

**Response by People Against Incineration (PAIN) to the
Nottinghamshire and Nottingham Waste Core Strategy
Consultation on Further Issues and Options**
(On-line Version – without Appendices)

1. Introduction

- 1.1. People Against Incineration (PAIN) is a Nottinghamshire-based community group with hundreds of members and thousands of supporters. PAIN played an active role in the recent public inquiry into Veolia's proposals for a waste incinerator at the former Rufford Colliery ("**the Rufford Inquiry**").
- 1.2. PAIN maintains a keen interest in promoting sustainable waste management in Nottinghamshire, and we remain committed to continuing to make positive contributions towards the development of a sound Waste Core Strategy for Nottingham and Nottinghamshire.
- 1.3. This consultation response should be read in conjunction with earlier submissions from both PAIN (e.g. PAIN's comments on the pre-consultation draft, including those appended to this consultation response as Appendix A and the associated updates in Appendix B), and Mansfield Against Incineration (MAIN) (e.g. MAIN's consultation submission for the first informal consultation which ran between October and December 2006).
- 1.4. This submission has been composed based on our understanding that Regional Strategies are to be abolished, and that the Joint Nottinghamshire and Nottingham Waste Core Strategy will rely on neither the East Midlands Regional Waste Strategy nor the East Midlands Regional Spatial Strategy. Should our understanding be incorrect then PAIN would wish to be informed so that we can make further submissions with reference to the East Midlands Regional Waste Strategy and the East Midlands Regional Spatial Strategy and how these should be implemented in Nottinghamshire and Nottingham. However, PAIN notes that we have already made various submissions within the context of the Rufford Inquiry regarding the East Midlands Regional Waste Strategy and the East Midlands Regional Spatial Strategy and how these should be implemented in Nottinghamshire.

2. Summary

2.1. PAIN is concerned that the evidence base used to produce the Further Issues and Options Consultation Document (“**the consultation document**”) is inadequate and deeply flawed, and as such cannot be relied upon to provide a sound basis for the emerging Waste Core Strategy, for example:

2.1.1. The figure of 4 million tonnes is not supported by reliable evidence;

2.1.2. Historic (current) waste arisings are overstated;

2.1.3. Projections of future waste arisings are unrealistic, and could result in undesirable overcapacity;

2.1.4. Recyclability of C&I and C&D discards are underestimated;

2.1.5. Landfill capacity is underestimated, due in part to false assumptions about landfill density.

2.2. The Issues and Options analysis appears inconsistent with National Policies, and emerging Green Infrastructure plans, for example:

2.2.1. PPS1 Supplement on Climate Change and Waste Strategy 2007 (and other sources), regarding the need to make best use of resources;

2.2.2. PPS10, and the priority to be given to previously used (brownfield) land, and the prevention and elimination of Persistent Organic Pollutants (POPs);

2.2.3. PPS4 and PPS7 regarding development in the countryside / greenfield status of former collieries;

2.2.4. PPS10 Companion Guide, and the account to be taken of waste reduction drivers when forecasting future waste arisings;

2.2.5. Waste Strategy 2007, including the need for flexibility, for honouring the One Planet Living goal, for promoting AD, and for the integrating the waste hierarchy – including much greater emphasis of minimisation and reuse – and per-stream Life Cycle Thinking, to contribute to the national ambition to move to a true zero waste economy;

2.2.6. Green Infrastructure, especially the need for explicit support for and compatibility with existing and emerging Green Infrastructure plans and policies.

