



## **POLICY POSITION STATEMENT ON ANAEROBIC DIGESTION AND RECYCLING**

This policy position sets out when anaerobic digestion of waste is considered as recycling for use in calculations for European Union (EU) recycling targets.

In 2008, Article 4 of the revised EU Waste Framework Directive (Directive 2008/98/EC) introduced a five-step waste hierarchy.<sup>1</sup> The waste hierarchy ranks waste management options according to what is best for the environment. Waste prevention, as the preferred option, is followed by reuse, recycling, recovery including energy recovery and as a last option, safe disposal.

Within the waste hierarchy anaerobic digestion (AD) is usually considered as sitting within the recovery step due to the energy recovered from the process. However, Life Cycle Assessment evidence suggests that waste management options that are not in keeping with the waste hierarchy are better for the environment, and include:<sup>2</sup>

- For food waste, wet or dry anaerobic digestion is better than other recycling and recovery options
- For garden waste, dry anaerobic digestion is better than other recycling and recovery options

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<sup>1</sup> Directive 2008/98/EC, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:0030:en:PDF>

<sup>2</sup> Section 9 and 10 of "Applying the Waste Hierarchy: Evidence Summary", [http://www.doeni.gov.uk/applying\\_the\\_waste\\_hierarchy\\_evidence\\_summary.pdf](http://www.doeni.gov.uk/applying_the_waste_hierarchy_evidence_summary.pdf)

In addition, EU guidance sets out when composting and AD may be counted as recycling for the purpose of recycling targets.<sup>3</sup> In particular a Commission Decision on recycling calculations states, “Where the target calculation is applied to the aerobic or anaerobic digestion of biodegradable waste, the input to the aerobic or anaerobic treatment may be counted as recycled where that treatment generates compost or digestate which, following any further necessary reprocessing, is used as a recycled product, material or substance for land treatment resulting in benefit to agriculture or ecological improvement.”<sup>4</sup>

AD of food waste and garden waste is a recovery process that produces a nutrient-rich digestate as well as yielding energy in the form of biogas. Application of the digestate to land ensures the recycling of valuable nutrients.

**Therefore, within Northern Ireland AD of food waste, garden waste or a mixture of both is deemed by the Department to be a recycling operation where the digestate is used as a fertiliser or soil conditioner for the benefit or improvement of land. However, digestate used as a fuel or for back filling operations is not deemed as recycling.**

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<sup>3</sup> Section 1.4.6 of Cion’s “Guidance on the interpretation of key provisions of Directive 2008/98/EC on waste”, [http://ec.europa.eu/environment/waste/framework/pdf/guidance\\_doc.pdf](http://ec.europa.eu/environment/waste/framework/pdf/guidance_doc.pdf)

<sup>4</sup> Commission Decision 2011/753/EU, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:310:0011:0016:EN:PDF>