

## **ESSEX COUNTY COUNCIL WASTE DEVELOPMENT DOCUMENT:**

### **ISSUES AND OPTIONS PAPER OCTOBER 2010**

#### **SUMMARY PAPER FROM ESSEX FRIENDS OF THE EARTH**

1. This summary paper has been prepared jointly by Saffron Walden & District Friends of the Earth, Colchester & North East Essex Friends of the Earth and South East Essex Friends of the Earth.
2. We have separately submitted detailed papers to Essex County Council in response to the draft Waste Development Document Issues and Options Paper 2010. This summary paper summarises the key waste issues facing Essex (including, where the context requires, Southend on Sea) and our proposals for addressing them, as set out in more detail in the main response papers.
3. Essex has seen steadily falling volumes of waste arisings across all the main waste streams, including MSW and C&I and C&D wastes, notwithstanding population growth. The latest figures published show that this trend has continued in 2009/10, and in just the last two years Essex MSW volumes have fallen by 6%. Separate Essex figures for C&I and C&D waste are not available, but national figures show that C&I and C&D waste arisings are falling substantially. We expect these trends to continue, and indeed, given the current Government focus on waste and waste reduction, to accelerate.
4. Essex is legally obliged to endeavour to move the treatment of waste up the “Waste Hierarchy”, which means a focus on waste prevention, reuse and recycling, to make sure that waste can be minimised and the waste that does arise optimized. This not only makes sound environmental sense; it also makes economic sense by creating value from waste and minimizing the costs of treatment, particularly disposal.
5. Despite this background of falling waste volumes, ECC’s “best case” plan assumes that MSW volumes will increase by 5% in the current year and will remain stable for the next 20 years. The WDD and ECC’s underlying Joint Municipal Waste Management Strategy is based entirely on the assumption that future waste arisings will be somewhere between its “best” and “worst” case scenarios, when current figures show that we are already significantly ahead of the “best” case, and that reuse and recycling performance will remain modest.
6. ECC’s current waste strategy, as reflected in the WDD, is primarily based on the construction of one or more huge, inflexible central facilities which will perform a limited recycling role but will primarily prepare waste for disposal. The core facility is currently the subject of a PFI-backed long term contract tendering process. If only the “best” case waste scenario is achieved this central facility will provide significant over capacity for Essex, which ECC will be obliged to pay for. The experience of other councils is that these long term, inflexible facilities and contractual arrangements are extremely expensive as waste volumes fall.
7. We are therefore calling on Essex County Council:
  - a. to rethink its approach to waste management, and to concentrate resources on preventing waste and ensuring that reuse and recycling opportunities are maximized, rather than its current focus on waste disposal;
  - b. to rethink its approach to waste collection and encourage district councils to prioritise methods which maximise both the quantity and the quality of waste which can be reused, recycled or composted, and ensure that the greatest value can be obtained for the recycle. In particular, to institute separated kerbside collections with enough boxes and reusable bags for all recyclables and garden waste, sorted at the kerb, for local baling and windrow composting, We support the separate kerbside collection of foodwaste for local Anaerobic Digestion plants to produce renewable energy -

preferably and most efficiently for the gas grid to provide heating for homes, or for transport fuel;

- c. adopt a flexible strategy, as required by Defra, which can react to changes in waste arisings in the future and can address waste on a local level.

8. By doing so, we believe that Essex can:

- a. make a substantial contribution to the environment by minimising waste, maximising the reuse and recycling of waste and minimising the environmental impacts of treatment and disposal;
- b. create significant local job opportunities in Essex by focusing resources on activities at the top of the Waste Hierarchy, which by their nature are more labour intensive, and moving them away from large-scale capital intensive treatment and disposal;
- c. save money by reducing the overall cost of waste management and realize revenue opportunities by increasing the quantity and quality of recyclates;
- d. avoid exposure to long-term, inflexible capital plant and contractual commitments;
- e. save energy, reduce transport pollution and cut climate change gases, helping Essex's contribution to comply with the UK's commitment to reduce climate change gases by 34% by 2020 and by 80% by 2050.

**Saffron Walden & District Friends of the Earth**  
**Colchester & North East Essex Friends of the Earth**  
**South East Essex Friends of the Earth**

**2 December 2010**

## ESSEX COUNTY COUNCIL WASTE DEVELOPMENT DOCUMENT:

### ISSUES AND OPTIONS PAPER OCTOBER 2010

#### RESPONSE FROM SAFFRON WALDEN & DISTRICT FRIENDS OF THE EARTH, COLCHESTER & NORTH EAST ESSEX FRIENDS OF THE EARTH AND SOUTH EAST ESSEX FRIENDS OF THE EARTH

##### A. Introduction

1. This submission is made on behalf of Saffron Walden & District Friends of the Earth, Colchester & North East Essex Friends of the Earth and South East Essex Friends of the Earth in response to the ECC Waste Disposal Development Document: Issues and Options Paper October 2010 (the “Consultation Document”). This submission is made separately by each of the three groups, so please treat us as separate respondents; we thought however that it would be more helpful for you to have one document than three separate ones.
2. We have followed the question numbering set out in the Consultation Document. In addition we make a number of general points separately from the questions.
3. In relation to the Glossary, we note the following:
  - a. the definition of **Energy from Waste Facility** does not distinguish between energy from waste facilities which can properly be classified as “Recovery Operations” under paragraph R.1 of Annex II to Directive 2008/98/EC (the “EU Waste Framework Directive”) from those which must be considered as “Incineration on Land” falling within paragraph D.10 of Annex I and therefore constitute “Disposal” rather than “Recovery”. This distinction is highly relevant to the consultation;
  - b. for this reason, the definition of **Waste Hierarchy** is misleading. Most energy recovery facilities, including all those methods proposed by ECC of which we are aware, will constitute “Incineration on Land” rather than “Use principally as a fuel or other means to generate energy” for the purposes of the EU Waste Framework Directive and therefore will fall at the bottom of the waste hierarchy as methods of “Disposal”. Under the 2006 Waste Framework Directive and relevant case law, incineration is correctly classified as “disposal” rather than “recovery”, unless it can satisfy the 3-fold test set out in the *Belgian Cement Kilns* case. To do so, the combustion of waste must have as a principal objective that the waste fulfils a useful function as a means of generating energy and such combustion must replace a source of primary energy which otherwise would have been used to fulfil that function. In the case of the solutions proposed by ECC for the burning of solid recovered fuel, this is clearly not the case – energy production is a by-product of waste disposal. Although the EU Waste Framework Directive reclassifies certain forms of incineration if they satisfy the R1 test, this relates only to “incineration facilities dedicated to the processing of municipal solid waste”. The DEFRA consultation paper on the transposition of the EU Waste Framework Directive (see *Stage One: Consultation on the transposition of the revised Waste Framework Directive July 2009, paragraphs 2.148 – 2.182*) makes it clear that the R1 test does not apply to facilities consistently dealing with non-MSW, so the existing case law will continue to apply and the incineration process cannot be regarded as recovery. The energy from waste facilities contemplated by ECC will therefore be at the bottom of the waste hierarchy;
  - c. in this submission, we use the term “incineration” to mean any form of burning / incineration, as the term is used in the EU Waste Framework Directive, rather than in the restricted sense of just “mass-burn incineration”, which is sometimes employed in ECC documents;