2.3. There is a lack of joined-up thinking between the City of Nottingham’s draft Waste Strategy (*A Waste-Less Nottingham*) and associated evidence base, and the Nottinghamshire and Nottingham Waste Core Strategy Issues and Options document, for example:

2.3.1. Failure to consider bio-stabilisation / pre-treatment to landfill, as is already used by Nottingham City;

2.3.2. Failure of the County to commit to matching the City’s ambitions;

- 2.3.3. No clear description of how the City and the County would work together to carry out the emerging Waste Core Strategy (once approved);
 - 2.3.4. Lack of clarity regarding the contribution each Authority will make to the recycling targets and waste arisings.
 - 2.3.5. Lack of information about efforts to coordinate with neighbouring Waste Authorities.
- 2.4. PAIN is not satisfied with any of the options (A – D), and instead calls for the formulation of an Option E.

3. Overarching Comments

3.1. PAIN is concerned that the consultation document's evidence base is inadequate and deeply flawed, and as such cannot be relied upon to provide a sound basis for the emerging Waste Core Strategy.

3.1.1. The figure of 4 million tonnes is not supported by reliable evidence. PAIN suggests that a more realistic figure for the total combined quantity of waste arising in the County of Nottinghamshire and the City of Nottingham is between 2 and 2.5 million tonnes.

3.1.2. A sound evidence base is required for the Strategy to be deemed "sound" at the Examination in Public stage. Relying on an old Strategy which the Government intends to abolish is not a sound way to plan for the future.

3.1.3. From the Environment Agency's 2009 waste trends statistics it can be seen that 715,000 tonnes of power station ash and 704,000 tonnes of other waste were landfilled in the County and City in 2009. There were 440,000 tonnes going through transfer stations, 796,000 going through treatment processes and 352,000 going through vehicle dismantlers and metal recycling. 139,000 tonnes were incinerated or co-incinerated. Not all waste will be captured by these statistics and some waste that passes through transfer stations will also be counted in the treated/landfilled totals. A reasonable estimate is that the County and City produces around 1 million tonnes of power station ash and between 2 to 2.5 million tonnes of other wastes.

3.1.4. Comments on Figure 2 on Page 18 of the consultation document, and the associated Question 4:

3.1.4.1. MSW ("Municipal") totalled 565,744 tonnes in 2009/10 (not 0.6 million).

3.1.4.2. C&I ("Commercial & Industrial") waste should have dropped 18% since 2002/03 if it followed the national trend¹. Total C&I waste would then be about 800,000 tonnes (not 1 million).

3.1.4.3. C&D ("Construction & Demolition") waste should be a fraction of the 2002/03 value. Only 228,000 tonnes of C&D waste entered landfills in Nottinghamshire during 2009. Assuming a 75% diversion rate gives a total C&D stream of 912,000 tonnes per year (well short of 2.4 millions).

3.1.4.4. This would result in less than 2.3 million tonnes having arisen in total for the County and the City in 2009/10 (excluding power station ash).

¹ <http://www.defra.gov.uk/evidence/statistics/environment/waste/documents/stats-release2010.pdf>

3.1.5. Comments on Figure 3 on Page 19 of the consultation document, and the associated Question 5:

- 3.1.5.1. PAIN believes that historic, current and predicted future waste arisings are lower than depicted in the consultation document, and that accurate forecasting (e.g. that contained within Mr. Kondakor's proofs of evidence for the Rufford inquiry² with updated charts included as Appendix B) demonstrates that there is absolutely no justification for the construction of new incinerators.
- 3.1.5.2. In June 2010 Nottingham City Council released a draft Municipal Waste Management Strategy entitled "A Waste-Less Nottingham: Waste Strategy 2010-2030" for consultation.
- 3.1.5.3. Nottingham City Council subsequently released the underlying data used to prepare the draft strategy, including the City Council's estimates for anticipated waste arisings, treatment capacity and treatment method.
- 3.1.5.4. These estimates show that the City Council expects to massively increase recycling and composting and to use anaerobic digestion for food waste.
- 3.1.5.5. Chart 18 from Nottingham City Council's draft strategy shows residual household waste falling from 75,600 tonnes in 2009/10 to 48,974 tonnes in 2029/30.
- 3.1.5.6. Nottingham City's draft waste strategy states that: "The impact of the measures outlined in this draft strategy will dramatically reduce the amount of both household and municipal (including trade and non household wastes) left over for residual waste treatment and disposal...".
- 3.1.5.7. Nottingham City Council is projecting a drop in non-household municipal waste from 39,838 tonnes in 2009/10 to 30,345 in 2029/30. They aim to recycle or compost at least 55% of trade waste and at least 50% of in-house waste in 2029/30.
- 3.1.5.8. If replicated in Nottinghamshire this would result in a fall in MSW, not a rise in MSW. Even if Nottinghamshire's waste were to stabilise or rise slightly, the City's fall in waste would mean that on the whole the combined Nottingham and Nottinghamshire waste arisings for MSW would be nowhere near as high as that predicted by the consultation document.

