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From: **Gemidan Ecogi consider is 'Plastic - public enemy number one'!**

Plastic waste remains high on the public agenda which in turn generates much debate and anxiety within the waste and renewable energy sectors. New descriptive terms for plastic waste in the environment, microplastic and macroplastic, are now frequently used in the media. The use of plastic is now under increasing fire from the public, especially single use plastic packaging.

The dilemma facing Bridgend council is a good example (recent news item - https://www.letsrecycle.com/news/latest-news/bridgend-conflicted-plastic-liners/) of how the current public scrutiny on the use of plastic has created a quandary for local authority Waste Managers. Promoting the use of plastic or bio-degradable plastic bags, as part of municipal food waste collection schemes creates a 'devil if you do and devil if you don't dilemma for Local Authorities.

Research by WRAP confirms the use of bags is proven to encourage greater diversion of food waste by residents. The high profile, very poor public perception of single use 'plastics' can result in a negative reaction by residents who may question the environmental reputation of the Local Authority.

The food waste a*naerobic* d*igestion* sector will face increasing risk if the public demands for improvements in the way plastic waste is dealt with are ignored. Organisations across the Industry, ADBA, WRAP, SEPA, CIWM to name but a few, have recently highlighted the 'plastic issue' and the importance of tackling plastic contamination.

Jeremy Jacobs, technical director of the Renewable Energy Association (REA) expressed the opinion concerning AD operators that *'Many are accepting packaged food waste which they have to in turn de-package. The challenge for them is ensuring that their clean up technologies are effective at removing the plastics prior to their subsequent spreading to land'*.

Most would agree that removing physical contamination is best done as a front-end of the AD operation i.e. during feedstock pre-treatment. The most effective way to remove contamination, especially plastic, is by keeping materials as whole as possible i.e. macroplastic. The logic being once materials become fragmented it is much harder to remove potentially adding to the rising problem known as microplastic pollution in soils and the wider environment.

The good news for the industry is there are now new high-performance pre-treatment technologies available that are very effective in removing virtually all plastic and other contamination from food waste substrates. Some technologies maintain performance even when contamination levels, across all material contaminants, rise above 20%