- d. it is therefore misleading in the present context to suggest that disposal to landfill should only be used if, eg energy recovery does not offer an appropriate solution, as landfill and disposal via energy recovery or “Incineration on Land” are classified equally in the waste hierarchy. We also note the OECD that landfill has fewer social costs than forms of incineration, and that from a climate change perspective plastics are better landfilled than burned. It is also extremely disappointing to see that ECC is contemplating adopting the burning of SRF as one of the main planks of its waste strategy when this is right at the bottom of the waste hierarchy, and we struggle to see how this can be consistent with ECC’s responsibility to promote waste treatment up the waste hierarchy.
4. This issue also recurs in the body of the Consultation Document, where it appears that energy from waste is treated as a “Recovery” rather than a “Disposal” operation. For example:
    - a. in Table 1 *Issues for Consultation*, Energy Recovery Facilities are classified separately from Disposal Facilities;
    - b. the description of *Energy from Waste* in paragraph 5.46 is also incorrect in the context of ECC’s proposed infrastructure for the reasons given above. In particular:
      - i. where waste is to be burnt, the energy produced is not a renewable energy source as most of the waste which is commonly burnt will itself be fossil fuel derived or otherwise non-renewable;
      - ii. paragraph 5.46 talks about incineration / mass burn incineration and *Energy from Waste* as distinct. This is only the case as far as mass burn incineration is concerned. Most energy from waste infrastructure is classified as an incinerator for the purposes of the Waste Framework Directive, and we believe that each of the possible IWMFs at Basildon, Stanway or Rivenhall would be so classified
      - iii. burning waste will not reduce carbon emissions. Incinerators will generally have lower levels of efficiency than primary power stations and therefore are more likely to increase rather than reduce carbon emissions if the carbon emitted is properly accounted for. Moreover, recycling reduces carbon emissions and pollution whereas incineration increases them. Destroying valuable materials in MBT plants and landfilling the shredded dried MBT residues, or making Solid Recovered Fuel in MBT plants to burn in incinerators, wastes the embodied energy in those materials. Recycling saves far more energy.
5. Because of the failure to account properly for energy from waste facilities in accordance with the waste hierarchy, we believe that the Consultation Document is fundamentally flawed and needs to be revised. It is clear from a review of the Consultation Document that far too much focus is placed on possible EfW operations at the expense of waste management activities further up the Waste Hierarchy, and we believe this may well be in part at least due to a failure to place EfW properly in the Waste Hierarchy as a disposal rather than a recovery operation. We would be very happy to discuss this with you further. In the meantime, we have however responded on the basis of the questions raised in it. We also note that it appears to be contemplated that contracts for the potential development of the Courtauld Road site would be signed prior to the conclusion of the WDD process and its approval by ECC and the Government. If so, this would make a mockery of the WDD consultation process; we firmly believe therefore that no long term or significant waste-related liabilities should be undertaken by ECC until the WDD has been finalised and approved.
  6. More fundamentally, this focus on EfW reflects a more general focus on the bottom of the Waste Hierarchy rather than the top. Paragraph 9(b) below sets out the requirement of the PPS10 companion guide, para 3.7 and the need to be particularly supportive of the upper end of the hierarchy. We believe that the WDD needs to be fundamentally redrafted with this requirement in mind. We also note the Audit Commission findings in this regard that Councils with large EfW programmes are very poor in reuse/recycling etc.

7. As the DEFRA Consultation on Waste Policies: Call for Evidence process is still ongoing, it also seems to be premature to be considering the Consultation Document; presumably in any case the WDD will need to be revised to accord with the outcome of the DEFRA consultation.

## **B. Question 1: prevention and reuse of waste in Essex**

8. We believe that a focus on waste minimization should be paramount in the WDD, and yet very little priority seems to be attached to it in the WDD. It is well down the list of key issues identified in the WDD, and the Strategic Objective (SO3) relating to it is both down the list and very loosely drafted. In our view, waste minimization should be the first and key Strategic Objective. We also believe that this is a requirement for the WDD to comply with national policy.
9. There are many independent reports urging this approach. To cite just a few:
  - a. the Government's stated intention to move to a national zero waste economy;
  - b. PPS10 and its companion guide, which sets out considerations for the development of waste strategies (paragraph 3.7). As the Guide states: "*consideration should be given to all the levels of the waste management hierarchy. It will be helpful for these to be dealt with sequentially and to be linked, in order to address the Key Planning Objective of driving waste management up the waste hierarchy and addressing waste as a resource. Policies will need to be particularly supportive of the upper end of the hierarchy if they are to be effective in practice*". In our opinion, the WDD fails to do this;
  - c. the Environmental, Food and Rural Affairs Committee report (Third Report, session 2009-10) that "*Although it is important that maximum levels of re-use and recycling of waste are achieved, this must not be at the expense of efforts at national and local level to prevent waste arising in the first place*";
  - d. the Waste Strategy for England 2007 requirements to honour the One Planet Living goal, and to focus on per-stream life-cycle thinking, and its key objectives to "*put more emphasis on waste prevention and re-use*". As the Waste Strategy for England 2007 says (Annex C2, Table C2.1), it is the responsibility of local authorities to "*develop local prevention regimes using a range of tools such as business support*" to reduce waste arisings;
  - e. a report by the consultants Arup for the Welsh Assembly Government 2009 which, in assessing the ecological footprint associated with the Welsh waste strategy notes that "*it is fundamental that recycling becomes an option for waste management only after reduction and reuse*". The Arup report further demonstrates that even 70% recycling by 2025 fails to meet the trajectory necessary to achieve Wales' 2050 ecological footprint target unless accompanied by very significant waste reduction.
10. The absence of a proper strategic approach to waste minimisation is a serious shortcoming of the WDD.
11. In terms of promoting and enabling the prevention and re-use of waste, we would direct you to the Friends of the Earth October 2010 Response to the Defra Waste Review Call for Evidence, which has a number of extensive sections with suggestions. It is available at [http://www.foe.co.uk/resource/submissions/policy\\_review.pdf](http://www.foe.co.uk/resource/submissions/policy_review.pdf) or we can e-mail you a copy.
12. Set out below is a summary of some of the Friends of the Earth suggestions most relevant to ECC directly rather than as matters of national policy. There is of course no rigid boundary between reuse and recycling so strategies are likely to help both and therefore some of our suggestions may be more directed at recycling but should also raise awareness of and assist reuse. It would of course also be helpful if ECC would support and promote the adoption of effective national policies as well:
  - a. encourage the growth of local waste collecting, sorting and reselling cooperatives;
  - b. ensure that no contracts entered into by ECC or relating to any Essex waste restrict the diversion of any waste streams to charities or anyone else; ensure also that no such

contracts ever commit to minimum waste streams or carry any financial penalties in the absence of minimum waste streams or otherwise financially encourage particular waste streams;