² See <http://www.nottinghamshire.gov.uk/home/environment/planningmatters/homepage-newpage/efrcoredocuments/efrrepresentations.htm>

- 3.1.5.9. However, we actually have every reason to believe that Nottinghamshire's waste will fall, not rise. As of 2009, household waste per head had dropped 10% relative to the peak in 2002/03 (from 520Kg to 468Kg) and has dropped dramatically since 2004/05.
- 3.1.5.10. Nottinghamshire's MSW peaked in 2004/05 at 466,665 tonnes and in 2009/10 the County's MSW was around 408,000 tonnes.
- 3.1.5.11. East Midlands' MSW also peaked in 2004/05, and in 2008/09 waste arisings in the Region were lower than those in 2001/02 despite the huge increase in garden waste collection.
- 3.1.5.12. The average annual percent change for Nottinghamshire's MSW arisings over the period 2001/02 – 2008/09 was -0.9% and Nottinghamshire's MSW continued to fall in 2009/10. As shown in Mr. Kondakor's proofs of evidence for the Rufford inquiry, the downward trend began well before the general economic downturn. It is also clear that the Landfill Tax has proved to be a greater driver in diverting waste from landfill than the recession.
- 3.1.5.13. The Final Technical Report, prepared for the East Midlands Regional Technical Advisory Body (RTAB) by Land Use Consultants and SLR Consulting, that informed the East Midlands Regional Plan and the East Midlands Regional Waste Strategy, outlined four different waste growth scenarios for the East Midlands, including a no-growth scenario.
- 3.1.5.14. With reference to the latest East Midlands waste data, PAIN notes that the no-growth scenario is very close to the current waste arisings data for the Region, whilst the scenario reflected in the Regional Spatial Strategy and the Regional Waste Strategy have proven demonstrably inaccurate.
- 3.1.5.15. The East Midlands Regional Assembly³ recognised the need to revisit these scenarios in light of more accurate waste data becoming available showing a departure from the anticipated upward trend: "The PPS10 companion guide emphasises the need for 'monitoring and regular review' to ensure that waste data used is robust and up-to-date. This requirement is particularly pertinent to the case of MSW arisings, for which, since 2003, there has been a marked departure from the steady historical upward trend. As depicted In Figure 6-1, this is true for both the East Midlands, and England as a whole. If MSW arisings data for future years continues

³ East Midlands Regional Assembly Waste Data Monitoring Report (February 2007), Paragraph 6.2 available from http://www.nottinghamshire.gov.uk/large-static/erf/CD96_emra_waste_data_monitoring_report_.pdf

to exhibit this feature, it is arguable that arisings forecasts should be re-evaluated to reflect the downturn”.

