



## Environment, Food and Rural Affairs Committee

### Waste Management in England

May 2014

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#### Background to CIWEM

1. The Chartered Institution of Water and Environmental Management (CIWEM) is the leading professional and qualifying body for those who are responsible for the management of environmental assets. The Institution provides independent comment on a wide range of issues related to water and environmental management, environmental resilience and sustainable development.
2. From April 2014, Defra will be “stepping back” in areas of waste management where businesses are better placed to act and there is no clear market failure. The department will not take forward new policy work, including developing energy from waste. CIWEM welcomes the opportunity to submit this written evidence to the Environment, Food and Rural Affairs (EFRA) Committee on this change of direction.
3. In formulating this response we have consulted with our members that work in waste and resources management and drawn on evidence from our 2013 report *Less is More*<sup>1</sup>. This argued for a whole life-cycle approach to achieve more sustainable production and consumption, with the outcome of more efficient and resilient business practice, making UK plc more competitive.

#### Summary of key points

4. Waste policy, measures and incentives should be aligned with the waste hierarchy, starting with reducing waste at source.
5. Targets for recycling may not necessarily produce the optimal environmental solution. Separate collections with incentives may be a better option than targets, to achieve high quality recyclates.
6. Energy incentives must not be allowed to distort re-use and recycling markets for waste.
7. Only truly residual waste should be used in energy from waste. Here it has the potential to produce useful energy from non-fossil fuels, contribute to energy security and provide heat.
8. Anaerobic digestion should be the preferred method for treating food and biodegradable waste where appropriate and where waste minimisation is not an option. We should resist growing energy crops for anaerobic digestion facilities which use valuable land and resources that might be better spent producing valuable food resource.

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<sup>1</sup> CIWEM. 2013. *Less is More*

<http://www.ciwem.org/policy-and-international/current-topics/waste-and-resources.aspx>

9. Almost half the food that is wasted in the UK is from within the household, and food waste generated in the UK is far higher than other European countries.
10. There is significant scope for reducing food waste. This can be achieved through better collaboration with food retailers and continued government support of initiatives such as WRAP's Love Food Hate Waste campaign.
11. Anaerobic digestion has been successful in countries where technical competence and relevant training have been provided. The AD Strategy and Action Plan should require training and technical competence.
12. Greater consideration should be given to the viability of heat networks and whether these can add value to industrial, commercial or social housing schemes.
13. Incinerator bans or an incinerator tax could be considered to promote waste minimisation and recycling. However targeted bans on particular materials, for example hard plastics, may better serve the purpose.

## General Comments

14. CIWEM is disappointed to hear that Defra will no longer be responsible for waste policy. There is considerable evidence to suggest that much of the progress that has been made with waste diversion, development of anaerobic digestion and other new technologies, has all been achieved through national policy and financial stimulus. It is difficult to see how more can be done, especially moving towards re-use, eco-design and a circular economy without government intervention. It is unlikely that the market alone, or the price of raw materials, will serve to drive any of this forward on a time scale that would either be useful or relevant.
15. We are concerned that the loss of Defra at the helm will create a policy vacuum and stifle investment, rather than push forward on the waste hierarchy. Clear policy would give greater certainty to investors, so we hope that the Government will respond to calls for the Department of Business, Innovation and Skills to take forward this work.

## Response to the call for evidence

### **The ability of existing recycling policy measures to ensure that England reaches the EU target of recycling 50% of household waste by 2020.**

16. The EU is currently reviewing waste targets and potential landfill bans, so England may need to adopt higher targets as a result.
17. Whilst numerical targets are helpful to enable everyone to understand, it is not quite as simple as saying that meeting a 50% target means the best environmental outcome has been achieved.
18. Current policy measures and incentives are not aligned with the waste hierarchy, therefore it is difficult to determine if existing policy measures will reach target levels of recycling. For example, the alignment of Landfill Tax increases with the Retail Price Index from 2015 will weaken existing policy. CIWEM considers that we need a continuation of landfill tax increases above inflation to assist in ensuring that landfilling remains the more costly option until new technologies are fully developed. Following the waste hierarchy

will increase the impetus to divert waste from landfill and stimulate investment in alternative infrastructure.

19. Local authorities are understandably keen to meet recycling targets rather than considering their role in the responsible management of resources. The government needs to ensure that local authorities have adequate information to make decisions about services to meet the legal requirements of the Waste Framework Directive. The lack of guidance on necessity and TEEP (what is technically, environmentally and economically practicable) could be a factor in any failure to reach recycling targets and could lead to costly challenges. Guidance on TEEP, rather than hard target figures, would provide a framework within which local authorities can make sound decisions which meet local needs, move towards a more sustainable economy and meet legal requirements, rather than attempting to meet targets at all costs.

**Whether England's national recycling targets should be higher than those stipulated by the EU; and the pros and cons of compulsory household waste recycling; the role of businesses and households in municipal waste recycling and recovery.**

20. Targets in England should be set at what is realistically achievable without having to resort to quick fixes and shortcuts (incineration of recyclable goods for example). There are countries within the EU that are better positioned than England/UK and others that are worse. It is every Member State's responsibility to continuously improve relative to their own situation.
21. Compulsory recycling may not have the desired outcome as it may lead to an increase in contamination, lowering the quality and therefore the value of recycle. Separate collections with incentives may be a better option than targets to achieve these objectives.
22. Business waste needs comparable models to municipal solid waste and needs to prove necessity/TEEP compliance. Businesses have a responsibility to bring more sustainable thinking into their practice, however as trading conditions remain tough, businesses will need to be able to see clear benefits in order to encourage them to recover and recycle more. Education will be a factor, enabling businesses to see the cost savings and other tangible benefits of following a more sustainable approach.
23. Regarding households, recycling and recovery needs to be made as simple as possible. If it takes too much time and effort and they will not see enough of a benefit to partake. Local consumer to consumer networks and initiatives, such as FRN, Freegle and Freecycle have proven to be successful, and could be enhanced by more government support to highlight their existence and encourage greater use of these platforms.
24. A further possible incentive may be to allow local authorities to ring fence savings made by adopting greater use of high quality recycling for particular high profile schemes. For example a community project, such as a new park, that has only been possible due to money saved on waste management would be a great way to promote a sustainable society. Where such schemes benefit a significant number of residents they will be encouraged to take further part in recycling.

