of non-recyclable waste and the resulting decarbonisation.

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<sup>5</sup> [World Bank report “What a waste 2.0”](#)

<sup>6</sup> [Eurostat data: municipal waste by waste management operations](#)

<sup>7</sup> [CEWEP capacity calculation](#)

<sup>8</sup> [Technical annex](#) of the TEG final report, page 209.