- 3.1.5.16. The estimates of future waste growth contained within Figure 3 of the consultation document do not offer a sound basis for the formulation of a sound waste strategy for Nottinghamshire and Nottingham City.
- 3.1.5.17. Defra has very recently released its 2009 C&I survey, and this report shows an 18% fall in C&I waste arisings since 2002/03. MSW is also down on the 2002/03 figures, and C&D waste is down well over 50%. Only 228,000 tonnes of inert non-power-station waste was landfilled in 2009.
- 3.1.5.18. The North West of England Commercial and Industrial Waste Survey 2009⁴ (dated March 2010) showed that up to 97.5% of landfilled C&I waste was potentially recyclable.
- 3.1.5.19. PAIN also notes the Government target of halving the amount of CD&E waste sent to landfill by 2012 against a base year of 2008 set out in Department for Business, Innovation and Skills, The Strategy for Sustainable Construction, June 2008, Page 48⁵.
- 3.1.5.20. The new Defra C&I study shows 58% was recycled, and very little of the remainder was landfilled (only 6.8 million out of 48.1 million (less unknown)). See the table below:

Table 4: C&I waste arisings by waste management method For England excluding North West England, 2009 calendar year	
Waste management method	Waste (million tonnes)
Land disposal	6.8
Land recovery	2.0
Thermal treatment with energy recovery	1.2
Thermal treatment without energy recovery	1.9
Non-thermal treatment	2.3
Transfer station	1.3
Recycling ¹	24.7
Composting	1.1
Re-use ¹	2.1
Unknown	4.7
TOTAL	48.1
Source: Defra	
Notes:	
¹ Excludes recycling/re-use on site	

⁴ Available at <http://publications.environment-agency.gov.uk/epages/eapublications.storefront> [Product code: GENW0410BSJM-E-E]

⁵ See <http://www.berr.gov.uk/files/file46535.pdf>

3.1.5.21. The Commercial and Industrial sector is becoming increasingly committed to driving waste management up the waste hierarchy. Food and Drink Federation members, for example, are now diverting 95% of their food and packaging waste from landfill and are approaching 100% diversion⁶. This translates into reduced pressure on landfill, helping to extend the life of existing landfill sites.

3.1.6. Landfill capacity is underestimated, due in part to false assumptions about landfill density and exaggerated projections of quantities of material to be sent to landfill.

3.1.6.1. In relation to landfill void space PAIN calls attention to the appended documents (Appendices A and B), and to Mr. Kondakor's proofs of evidence for the Rufford Inquiry, and to the comments made by PAIN to Nottinghamshire County Council's Waste Planning Officer regarding landfill density assumptions.

3.1.6.2. PAIN calls for the use of either the methodology adopted by Mr. Kondakor in his proofs of evidence and/or for landfill void space estimates to be based on a decreasing amount of waste sent to landfill and a density assumption of at least 1.1 tonnes per cubic metre (in place of the 0.85 presumably used for the consultation document).

3.1.6.3. The 1.1t/m³ figure was accepted in the Staffordshire And Stoke-On-Trent Waste Local Plan Inspector's Report. The 1.1 tonnes/ m³ figure was arrived at following a detailed and extensive survey of densities in practice. He concluded there was "no justification to adopt the lower figure proposed by the operator" of 0.85 tonnes/m³. In fact, an even higher figure could potentially have been justified as "calculations provided by the WPAs, regarding almost 2 million tonnes of waste deposited at licensed landfill sites within Staffordshire in 1998/99, indicated an in-situ density of 1.34 tonnes/m³".

3.1.6.4. To support better strategic planning, PAIN advocates for the use of a higher landfill density assumptions. These should be based on local studies demonstrating actual in-situ densities, and in lieu of such local studies, a minimum in-situ density of 1.1 – 1.34 per cubic metre should be used, in accordance with the Staffordshire And Stoke-On-Trent Waste Local Plan Inspector's Report on Objections.

⁶ See https://www.fdf.org.uk/publicgeneral/environment_makingarealdifference.pdf

3.2. The Issues and Options analysis appears inconsistent with existing National Policies and emerging Green Infrastructure plans.

3.2.1. 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.

3.2.2. Burning fossil fuel based waste in inefficient incinerators is not renewable⁷, 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".