- c. continue with the subsidised distribution of home composting bins;
  - d. promote real nappies and waste reduction and reuse generally. We may be wrong but little effort seems to go into this;
  - e. promote best practice across the districts. If one looks at the Joint Municipal Waste Management Strategy for Essex (2007 to 2032) (“JMWMS”), there is a huge range of performance across the districts – see for example the table on p.60 “*Essex Household Recycling & Composting Performance 2007/08*” which shows recycling rates varying between 17% and 34% and composting rates from 0% to 20%. The 2009/10 figures show higher overall levels but the range in performance remains. Although these statistics relate to recycling and composting rather than prevention and reuse, the same principles apply;
  - f. adopt the best methods from the Future Resources Report 2009 to Defra, particularly greater communication to raise awareness of waste prevention and reuse / recycling and householder engagement and the provision of greater capacity in dry recycling systems;
  - g. actively support community based franchises to promote the collection and sale of reusables and recyclables. Provide much more and better infrastructure to permit and encourage these forms of behaviour;
  - h. to the extent not already in operation, institute weekly separate foodwaste collections as soon as possible. As well as encouraging AD/composting and better separation of waste streams, they have also been shown to reduce the overall waste generated;
  - i. consider the use of smaller receptacles or black bags for residual waste – these have been shown to lead to a reduction in waste arisings;
  - j. devote far more resource to collection and source separation of waste / reusables and recyclables so that resources remain at the top of the Waste Hierarchy rather than being mixed/commingled or contaminated and moving down the Waste Hierarchy. Institute the universal adoption of kerbside sorting;
  - k. operate reuse/refurbishment centres at civic amenity and household waste recycling centres, possibly in conjunction with community based organizations;
  - l. look at the provision of large scale retail warehouses such the “Trash Palaces” in New Zealand. Look at all of the other suggestions for local authorities contained on p.24 of the FoE Response, and also those contained in the reports referred to there.
13. We also note the proposals made in WRAP’s 2009 report “*Meeting the UK climate change challenge*”, many of which ECC and the district and local councils could adopt or promote in their capacities as producers of waste rather than just as waste treatment organizations, such as:
- a. improving the efficiency of product use, through for example extending the lifetime of products and reducing edible food waste;
  - b. adopting and promoting strategies for sustainable building and through more efficient use of existing infrastructure;
  - c. using products over their full technological lifespan;
  - d. promote all of the WRAP demand strategies within Essex to reduce consumption;
  - e. focus on waste minimization in all council operations.
14. Furthermore, ECC should provide increased support to community reuse and recycling schemes.
15. Far too little effort has been expended on boosting the reuse of goods and materials as opposed to sending them to recycling or, more usually, disposal. This is despite the fact that, after prevention, reuse is at the top of the waste hierarchy. Reuse has many advantages. Most obvious of these may be the environmental savings in both reduced resource extraction and energy use, thus avoiding emissions. Reuse has the additional advantages of creating jobs in reconditioning, resale and so on, in supplying cheap goods such as furniture to low income communities, and

avoiding landfill and other disposal costs. Flanders has developed a thriving network of reuse stores, with one per 60,000 people, compared with one per 155,000 people across the UK (and one per 233,000 people in London). Discarded goods are sorted, inspected, cleaned and repaired if necessary. They are then resold at affordable prices. London recently announced its own plan to create the world's largest reuse network: "The London Reuse Network will be made up of 'clusters' of organisations, including local authorities and charities who will work together to deliver an easy-to-access and consistent reuse service to residents and businesses within their area. It will collect, store, refurbish and sell on everything from furniture, books, carpets and bikes through to cookers and fridges. It aims to divert 17,000 tonnes of reusable products from landfill over the first two years of the project saving over 80,000 tonnes of carbon emissions. It will provide a single 'reuse hotline' and web portal serving the whole of London. By 2015 the network aims to be diverting over a million items from the waste stream every year, training thousands and employing hundreds of people. As we say above, reuse and refurbishment centres could be sensibly located at CA/HWRCs.

16. Finally, we note the initiatives referred to in paragraphs 3.5-3.6 of the JMWMS. We support these forms of initiatives. It is not obvious however how much resource is devoted to these forms of initiative – as we say elsewhere, it seems to us that ECC resources are currently primarily directed at waste management at the bottom of the Waste Hierarchy, rather than at the top as they should be.

### **C. Question 2: use of RSS evidence base**

17. As a starting point, we note that no question is asked in relation to the proposed waste Targets set out in the table following para 3.15. We also note the statements in para 3.13 that even these targets are considered to be "extremely challenging" by some Waste Planning Authorities. We strongly disagree with this approach, and believe it shows a completely unnecessary lack of ambition. As examples of approaches elsewhere, both Scotland and Wales have set 70% recycling targets by 2025, and the Flanders region of Belgium already recycles nearly 75% of municipal waste. In 2008/9, South Oxfordshire recycled 43% of MSW and in just one year this rose to 64% in 2009/10 which shows what can be achieved, and the number of authorities recycling over 60% is rising fast year on year. Closer to Essex, we understand that Cambridge CC has set a recycling target of 67% of MSW by 2021. Even in Essex, the average recycling rate rose from 38% in 2007/8 to 46% in 2009/10. In contrast, the targets contemplated by the RSS and Local Waste Strategy of 65% by 2031 or 60% by 2020 are pitifully low and unambitious. Within Essex, Rochford District recycled 63.5% in 2009/10, which already exceeds the ECC 2020 target and is close to the 2031 target.
18. The Mersea area trial in Colchester district was hitting the 60% target in 2002 even without a separate food waste collection so we are at a loss to understand how 60% by 2020 is a remotely acceptable, let alone challenging, target. In their response to the Government's recent Waste Review Call for Evidence, Friends of the Earth have called for the Government to adopt national targets for recycling MSW of 70% by 2020 and 75% by 2025 (and we would also note the recent decision in relation to Derbyshire which describes 70% as "reasonable"). Waste audits prepared for the Welsh Assembly (see <http://wales.gov.uk/docs/dsjlg/meetings/090106pc304annex2e.doc>) demonstrated that 93.3% of MSW is recyclable (including composting), and a Government focus on waste should reduce or design out completely the remaining 6.7%. We believe therefore that ECC should set itself a far higher target of MSW recycling rates in line with those proposed in Wales and Scotland and called for nationally by Friends of the Earth – the evidence of others shows that these targets are very realistic, and only by adopting – and meeting - properly ambitious targets can we see that ECC is meeting its general obligations to push waste up the Waste Hierarchy.
19. Given the experience of others, we do not believe that even these targets should be particularly challenging. We also note the recent statement by the Audit Commission (2008, Well Disposed,

para 140) that it considers that 70% of household waste is “*readily recyclable*”, and that (para 47) 70% of MSW is biodegradable and therefore suitable for composting / AD. It doesn’t make sense to compost / AD all of the biodegradable waste as much of it is paper or card, both of which should be subject to separate kerb-side collections and recycled. These targets should also save ECC/the district councils money, and if material is kerb-side separated should also be a material source of revenue. The December 2007 consultation paper by the Welsh National Assembly referred to in the preceding paragraph showed that the most cost effective recycling level over the period 2024/5 would be 80% of the waste.