**Whether England has the right balance of waste treatment technologies between anaerobic digestion, incineration with energy recovery and gasification to produce fuel/heat/power; the extent to which increasing the capacity of thermal treatment plants could impact England's municipal waste recycling rates.**

25. The role of energy from waste needs to be recognised in the context of the waste hierarchy as a whole and greater emphasis should be placed upon options higher in the hierarchy. For source segregated waste anaerobic digestion is often an attractive option as it has the capacity to be a recycling activity (if PAS110 compliant), this would place it up the hierarchy, if operated to the correct standard.
26. We should be aiming to reduce waste at source. In the past few years the emphasis has been on landfill diversion. However there is a need to encourage both businesses and householders to take a lifecycle approach, identifying materials as a resource far earlier in the process and embracing the circular economy. The aim should be to see material as a potential resource before it becomes a waste. In this way the waste hierarchy can be correctly applied, with energy from waste the option only for waste that cannot be recycled.
27. Energy incentives must not be allowed to distort re-use and recycling markets for waste. Too much thermal capacity is highly likely to have an adverse impact on recycling rates; this can be seen with the current competition for feedstock from underutilised European plant. An approach similar to that taken in Scotland may be appropriate, ensuring that recyclable materials are as far as possible recovered for recycling prior to waste being incinerated.
28. Well managed energy from waste has an important role to play; there is a need to ensure that only truly residual waste is used. In this way energy from waste has the potential to produce useful energy from non-fossil fuels, contribute to energy security and provide heat.
29. Heat networks are firmly established in other countries but currently provide less than 2% of the UK's heat demand. Nearly 50% of heat demand in England is concentrated with enough geographic density to make heat networks worth investigating. Greater consideration should be given to the viability of heat networks and whether these can add value to industrial, commercial or social housing schemes.

**Whether anaerobic digestion is the best option available to deal with food and other bio waste; whether the Government's Anaerobic Digestion Strategy and Action Plan has substantially increased the use of AD.**

30. Anaerobic digestion can be used to turn organic waste into a resource and is environmentally superior to composting. Currently only 25% of English local authorities provide for separate collection of food waste, with a further 25% collecting food mixed in with garden waste.
31. As we have stated for other energy from waste technologies, anaerobic digestion is useful but should not be seen as the solution of choice. More needs to be done to minimise food waste at the household level, and masking it by relying on anaerobic digestion is not the answer to all our food waste problems. Almost half the food that is wasted in the UK is from within the household, and food waste generated in the UK is far higher than other European countries (137kg/capita in the UK compared to 93kg/capita in Germany and 46kg/capita in Italy). There is significant scope for improvement through better collaboration with food retailers and continued government support of

initiatives such as WRAP's Love Food Hate Waste campaign. Waste minimisation and potential recovery, for example by donation to charity or use as animal feed, should be seen as the options of choice with anaerobic digestion utilised where the other options have been exhausted.

32. We note that some local authorities are still priced out of implementing a self-sufficient food waste collection, thus we are losing out on landfill diversion. By supporting the anaerobic digestion sector and associated food waste collections more authorities may be able to divert food waste from landfill. Removal of food from the residual waste stream may also reduce the potential for odour or flies and make less frequent collections more viable, saving costs elsewhere.
33. There is also scope for greater use of the co-digestion of sewage sludge and waste to produce biofertiliser and biogas. Regulatory barriers currently inhibit co-digestion and an update to the Quality Protocol for Anaerobic Digestate (PAS 110) needs to include provision for the use of biosolids (sewage sludge) as feedstock where appropriate.
34. Anaerobic digestion should be the preferred method for treating food and biodegradable waste where appropriate and where waste minimisation is not an option. We should resist growing energy crops for anaerobic digestion facilities which use valuable land and resources that might be better spent producing valuable food resource.
35. The AD Strategy and Action Plan has increased the use of anaerobic digestion, however there remains scope for a lot more to be done. The plan does not require training and technical competence to operate all plant. This is essential, both for optimal operation of the plant and also to achieve buy-in to the process. Technical competence and relevant training have been proven to be essential in countries where anaerobic digestion has a high profile and contributes significantly to waste management with improved health and safety as one of the benefits.

#### **The feasibility of the introduction of a ban on landfill and/or incineration in England.**

36. Landfill bans are becoming increasingly common as a means of both diverting waste from landfill and creating certainty for investment in alternative technologies. We would see this as a positive step which would encourage the movement of waste up the waste hierarchy.
37. Incinerator bans or an incinerator tax could be considered to promote waste minimisation and recycling. However, such measures would need to be considered carefully to guard against undesirable outcomes. A blanket tax could well lead to more waste being landfilled or sent abroad for incineration. Targeted bans on particular materials, for example hard plastics, may better serve the purpose.