3.2.3. Fichnter, for the Environmental Services Association (2006), said: "...all analysis confirms that the combustion of plastic in an inefficient power plant has an adverse impact on climate". Indeed, the academic literature strongly supports those conclusions (see Eriksson and Finnveden 2009). Recycling, by contrast, shows "significant potential for carbon and energy savings through displacing virgin materials" (Waste Strategy 2007, Chapter 4, Para 18).

3.2.4. Waste Strategy 2007, Annex K: Environmental Statement⁸, Paragraph 52 states that: "WS2007 makes clear that energy should be recovered only from residual waste that cannot viably be recycled, as well as certain biomass wastes such as wood and food waste (via anaerobic digestion) where there are clear carbon benefits of doing so".

3.2.5. And at Paragraph 54 of Waste Strategy 2007, Annex K: Environmental Statement, we read: "EfW should be set in a context of both greater emphasis on waste prevention and more ambitious recycling targets".

3.2.6. A December 2007 consultation paper by the National Assembly for Wales⁹, for example, estimated in December 2007 that up to 93.3% of municipal waste could either be recycled or composted / anaerobically digested. Even more significantly it showed that the most cost effective recycling level over the period to 2024/25 would be 80% of the waste.

⁷ 5.8. The Glossary of the PPS1 Supplement (CD20) makes it clear that 'renewable' energy and 'low-carbon energy' are different. Renewable energy: "covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass". Fossil fuels are, for practical purposes, finite and would be excluded from this coverage. Therefore processes which rely on fossil fuels or materials derived from them, including incineration technologies, would not be consistent with this definition.

⁸ <http://www.defra.gov.uk/environment/waste/strategy/strategy07/documents/waste07-annex-k.pdf>

⁹ See <http://wales.gov.uk/docs/dsjlg/meetings/090106pc304annex2e.doc>

This is significantly cheaper than limiting recycling to the 50% levels that are currently set as targets in Waste Strategy 2007.

3.2.7. Wales is promoting the 70% level as offering better environmental outcomes than the 60% option whilst it is considered more achievable in the timescale than the 80% option. Scotland has already included an ‘aspirational’ 70% target in the recently announced revised waste strategy. These levels of recycling are already been exceeded in parts of Europe such as in Flanders.

3.2.8. With some 70% of household waste considered by the Audit Commission (2008, Well Disposed, Para 140) to be “readily recyclable” (and at Paragraph 47 it is noted that 70% of MSW is biodegradable, and would therefore be suitable for composting / AD), it is apparent that high incineration rates can only come at the expense of recycling and composting.