20. Although the enormous range of recycling and composting rates in Essex shown in the JMWMS has narrowed in the 2009/10 figures, there is a huge amount that could be done to get close to these targets by just bringing the worst performing districts in line with the best performing. For example combined recycling / composting rates for 2007/8 range from 27.55 (Tendring) to 63.5% (Rochford); and within these figures, reuse/recycling varies from 19% to 34% while composting varies from 0% to 34.9% - this range ought to be completely unacceptable. Of course these figures disguise a number of natural variations, such as that a number of councils (rightly or wrongly) view it as unsustainable to collect garden waste or some garden waste goes directly into ECC figures rather than the relevant district figures, and kerb-side collection methods vary.
21. High target rates for reduction, reuse and recycling of C&I and C&D waste should be adopted. We note the 2009 Defra C&I survey which shows an 18% fall in C&I waste arisings since 2002/3, a 50% reduction in C&D waste arisings since 2002/3 and that some 58% of C&I waste was recycled. As far as other authorities are concerned we understand that Cambridge CC has set a target of 88% by 2026 for C&I waste reuse/recycling, and we note the North West of England Commercial and Industrial Waste Survey 2009 (dated March 2010) shows that 97.5% of landfilled C&I waste was potentially recyclable. We also note that the C&I sector is becoming increasingly committed to driving waste management up the Waste Hierarchy ([https://www.fdf.org.uk/publicgeneral/environmental\\_makingarealdifference.pdf](https://www.fdf.org.uk/publicgeneral/environmental_makingarealdifference.pdf)). The FDF report also notes that their members waste has decreased by 16.5% over 3 years while production has risen by 3% and that source segregation of waste, to reduce the need to dispose of mixed waste, is regarded as a priority.
22. As well as designing ECC’s waste systems for lower volumes of waste, we believe that ECC’s waste systems must also be flexible and modular so as to respond to rapid changes in the volumes of waste arisings. As the Environment Agency’s Head of Waste testified to the Environment, Food and Rural Affairs Committee: Waste Strategy for England 2007: “...Defra’s advice on the Waste Strategy is very clear, that local authorities need to avoid being locked into long term contracts or plant that is too big. They need to be responsive to future, technological changes”. Yet a key plank of ECC’s WDD, to build 3 large, expensive, long-term, inflexible MBT plants, would do completely the opposite. Most importantly, ECC needs to institute a proper system throughout Essex of kerbside collections and separation in place of the “wheelie bin” systems now prevalent. According to WRAP, these are the most economic collection systems and bring in the highest income while supplying UK processors with high quality recycle. To do this, we need sufficient kerbside boxes and reusable bags, suitable vehicles, weekly collections and local baling centres in each district such as in Chelmsford currently – these will be far cheaper than the proposed MBT plants, as well as producing an income stream, being vastly better environmentally and pushing waste up the Waste Hierarchy. Not to do so seems to us to be in breach of ECC’s obligations to move waste treatment up the Waste Hierarchy.
23. The Plan shows far too great a readiness to accept the current rates of recycling and to focus primarily on the methods of disposal at the bottom of the Waste Hierarchy. Unfortunately, this approach, with which the Plan starts, then permeates the rest of the Plan proposals. Far too little of the plan contemplates significant resource being devoted to higher level measures. If for example one looks again at the figures in the table in paragraph 3.4 of the JMWMS, the

combined percentage for reuse / recycling / composting / AD for Essex was only 38.07%. This figure has now increased significantly to 46% in 2009/10, but if Essex adopts and achieves the targets currently proposed for Wales, this percentage should increase greatly, removing a huge amount of waste from the EfW / landfill disposal routes currently proposed by ECC.

24. We therefore support those parts of the evidence base which look to increase resources and capacity to facilitate waste reduction, reuse and recycling and which will enable the use of composting and AD for any waste streams which cannot reasonably be reused or recycled. However, we do so because a far higher proportion of Essex waste should be treated via these routes rather than because we believe that the overall waste arisings estimates are correct.
25. Although the Questions do not specifically refer to it, we also note the error in Table 3 (page 24) of the WDD, where it describes the total MSW and C&I waste arisings as "*Biodegradable Waste*". This is of course not true – large amounts of this waste will be inert and not biodegradable at all. The WDD should give a proper assessment of how much of the waste arisings are and are not biodegradable for a proper assessment of the necessary treatment methods and capacities to be made. We assume that Tables 4 and 5 on p.24 are also incorrect for the same reason – both should refer to biodegradable waste, not total waste. It is not clear how much this error has affected other parts of the WDD, for example the SO1 target to reduce the volume of waste to landfill by 75%, when the EU requirement is just to reduce the biodegradable waste to landfill by this percentage. See paragraph 10.4 of Appendix 1 and the reference to "*biodegradable municipal waste*" for example.

#### **D. Questions 3 & 4: self sufficiency?**

26. In principle we believe that ECC should plan for net self-sufficiency.
27. As explained however in response to questions 2 and 5, we strongly believe that the ECC Plan should not be based on the waste forecasts set out in the Submission RSS. For the reasons stated in relation to questions 2 and 5, we believe that the Submission RSS significantly over-estimates the future waste arisings, and we believe that the ECC Plan should reflect the likely continued diminution in waste arisings in the plan period.
28. We also believe that ECC should do it all it reasonably can to introduce effective waste prevention measures and targets and that the core Plan waste arisings forecasts should be calculated on the assumption that these waste reduction measures are effective.
29. We do not know enough about the London waste arisings to answer the question properly in relation to the acceptable proportion of London's waste to be catered for, but we certainly do not believe that any increase should be planned for to justify or be used as feedstock for large scale EfW or other disposal operations.

#### **E. Question 5: forecasting future waste management requirements**

30. We do not believe that any of the three options is either appropriate or robust based on the forecast waste arisings. The Adopted RSS is clearly the least robust and looks completely unrealistic in light of current waste trends even without the step change in waste-management policy which is needed. The Submission RSS and the Local Waste Strategy predictions are essentially the same – below we have concentrated on the Submission RSS figures, but the same comments apply to the Local Waste Strategy figures. For the reasons given below, we also believe that these scenarios substantially over-estimate likely waste arisings.
31. Taking MSW as an example, in the last three years, total MSW has declined from 816,842 tonnes in 2007/8 (Essex 732,578 and Southend 84,234), to 799,624 tonnes in 2008/9 (Essex 718,876 and Southend 80,748) and to 767,176 tonnes in 2009/10 (Essex 690,848 and Southend 76,328), year on year declines of 2.1% and 4.1% respectively. There is no obvious reason why this decline should not continue and indeed if national and ECC policies are effective, we should assume it would, and indeed one would hope that the rate of decline will increase hugely

