

ESWET Answer to the Consultation on the Functioning of Waste Markets

04.09.2015

ESWET welcomes the opportunity to provide input on the Functioning of Waste Markets Consultation. We represent suppliers of Waste-to-Energy Technology, with expertise in the technical benefits of the technology, which are mostly independent from market issues. Nevertheless, we support a circular economy that thrives on efficient recycling while creating conditions to minimise landfilling through the use of Waste-to-Energy for residual waste, enabling the recycling of some materials and recovery of energy that would otherwise be lost.

Recognising all sources of recyclates

Policy request: inclusion of metals recycled from WtE residues towards EU targets

ESWET believes that more recognition should be given to recycling activities, including those that occur outside the mainstream sorting centres or biological treatment activities. Key to achieving a circular economy is to prioritise re-use and recycling of materials already within the economy. In the case of multi-material wastes that cannot easily undergo material recovery, or when the pollutant content is too high, Waste-to-Energy offers an attractive alternative to landfilling, because it allows recovering the embedded energy and incombustible materials. Both material and energy are necessary to feed and power a Circular Economy.

In Germany, 518,000 tonnes of ferrous and non-ferrous metals were recycled in 2013 from Waste-to-Energy bottom ash. In the Netherlands, similar efforts yielded – given the lower quantities of waste treated – 140,000 tonnes in 2013. Countries that have minimised landfilling of untreated municipal waste recover a lot of recyclable metals from Waste-to-Energy plants' bottom ashes. For instance, in Belgium, about 40% of the recycled metal packaging was extracted from bottom ashes (and 57% from separate collection), giving the country a 97% rate of metal packaging recycling.

This shows that without Waste-to-Energy, it would not be possible to close these material loops. Therefore, ESWET believes that recognition of this material recycling stream is crucial towards the recycling targets and a better waste market that encourages recycling. We also believe that it is preferable that those metals remain in Europe, where we can ascertain quality treatment. Besides, this helps bolstering our competitiveness and retain our secondary raw materials, which is why recycled metals should be ranked as more appealing than imported or raw ones.

Waste shipments and the Proximity Principle

On the question of waste shipments, ESWET believes that European citizens are better served by local treatment of their residual waste in energy-efficient Waste-to-Energy plants. While we do not believe that the proximity principle should prevent shipments for energy recovery, we nevertheless believe that proximity energy recovery has its merits.

For locations lacking Waste-to-Energy capacity, shipping waste for energy recovery is better than landfilling it. However pre-treatment (e.g. RDF production) is usually needed for easier shipping.

Because some unrecyclable wastes burn very cleanly and yield high calorific value, while others are heavily polluted and yield little energy, not all residual wastes are equally desired. If the accepting energy recovery facility only seeks high quality fuel (e.g. SRF for some cement plants), there is a risk that waste will be cherry-picked, leaving a more polluted residue to dispose of locally, in that case in a landfill.

If all residual waste was instead treated in a local Waste-to-Energy plant, it would be blended in the bunker of the plant, with good energy benefits. This balances the benefits of energy recovery with the necessary hygienisation of waste, a central purpose of residual waste treatment.

Implementing a national waste management strategy

It makes perfect sense to ship waste within the European Union borders and to trade with neighbouring countries when no local capacities are available, thus avoiding landfilling. It would be more difficult to justify shipments away from a local Waste-to-Energy plant, especially if efforts to increase energy efficiency have been undertaken. Local jobs are created and value is kept locally when waste is treated locally.

A Waste-to-Energy plant in the vicinity engages with local citizens, who know where their waste ends up, maintaining scrutiny – and support of – local waste management infrastructure. Local waste treatment also confronts citizens to their own, local, waste generation. It is more likely to raise awareness of citizens if they see waste infrastructure nearby than if waste is shipped beyond sight.

Climate Correction Factor and Energy Union

At first sight, it may look better to send waste to these facilities with the highest energy utilisation in Europe. However, an imbalance exists within the European Union on the concentration of energy recovery capacities, most of them being in Northern Europe.

The European Commission has remedied to this imbalance by partially offsetting the impact of the local climate on the R1 result of Waste-to-Energy plants. The R1 Formula incentivises improvements in recovery efficiency and use of the energy made available from waste. This Commission Directive will make recovery capacity more likely to be built in more regions, thus allowing more local waste treatment. This will shorten distances to energy recovery for otherwise landfill-bound residual waste, e.g. in Southern Europe.

In the context of the Energy Union and of the desired goal to widen renewable energy supplies and security of supplies within the EU, it also makes sense to use residual waste's embedded energy as a source of local, partly-renewable and dispatchable energy. It must be clear that landfilled waste does not help securing supplies, therefore it makes sense to ship waste for energy recovery if it would otherwise have been landfilled. But it does not help fellow EU Member States if their residual waste is removed from their own Waste-to-Energy plants to be utilised elsewhere.

Besides, commercial and industrial wastes can move more freely, thus enabling Waste-to-Energy plants with spare capacity to top-up their energy-producing activity with unrecyclable materials from non-MSW origin.

End of Waste criteria for waste-derived fuels

ESWET has previously urged caution with any End-of-Waste criteria for waste-derived-fuels that would enable treatment of waste in installations not following the strict environmental standards for waste incineration and co-incineration, as the Industrial Emissions Directive's Annex VI mandates.

Any other process not complying with Annex VI risks releasing more pollutants to air than dedicated waste incineration or co-incineration installations. Those processes might be cheaper because of the avoidance of state-of-the-art Flue Gas Cleaning techniques, but enabling them to perform sub-standard waste treatment that will spread pollutants would be a market distortion with respect to Waste-to-Energy plants required to meet strict Emission Limit Values.

Some EU Member States have implemented End-of-Waste criteria for waste-derived fuels, and even if they have equivalent requirements to the IED for air emissions, it must remain clear that no waste should be combusted outside the IED Annex VI regime. National End-of-Waste criteria for waste-derived fuels are a concern because they do not bring added-value to air quality while in fact risking undermining air protection efforts.

Taxing Waste-to-Energy hampers recycling

Recycling activities need quality waste input to produce quality output recycled materials. Taxing incineration risks shifting more polluted or unrecyclable materials in streams sold to recyclers. Taxing energy recovery risks hampering recyclers' activities either with dirtier feedstock and/or more expensive handling of the residues.

Financial support for Waste-to-Energy

It is more expensive to treat residual waste by energy recovery than to put it in a landfill, where it will be a burden to the next generations. This mainly explains why so many locations in the EU still landfill so much residual waste. Financial support, whether on the construction or operation of a Waste-to-Energy plant (e.g. regional funds, loans, renewable energy subsidies), help lowering the gate fee for waste holders, which makes Waste-to-Energy more competitive compared to landfilling. Taxing Waste-to-Energy or removing these subsidies has the same effect: while recycling rates will not budge, more waste will be landfilled.

It is fair that other waste treatment technologies are supported as well, e.g. through funds to run re-use operations, for the construction of sorting centres or work-placement programmes to cover some recycling staff costs, thus easing their operation. But removing subsidies from Waste-to-Energy to instead support recycling will not change the unrecyclable nature of waste, rather, it will mean continued landfilling.

A careful balance of public support for recycling and Waste-to-Energy, taking into account the volumes of waste to treat and the different realities of both complementary (and indispensable) treatment sectors, will yield the best results. And it would also help to have clear landfill minimisation objectives for municipal solid waste, similar to those proposed in the 2014 proposal on Circular Economy.