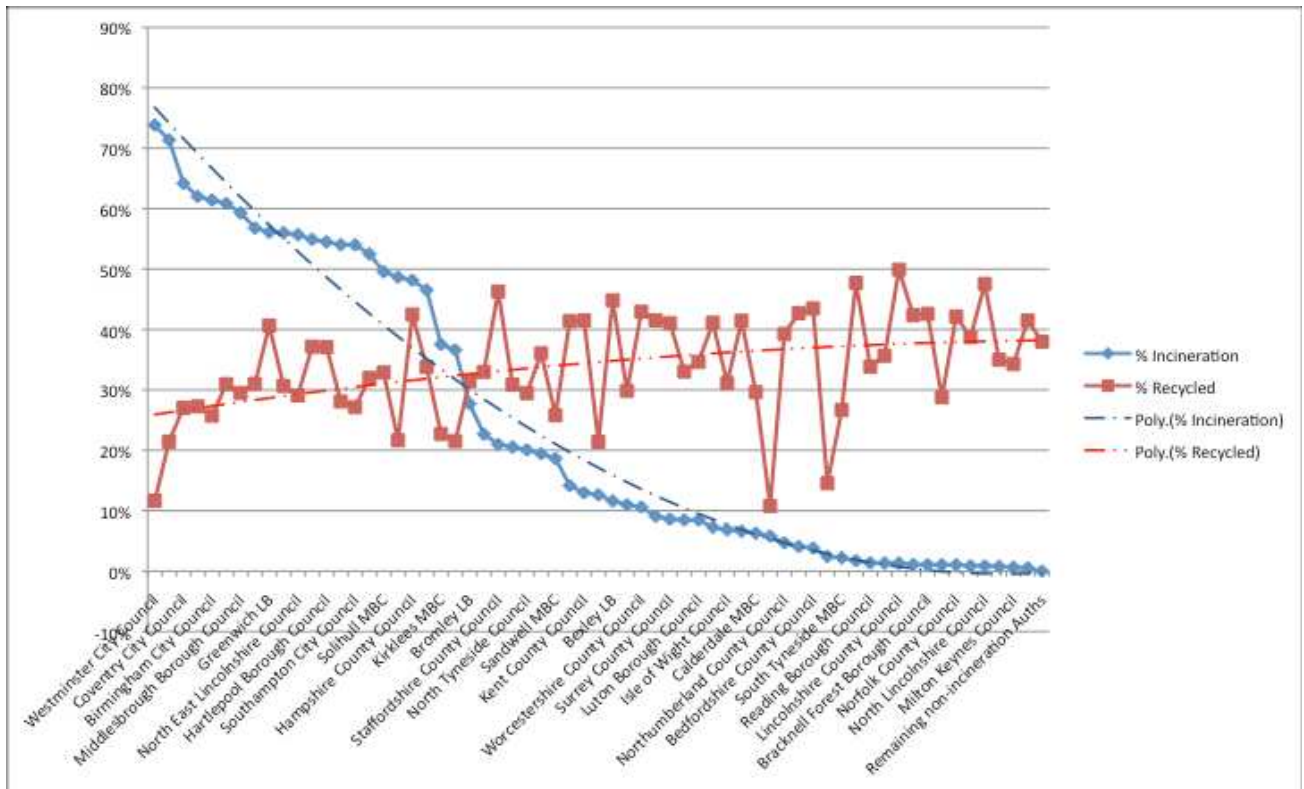
3.2.9. An assessment of the 2009 MSW statistics published by Defra shows how none of the top 5 incineration authorities rank in the top 100 recycling authorities:

	Rank Incineration	% Incineration	% Recycled	Rank Recycling	% Landfill	Rank Landfill
Westminster City Council	1	74%	12%	120	15%	108
Lewisham LB	2	71%	21%	116	7%	118
Coventry City Council	3	64%	27%	104	9%	115
Portsmouth City Council	4	62%	27%	102	11%	113
Birmingham City Council	5	61%	26%	109	13%	110

Source:

<http://www.defra.gov.uk/evidence/statistics/environment/wastats/bulletin09.htm>

3.2.10. Although the data includes some variability it is clear that there is a general inverse correlation between incineration and recycling:



3.2.11. There is increasing hard evidence that higher levels of incineration undermine recycling. This is not surprising as incinerators rely particularly on paper and plastic waste to provide the homogenous waste stream with a stable calorific value that is necessary to achieve stable combustion.

3.2.12. As the Audit Commission's Well Disposed report¹⁰ 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)¹¹.

3.2.13. Nottinghamshire needs to learn from the experience in Kent where it is reported that "...what was initially seen as a cash-saving opportunity has quickly turned into a money pit, as the council is forced to

¹⁰ <http://www.audit-commission.gov.uk/reports/NATIONAL-REPORT.asp?CategoryID=ENGLISH-576-SUBJECT-397&ProdID=C0CDBCBE-24E0-494d-824D-F053A576661E>

¹¹ PAIN notes the minutes of Nottinghamshire's Joint [Waste] Officer Board meeting of Wednesday 28th November 2007 which records how the representative from Gedling Borough Council asked "if there were any plans to look at food waste collection in the future". In reply, NCC's Mick Allen confirmed "not at the present time as the contract can deliver targets promised to Defra without food waste".

send increasingly valuable recyclable material to the incinerator in order to meet its annual quota". Kent County Council's Environment Spokesman said of the decision to sign a long-term incineration contract: "What seemed a very wise decision a very long time ago is a very stupid one today..."¹².