- all the core policies cited above are aiming for this to happen. Yet the Submission RSS assumes that in the year 2010/11 MSW will increase by 4.9% from the preceding year and then stay effectively static for the next 20 years. The Plan therefore is effectively assuming that all of ECC’s waste prevention policies will fail and indeed we will revert back to earlier higher levels of MSW. We can see no reasonable basis for this assumption, and certainly can see no reasonable basis for planning on the back of this assumption.
32. The figures for C&I waste and C&D are not published as far as we are aware. However, if one looks at the Environmental Agency figures for Waste Deposit Trends in the East of England, the total amount of waste being either sent to landfill or otherwise transferred and treated has fallen from 6,326,000 tonnes in 2007 to 5,987,000 tonnes in 2008 and to 5,148,000 tonnes in 2009, decreases of 5.4% and 14.0% respectively, or a total decrease of 18.6% in just two years, virtually all of which is attributable to the decline in material being sent to landfill. Despite this, the Submission RSS predicts that MSW will remain essentially the same for the next 20 years to 2030/31, C&I will actually increase by 13% over this 20 year period and C&D will stay exactly the same over this 20 year period. In fact, the predictions are even more pessimistic, as London imported waste will decrease greatly over the plan period and therefore these figures disguise a significant increase in Essex waste if the overall waste figures remain roughly constant. As we say above in relation to MSW, we can see no reasonable basis for any of these assumptions and can see no reasonable basis for planning on the back of these assumptions.
33. We also note para 7.14, that the Site Waste Management Regulations 2008 are expected to result in a significant reduction of C&D waste.
34. Of the three options, the Submitted RSS in general assumes the lowest amount of waste overall and as the evidence of the last five years is that waste arisings have fallen considerably, and should continue to fall, it must be the closest. However, as we say above, we believe that ECC should plan on the basis that this trend will continue, and therefore all of the options presented will greatly overestimate the future waste management requirements. The Submitted RSS figures overall therefore should be seen as not even a likely absolute maximum and planning made on the basis that the likely waste arisings will be significantly less, and that the recent declines should be expected to continue, particularly as there is still so much progress to be made to get recycling and composting up to even the low statutory figures let alone the figures that we believe ECC should be targeting.
35. If one looks at the ECC Capacity Gap report, the “Worst Case” scenario assumes that the Adopted RSS figures are correct whilst the “Best Case” assumes the Submitted RSS / Local Waste Strategy. We do not believe that it is credible now to regard the Adopted RSS as a realistic scenario in any reasonable circumstances, and we note the comments in the Capacity Gap report that the Adopted RSS forecasts are excessive (see for example para 3.3.1). For the reasons given above, we believe that the Submitted RSS / Local Waste Strategy projections represent at best a worst case scenario, and in no way can they be possibly regarded as a realistic best case scenario. Waste arisings are already lower than in the “best” case, and the ongoing targets on which the Submitted RSS / Local Waste Strategy are based are extremely undemanding, and as we say above should be raised significantly. Whilst it is clearly arguable as to how reasonable or not these strategies are, we do not believe that there can be any credible argument that they represent a “best” case scenario – indeed on current trends, they represent a “worst-case” scenario.
36. If one looks at the summary capacity requirements in Table S2 of the Capacity Gap report and reproduced in Table 9 of the WDD, one can see that in the “best-case” scenario:
- a. Transfer capacity is currently 37% above the predicted requirement (ie 1.64Mtpa existing potential capacity compared to 1.20Mtpa required capacity);
  - b. Recycling and Composting is currently 36% above the predicted requirement (ie 1.94Mtpa compared to 1.43Mtpa), and this is before any additional capacity from the proposed IWMF. We would hope that recycling and composting will be greatly higher than the amounts contemplated by ECC, but there is considerable excess capacity, and if

more capacity is needed, we believe this should be built on a small-scale, localised basis. The Capacity Gap report makes clear that there is sufficient capacity without any need for the IWMMFs;

- c. C&D recycling capacity is predicted to be below the required capacity, but given the trends in C&D and the statements in the Capacity Gap regarding C&D, such as for example that “*there is a shortage of inert material for use as an infill material due to the need to increase recycling*” (para 2.2.3.2 of the Capacity Gap report), we do not believe that this is likely to be a significant issue;
  - d. Treatment capacity is currently 0.18Mtpa against a forecast of 0.51Mtpa. “Treatment” is defined as including AD, MBT, WEEE and the various forms of incineration. As we say above, we believe that waste arisings are significantly over-stated and that the targets for waste reduction, reuse, recycling and composting should be significantly higher than those in the Submission RSS / Local Waste Strategy. We also believe that if kerb-side collection is optimized there will be a greatly reduced Treatment need. We therefore believe that this capacity gap should be viewed as very much a maximum scenario, and in no way a likely middle ground. We also note that (paragraph 4.3.5.1 of the Capacity Gap report) there are currently no AD plants in Essex, and in accordance with the Defra requirements one would expect this capacity to rise significantly (although we do not believe that AD on the individual plant scale of the proposed IWMMF plants is sensible). Finally, we note the statement in para 4.3.5.2 of the Capacity Gap report, that proposed AD facilities “*may not be sufficient for government targets, if a landfill ban was fully implemented for food and green waste*”, but we believe that this should be properly dealt with through source-separated collection and composting. As a general principle we support AD for food and agricultural/general putrescible waste.
37. We also note that according to para 3.31 of the WDD, the total combined capacity of the three IWMMFs proposed at Rivenhall, Stanway and Basildon would be 1,196,000 tonnes pa. This figure is more than 3.5 times the “best-case” treatment capacity gap and is only some 15% less than the 1,400,000 tonnes by which the Essex waste to landfill total declined in just the two years from 2007 to 2009 according to the Environmental Agency figures. Even one of these plants is therefore in excess of the Capacity Gap requirement.
  38. As Defra require, and as explicitly set out in the 2007 Waste Strategy for England, flexibility should be built into the plans to react if these projections prove to be over or under optimistic. As we have said elsewhere, we strongly oppose the development of large scale inflexible waste disposal units such as the IWMMFs contemplated. On the basis outlined above, it is more than possible that if ECC fulfil their obligations to move waste arisings up the Waste Hierarchy, and even just one of the IWMMFs will result in expensive and inflexible overcapacity.
  39. We believe therefore that the WDD needs to be redrawn on the basis of a likely huge reduction in waste arisings in the period (but with flexibility if this does not occur).
  40. Within the overall waste management requirements, we also believe there needs to be a huge change in the capacities of the various treatment streams, with far more resources devoted to treatments at the top of the Waste Hierarchy (ie reduction, then reuse then recycling / composting and AD) and far less to disposal routes such as landfill and non-AD EfW or the production of SRF for eventual incineration.

#### **F. Question 6: key capacity issues summary**

41. We disagree with the summary of key capacity issues for the reasons set out below and in the rest of this submission.
42. We believe, for the reasons set out above in response to Questions 1 to 5 that the first assumption, that MSW and C&I arisings will remain broadly constant over the period, is incorrect and results in a significant over-estimate of the necessary waste treatment capacity. In fact the statement is not even correct – the Plan assumes a 4.9% increase initially over current

MSW levels and then to remain broadly constant; we do not have information for the current levels of C&I waste managed by ECC, but question whether current and predicted levels are not also over-estimated. Our view is supported both by the ongoing ECC MSW and C&I statistics and the ongoing reductions at a national level, which mirror what has been occurring in Essex over the last 5 years. We note for example the recent Defra report showing that C&I waste nationally has reduced by some 18% since 2002/3 (ie a reduction from 67.9 to 55.8m tones pa) – see <http://www.defra.gov.uk/evidence/statistics/environment/waste/documents/stats-release2010.pdf>. As we say above, we also believe that the decrease will continue as Government initiatives, and initiatives which ECC should be taking, to reduce waste have effect.

43. We agree entirely with the statement in Key Issue 2 that it is vital that waste management is pushed up the Waste Hierarchy. Unfortunately however much of ECC's proposals seem to have the effect primarily of diverting waste from disposal to landfill to disposal by EfW production.
44. We also disagree that landfill space is running out. For example, at Stanway we understand that Tarmac has said that there is sufficient space for 50 years of landfill even if current rates of landfill use were maintained (and as we say elsewhere, we believe they should reduce significantly as waste treatment moves towards the top of the Waste Hierarchy).