- 3.2.14. Returning to the Audit Commission's Well Disposed report (at Para 160) we read that: "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."
- 3.2.15. The EFRA Committee report¹³ records Dr Paul Leinster, Chief Executive of the Environment Agency as saying: "The objective for me would be that you should not have an incinerator which then destroys waste minimisation programmes or interrupts re-use and recycling".
- 3.2.16. In answer to the question: "...This has been built by means of a 25 year PFI. During the 25 years and in the next 25 years the way that we dispose of our waste will change radically. I do not think in 25 years' time there will be enough waste to feed this incinerator. Is that a concern of yours?" Dr Leinster replied: "Absolutely. What we should not be doing is having incinerators which then mean minimisation, re-use, recycling get impacted and that has to be over the 25 year period. I do have concerns over locking technologies in on a 25 year basis when technologies are moving as fast as they do".
- 3.2.17. In their evidence to the Environmental Audit Committee for their report into Climate Change and local, regional and devolved Government (House of Commons Environmental Audit Committee 2008), WRAP drew attention to their specialist review of international studies *Environmental Benefits of Recycling* which shows how increased recycling is helping to tackle climate change and emphasises the importance of recycling over incineration and landfill as the appropriate way forward.
- 3.2.18. The evidence from WRAP said: "In the vast majority of cases, the recycling of materials has greater environmental benefits than incineration or landfill"; and WRAP concluded: "The message of this 2006 study is unequivocal. Recycling is good for the environment, saves energy, reduces raw material extraction and combats climate change. It has a vital role to play as waste and resource strategies are reviewed to

¹² Kent's waste contract could be money in the bin, 12th August 2008

<http://www.kentonline.co.uk/kentonline/newsarchive.aspx?articleid=46264>

¹³ <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenvfru/230/230ii.pdf>

meet the challenges posed by European Directives, as well as in moving the UK towards more sustainable patterns of consumption and production, and in combating climate change by reducing greenhouse gas emissions”.

3.2.19. The EFRA Committee’s report on Waste Strategy for England 2007 praises householders for increasing their recycling levels to nearly 37% and urges the Government to set tougher recycling targets of 50% by 2015 and 60% by 2020. However, the fact that 15 District Councils exceeded 52% recycling levels in 2008/09 suggests that these targets are unambitious¹⁴.

3.2.20. PAIN also notes the EFRA Committee’s assertion that: “Waste should only be used for energy recovery if it is not possible to re-use, recycle or compost it. To achieve maximum energy efficiency levels, planning consent for energy from waste plants must require heat to be captured and used”.

3.2.21. PAIN agrees with the EFRA Committee that Government should require local authorities [i.e. Nottinghamshire and Nottingham] to provide all householders with information each year on what happens to the waste they put out for recycling. Councils must explain clearly to people what it costs to collect and dispose of each bin, bag or wheelie bin of waste.

3.2.22. The notion that higher levels of incineration undermine recycling is not surprising, as incinerators rely particularly on paper and plastic waste to provide the homogenous waste stream with a stable calorific value that is necessary to achieve stable combustion. There is little doubt that this can, and does, happen. In Lewisham, for example, Veolia’s (inaccurately named) SELCHP plant and the contract with the local authority has resulted in very low local recycling levels. A similar situation with poor recycling rates arises in Portsmouth and Sheffield, where Veolia also operates waste incinerators.

3.2.23. The Issues and Options consultation document fails to recognise these facts.

3.2.24. The Issues and Options consultation document also does not appear to take account of Paragraph 21 of PPS10: “In deciding which sites and areas to identify for waste management facilities, waste planning authorities should... (ii) give priority to the re-use of previously-developed [i.e. brownfield] land, and redundant agricultural and forestry buildings and their curtilages”.