#### **G. Question 7: do you agree with the key issues?**

45. We agree with some of the key issues and disagree with others:
  - a. as a starting point, there should be a new Issue as the overriding first issue which is to seek to drive waste up the Waste Hierarchy, focusing especially on maximizing waste prevention, then on reuse, to which far too little attention is given, then recycling and AD and only then finally to the methods of residual disposal such as EfW/ other incineration or landfill. Waste collection methods should be planned with this hierarchy in mind so that the highest quality waste for the purposes of reuse or recycling is produced. For example kerbside sorting makes much more sense than commingling – refer again to the WRAP report referred to above. Emphasis should also be given to the need to promote reuse / recycling and their implementation, whether by ECC alone or through or in partnership with the third sector. As the Arup report above says, it is fundamental that recycling becomes an option for waste management only after reduction and reuse;
  - b. we agree with Issue 1, but subject to our comments in relation to Questions 9 & 10 *Spatial Options* below;
  - c. we do not disagree with Issue 2 insofar as it goes, but looking at future growth alone is much too simplistic. Issue 2 also needs to take account of waste reduction strategies, which should continue to reduce overall as well as per capita waste arisings. We also believe that paragraph 4.11 is incorrect in forecasting ever increasing C&D and C&I waste when these have been reducing substantially and should continue to do so – evidence of such is clearly available in the Waste Data Flow and other data sets available on the Defra website. We refer you also to the WRAP report "*Meeting UK climate change challenge*" and its aspirations for waste prevention;
  - d. we agree in Issue 3 with maximising employment opportunities where possible, but it is not clear what Issue 3 intends by the economic benefits of waste management. For the country as a whole, a huge reduction in waste arisings is clearly of enormous benefit, and at the top of the waste hierarchy; conversely, the more waste that is produced the more of a waste management industry that is required. Looking to enhance the economic benefits of waste management seems to us therefore to be completely wrong as stated, particularly if it led to pressure for more disposal by EfW rather than compliance with the Waste Hierarchy. Recycling and reprocessing materials such as paper, card, glass, metals and all plastics saves virgin materials, energy, pollution,

transport pollution and climate change gases. Similarly, job creation is likely to be far higher by promoting better waste collection, sorting, reuse and recycling than spending equivalent sums of money on capital intensive treatment plant. If this Issue 3 is to remain, it needs to be rephrased to make it clear that it is subject entirely to the requirements of the Waste Hierarchy, the need to address climate change and the need to reduce the overall production of waste;

- e. we strongly disagree with Issue 4 as stated. Climate change is clearly extremely important, but the Issue 4 as stated seems to us wrongly drafted. Climate change will best be addressed by driving waste up the Waste Hierarchy. At the moment far too much effort is put into waste treatment and far too little on the measures at the top of the Waste Hierarchy such as waste prevention, reuse and recycling. These should be placed at the top of Issue 4 – at the moment there is no mention of reuse or recycling. Next should come composting / AD / energy production from AD. If optimum strategies are used for these, there should be comparatively little residual waste to use as a “resource”, and there seems to be no reason to single this out. Ultimately, ECC should aspire to “zero waste to landfill or incineration (in the widest sense of the term)” as part of an explicit commitment to One Planet Living and to climate change mitigation and adaptation. Issue 4 should also address the complete climate change effects of any aspect of waste treatment, including CO<sub>2</sub> production in the transportation process and greenhouse gas production in disposal. CO<sub>2</sub> should also be properly accounted for and the WDD should ignore the distinction between biogenic and non-biogenic CO<sub>2</sub>, so that the full climate effect of EfW is properly accounted for. Account should also be taken of carbon sequestered in landfill over the medium term. There is for example much evidence that it is better to landfill un-recycled plastics than to incinerate them (see for example “*Ola Eriksson and Goran Finnveden – Plastic waste as a fuel – CO<sub>2</sub> neutral or not? Energy & Environmental Science, 2009, 2, 907-914; [www.rsc.org/publishing/journals/EE/article.asp?doi=b908135f](http://www.rsc.org/publishing/journals/EE/article.asp?doi=b908135f)*);
- f. we agree with the principle of Issue 5. We disagree with the central assumption that there will be a growth in waste management – as stated elsewhere, if Government strategy on waste is effective, waste arisings will decrease in line with the paramount requirement of the Waste Hierarchy of waste prevention. However, regardless of future levels, the environmental impact of waste transportation should be minimized. As we say elsewhere, we therefore favour the development of smaller locally-situated waste treatment options which can treat waste close to where it arises, so that only waste which cannot be reused / composted / AD’d / recycled locally needs onward transportation. We therefore also oppose ECC’s proposals to focus on a small number of very large MBT / EfW plants;
- g. we agree with Issues 6-9.

46. We also disagree with the policy objective stated in para 4.36 of “*minimising the amount of waste going to landfill*”. This policy should be restated to “minimize the amount of waste being disposed of” – for inert waste there may well be very good reasons why landfill is a better disposal option than others. As we say above, ECC should aspire to zero waste to landfill or incineration (in the widest sense). Para 4.36 also doesn’t mention re-use or AD, or moving up the waste hierarchy generally.

47. For the reasons given above, we therefore also disagree with aspects of “*Our Proposed Vision*” between paras 4.37 and 4.38. In particular:

- a. given the evidence of the last 5 years and the renewed emphasis on waste prevention, it is wrong to plan on the basis of waste growth. Plans should be made on the basis that the ongoing reduction in overall waste arisings will continue and plans should be flexible to react to substantial variations (up or down) in the Plan period without incurring undue additional cost or compromising the Plan objectives or the Waste

Hierarchy. The Waste Strategy for England emphasizes the need for flexibility in infrastructure;

- b. the statement under the second bullet point to push waste up the hierarchy should have three sub-bullet points rather than two, with recycling or composting as appropriate as the second bullet point, and as a third bullet point only where waste cannot be recycled or composted should the remaining options be considered. We think this section could also be strengthened, so the aim is to do so to the greatest extent practical, or similar language;
  - c. we do not know why the Vision doesn't refer also to the targets which ECC intends to adopt eg for composting and recycling (as amended as stated above).
48. We also believe that the WDD should explicitly recognise the conflict between EfW and waste treatment higher up the Waste Hierarchy – as the Audit Commission's Well Disposed report (at para 160) says: *“One of the common objections to Energy from Waste (EfW) facilities is that after they have been built they will discourage further improvements to recycling because the facility is designed to process a fixed amount of waste (between an upper and lower limit). WDAs therefore need to build ambitious forecasts for recycling and waste minimisation into business cases for disposal infrastructure if they are to avoid creating such a disincentive.”*

#### **H. Question 8: are the proposed spatial vision / strategic objectives correct?**

49. Not all. We do not believe that the proposed spatial vision and strategic options encompass all of the elements they should, and that some of them are incorrect, for the following reasons:
- a. there is no mention of the proposed targets for composting and recycling. As we say above, we believe the targets contemplated by ECC are far too low, but surely one of the Strategic Objectives should be to increase composting / recycling to the maximum extent reasonably possible and as a minimum to hit the targets adopted;
  - b. we disagree with SO1 – the focus on reducing waste to landfill is wrong in isolation. As we say above, for inert waste, it may well be the best disposal option and will almost certainly be a better option than EfW plants of the type contemplated. For plastic that cannot be re-used / recycled, it is likely to be a better option, as a form of carbon sink, than incineration. As well as the quantity of waste recycled etc, we believe that the Strategic Objective should also look at the quality of waste collected – if proper source segregated collection is instituted throughout the region, the quality of waste is likely to be much higher, and should therefore be both more readily re-used / recycled and achieve higher sales values. In this regard, we note the 9th June 2009 announcement by the Waste & Resources Action Programme (WRAP) that: *“Sorting household recycling at the kerbside is the best and cheapest option in most cases”*. WRAP also reported that: *“It is well known that the UK has become very dependent on export markets for its collected recyclates. It is less well known that in key areas e.g. paper, aluminium and certain types of glass, UK reprocessors are importing materials because sufficient material of the required quality is not available on the UK market...Whilst it is true that considerable success is being achieved by some newer MRFs, even they are unable to deliver the levels of quality achieved by kerbside sort systems”*. We also note again the errors in Tables 3 and 4 on p.24 mentioned above;
  - c. there should also be an increase in the range of material accepted / collected for recycling, such as plastic bags, which are readily recyclable;
  - d. SO1 should therefore be rephrased so as *“To increase the re-use, recycling and composting/AD of waste within the plan area to the maximum extent reasonably practicable, and as a minimum to the targets adopted by ECC, and to increase the quality as well as the quantity of waste capable of re-use, recycling or composting/AD”*;. The Strategic Objective SO1 fails to mention greenhouse gas emissions from waste emissions, although this is one of the key issues it supposedly covers. Either a new

- Strategic Objective should be inserted or SO1 should be extended to cover minimising greenhouse gas emissions (both biogenic and non-biogenic);
- e. SO3 seems to be very unambitious – should the objective not be “*To maximize waste prevention, including through working with the Councils’ Waste Strategy Teams*” etc?
  - f. we disagree with SO4. As noted above, we believe that the planned Integrated Waste Management Facilities are the wrong solution for Essex, and are likely to work against rather than for achieving the other objectives of pushing waste up the Waste Hierarchy and minimizing greenhouse gas emissions, for the reasons given elsewhere in this submission. Regardless of this, it seems to be a very strange strategic objective – if these waste management facilities are the optimum solution, they will be covered by the other Strategic Objectives as an inherent part of achieving them; if they are not and better solutions are available then they shouldn’t be safeguarded. SO4 should therefore be deleted;
  - g. we agree with SO5, but subject to the comments elsewhere, particularly regarding likely necessary capacity and the nature of the facilities needed. It should also refer to building flexibility into the provision of waste management facilities so that they can respond best to significant changes in waste arisings in the Plan period;
  - h. we disagree with SO7 in isolation. It seems sensible, but only if subject to the overriding objectives of pushing waste up the Waste Hierarchy, minimizing greenhouse gas emissions etc. It should be rephrased accordingly;
  - i. SO8 focuses purely on transportation whereas, to meet the key issues, it should cover all greenhouse gas emissions, and aim to reduce the environmental impact of the whole waste management process, including but not limited to transportation. SO8 should be rephrased accordingly;
  - j. the key issues against SO9 refer to “*In line with the Waste Hierarchy, there is a need to pursue opportunities to recover and utilise energy from waste*”, but this is not identified as a key issue earlier – it should therefore be deleted. For the reasons given in the introduction to this submission, we believe that it is technically wrong in any case, but we also believe that it is not desirable. Energy recovery will not of itself reduce carbon emissions and indeed may increase them – for example if ECC were to adopt EfW operations which could be classified as “recovery”, it is likely that they would still have higher carbon emissions than burning virgin fuels. We believe that the wording of SO9 should stop after “*reduce carbon emissions*”. We also note the recent report in the Guardian (23 November 2010) that the Committee on Climate Change intend to recommend that by 2030 average fossil fuel derived CO2 emissions from electricity generation should not exceed 60g/kwh – we understand that even the most efficient EfW CHP plants produce more than 300g/kwh. It is unlikely therefore that there will be any market for EfW derived electricity by this point, if not earlier;
  - k. we do not disagree with the remaining Strategic Objectives.

## **I. Questions 9 & 10: the most appropriate Spatial Option / alternative approaches?**

- 50. We believe that a combination of Options 3 and 4 is generally most appropriate, and in fact it is not apparent to us that there is necessarily a distinction between the two options – if Option 3 to have a network of decentralised facilities serving their local areas is to be adopted, this will almost necessarily encompass Option 4 of introducing more facilities in those areas which are poorly served currently.
- 51. Our reasons for favouring Option 3 especially are as follows:
  - a. we agree with the overall approach, which we understand also to be the Government’s preferred strategy, that wherever possible communities should be encouraged to take responsibility for their own waste. In turn this should encourage communities to behave

- more responsibly in relation to waste generation and disposal, and encourage a greater uptake of reuse and recycling;
- b. it should minimise transportation of waste, so that waste is treated (in the widest sense, so including separation, re-use, recycling, and AD) locally and only the residual waste, if any needs to be transported further as waste. We believe that the climate change impacts of transportation of waste are generally believed to be considerable and frequently underestimated, and therefore a central part of the ECC waste strategy should be that waste transportation should be minimised where possible;
  - c. we believe that waste facilities should in general be small, local and modular, as these are far more likely to be responsive to changes in waste composition and new technological developments, in order to derive the environmental benefits of future innovation. We also note the comments of the Environment Agency's Head of Waste, that "*...Defra's advice on the Waste Strategy is very clear, that local authorities need to avoid being locked into long term contracts or plant that is too big. They need to be responsive to future, technological changes.*" We believe that no contract should be more than 10 years, and that 5 years should be more than long enough for most contractual arrangements;
  - d. we also note the Audit Commission's Well Disposed report which states: "*WDAs might buy too much disposal infrastructure if they overestimate future volumes of waste arising (including other authorities' waste or trade waste). They may also achieve a worse environmental solution if, by building large disposal facilities, they reduce their own financial incentive to pursue waste reduction or recycling initiatives*" (Para 151, pp 77-78);
  - e. we believe that a more dispersed pattern of smaller facilities is likely also to result in greater employment opportunities when compared with more centralised, capital intensive waste facilities.

## **J. Questions 11 - 20: suitable locations**

52. We do not feel qualified to answer the detailed questions as to which locations are most suitable for waste transfer stations, MRFs, composting, C&D recycling, AD or autoclaving for clinical waste (Questions 11 – 15 and 17), save to reiterate the response to Questions 9 – 10, that they should in general be on a local scale and close to the sources of waste to minimize transportation.
53. We do not believe that MBT or Energy from Waste (other than AD) should form part of the Plan or ECC's strategy, and therefore these should not be located anywhere in Essex (Questions 16 and 18).
54. We firmly believe that ECC and the local authorities should be concentrating on the most effective methods of source separated waste collections so that there is no need for MBT plants. MBT plants will do little but separate out metals and dry the residue for incineration / landfill, which does not seem to us to comply with the Waste Hierarchy. If there is effective separation at source of plastics, card, paper, glass, cans and food/other organic waste, and if these waste streams are thereafter kept separate, there should be little mixed waste to deal with, and it is likely that what there is after MRF treatment it can be effectively processed by composting or AD. As we say before, we believe that the Plan is much too focused on methods of waste disposal rather than on waste collection / sorting / separation and effective reuse / recycling.
55. Where AD is used, we believe in general that the gas produced should be used directly (for example for heating or fed into the gas grid) and not turned into electricity.
56. In the case of EfW plants (Question 18), we oppose them on many grounds, including on both environmental based grounds and on cost grounds because of the waste of a valuable resource. As we say before, if proper source-separated collections are used, there should be very little waste to be processed through EfW plants. The main calorific inputs for EfW plants will be

from plastic or paper within the feedstock, both of which should have been collected separately and recycled, or organic matter which should be collected separately and composted and AD'd. Even if there is residual waste left, it is likely to be far more beneficial from a climate change perspective that it is composted to the extent possible, and if necessary the remaining inert residue is landfilled. We also note again that most EfW plants, including those contemplated by ECC, would be at the bottom of the Waste Hierarchy, which para 5.46 is silent on, and that they are also extremely inflexible, relying on a fixed and constant supply of feedstock of the right calorific value, in contravention of the Defra policy for flexibility in waste treatment. Finally, we note that, as well as being at the bottom of the Waste Hierarchy, EfW plants introduce a tension into the Waste Hierarchy, as too much reuse / recycling will deprive them of their necessary feedstock, and note the problems and costs other councils have incurred. We do not therefore believe that EfW plants should be situated in Essex or form part of the Plan

57. Our comments on EfW apply equally to pyrolysis.

58. We do not have any particular preference amongst the various landfill options (Question 20) – each option is likely to turn on the particular merits of the relevant site. We note however that if waste is properly source separated at source and all of the organic matter is subject to composting / AD, there should only be inert waste to deal with, and therefore odours, gas production etc should be less of an issue than identified in the Question. For the same reason, new landfill gas generation plants should not be necessary.

#### **K. Questions 21 - 23: strategic site definition / safeguarding options**

59. We believe that if waste treatment is decentralised, the need for strategic sites should be diminish, as more potential sites will be available for smaller operations. In response to Question 21, we do not believe that Option 1 is appropriate as it does not seem to us that these scales of sites should be necessary if waste is managed properly as outlined above. We have no objection to the principle of Options 2 or 3.

60. In relation to Question 22, we refer to our comments above in relation to the proposed Strategic Objectives 4 and 5. We do not believe it is necessary to safeguard facilities to ensure that there is no net loss in waste management capacity, as we believe that future waste arisings have been overestimated. We also believe, as stated away, that there needs to be a huge shift towards reuse, recycling and AD / composting, which are likely to require different types of site from at least some of the existing sites. We believe that Option 1 is more likely to be consistent with this aim.

61. In relation to Question 23, we do not agree with any of the Options, but that those sites which are most consistent with the WDD policies (whether or not having permanent permission, assuming that permission is likely, if not already given) should be safeguarded.

#### **L. Question 24: climate change mitigation**

62. We do not agree with all of the suggested policy criteria in para 6.17, and refer to our comments above in relation to Strategic Objectives 1, 3, 10 and 11. The policy criteria should reflect these comments. In particular, the first bullet point should be redrafted to strengthen the requirement for treatment to move as far as reasonably possible up the Waste Hierarchy, and we do not believe that the second bullet point is desirable or acceptable from a climate change perspective for the reasons given above.

63. Paragraph 9 of PPS1 Supplement on Climate Change places a duty on local authorities to "secure the highest viable resource and energy efficiency and reduction in emissions". Strategic plans that allow or even encourage the mass burn incineration of plastics and food waste, and other recyclable and compostable discarded material, that could viably be dealt with in ways that would be less damaging for the environment, would go against this Government policy. Burning fossil fuel-based waste in incinerators is not renewable, nor is it good for climate

change or in any other way environmentally beneficial. The Government acknowledges, for example in Waste Strategy 2007, that “burning plastics has a general net adverse greenhouse gas impact due to the release of fossil carbon” and that this can “outweigh the returns of energy recovery”.

**M. Question 25: transportation of waste**

64. As we say above, we believe that SO8 should extend to the overall environmental impacts of waste management rather than purely focusing on transport. However, to the extent that it covers transport, we agree with the statements in para 6.18, and increasing local self-sufficiency and local re-processing as a means of reducing waste miles. We agree with the policy criteria set out in para 6.21 and the suggested policy approach for managing the transportation of waste.

**N. Question 26: managing opportunities for reprocessing**

65. As we say above, we disagree fundamentally with SO7 and SO9 save to the extent that they are clearly subordinate to other elements of the Waste Hierarchy, and we have suggested ways in which we believe SO7 and SO9 should be redrafted. Much obviously also depends on what is meant by “reprocessing”, and it should be made clear that reprocessing should be subordinate to the higher elements of the Waste Hierarchy and the over-riding need to reduce the climate change impact of waste management. Reprocessing activities should not be carried out which might compete with or provide any economic incentive to move away from an obligation to use all reasonable endeavours to move waste up the Waste Hierarchy.

66. Given that the best form of waste management system appears to be based on a diversified system of management facilities encouraging local self-sufficiency and local re-processing throughout Essex, it is not obvious that there will necessarily be sufficiently large waste management facilities to make adjoining reprocessing facilities a sensible policy criterion. For example, recycled metal may well be best reprocessed at a limited number of central facilities and there may well be no obvious policy reason why these should be co-located with any particular recycling facility. We therefore disagree with the second limb of para 6.25. It should be replaced with a policy that such re-processing facilities should only be supported where they are designed to further the other aims of the Plan. They should of course be encouraged where consistent with the other aims of the Plan and the Waste Hierarchy – improving the market for quality reprocessible waste should provide a financial benefit to Essex in improving its waste treatment, quite apart from all the other reasons for doing so.

**O. Questions 27 and 28**

67. We do not have the necessary expertise to answer these questions.

**P. Question 29**

68. We disagree strongly with the proposal that low level nuclear waste should be disposed of in non-hazardous landfill sites.

**Q. Questions 30 and 31: Waste Consultation Zones and Health Impact Assessments**

69. In relation to Question 30, we favour a hybrid of Options 2 and 3 so that certain types (eg those mentioned) should always be subject to Waste Consultation Zones, but otherwise they should be established by local planning authorities through LDFs.

70. In relation to Question 31, we believe that all 4 Options should apply. Certain forms of waste disposal are likely always to give rise to potential health issues (eg any forms of incineration),

and larger facilities are more likely to give rise to issues. Options C and D then seem to be clearly sensible on a case by case basis.

**R. Question 34: Landraising and the use of Waste for Construction etc**

71. Subject to our comments on the SO1 above, we broadly agree with the suggested policy criteria, although we do not see the need for the second criterion as drafted. If there is a landraising option which appears to be the best way to dispose of, for example, inert C&D waste, it is not obvious to us that it should instead be forced to go to a landfill site if there is void space available. If the nature of the waste makes it safe to use for landraising, and there is an identified need, we do not see why landfill should be preferred instead?

**S. Question 36: Residential Development Levy**

72. Yes, we agree.

**Saffron Walden & District Friends of the Earth  
Colchester & North East Essex Friends of the Earth  
South East Essex Friends of the Earth**

**2 December 2010**