¹⁴ The MPs also called for the Government to, amongst other things, "Set a target for mandatory collection of food waste, learning lessons from those authorities which already collect such refuse for beneficial use such as in anaerobic digestion plant, and ensure continued provision of advice, education and practical support, for example through reduced cost composting equipment”.

- 3.2.25. This is not to say that greenfield land is completely ruled out for use for waste related uses, however, greenfield land should be used only if previously developed land is not available to meet the need. This is made clear in paragraph 1(v) of PPS7, and in the Companion Guide to PPS10, which urge Planning Authorities to “avoid turning unnecessarily to greenfield locations” and “to give preference to suitable sites that are previously-developed land”.
- 3.2.26. PPS7 Paragraph 1(vi) requires that any development should be “inclusive, in keeping and scale with its location, and sensitive to the character of the countryside and local distinctiveness”. Paragraph 1(iv) of PPS7 was cancelled by PPS4. PPS4 EC6.1 and EC6.2(a) cover some of the same ground, as follows:
- 3.2.26.1. EC6.1 – Local planning authorities should ensure that the countryside is protected for the sake of its intrinsic character and beauty, the diversity of its landscapes, heritage and wildlife, the wealth of its natural resources and to ensure it may be enjoyed by all; and
- 3.2.26.2. EC6.2(a) – In rural areas, local planning authorities should strictly control economic development in open countryside away from existing settlements, or outside areas allocated for development in development plans.
- 3.2.27. Confusion arises from the consultation document mistakenly referring to former colliery land in need of restoration as “brownfield” (e.g. on page 43). This is incorrect. All former collieries with restoration conditions are properly classed as greenfield sites, and should be treated for planning purposes as if they have already been restored. Priority consideration should be given to brownfield sites, and not to former collieries¹⁵.
- 3.2.28. PAIN believes that the Issues and Options consultation document also fails to take adequate account of Paragraph 3.7 of the PPS10 Companion Guide, which sets out considerations for the development of waste strategies. 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”.

¹⁵ A detailed exploration of this is provided in Mr. Watson’s original Proof of Evidence for the Rufford Public Inquiry, please see Paragraphs 60 – 105, available from: http://www.nottinghamshire.gov.uk/large-static/erf/es1144_pain_watson_proof_of_evidence.pdf

- 3.2.29. The absence of a strategic approach to waste minimisation is a serious shortcoming of the current consultation document.
- 3.2.30. Page 33 of the PPS10 Companion Guide explains how: “In making forecasts, account should be taken...of the impacts of commercial and legislative drivers of waste production...Such measures include the landfill tax, the Aggregates Levy, the Waste Electrical and Electronic Equipment Directive and the introduction of the Hazardous Waste Regulations in July 2005”.
- 3.2.31. Significant additional commercial and legislative drivers have already been introduced, with others being planned, and still further measures to reduce waste arisings being considered. These include targets to reduce waste packaging, existing and emerging voluntary agreements, e.g. The Courtauld Commitments (1 and 2), new approaches to Extended Producer Responsibility (including Producer Responsibility Obligations (Packaging Waste) Regulations, and Producer Responsibility Notes), battery take-back schemes, and innovative incentivisation schemes to promote reduction, reuse and recycling, as well as changes to Landfill Tax, e.g. the introduction of a Landfill Tax escalator that means that Landfill Tax is set to rise to, and remain at a minimum of £80 per tonne.
- 3.2.32. Other potential drivers that would result in reductions of waste arisings in all sectors and in changes in waste management methods include:
- 3.2.32.1. the possible introduction of a cap on incineration in England, along the lines of the caps in Scotland and Wales;
 - 3.2.32.2. the banning of material permitted to be landfilled or incinerated (e.g. textiles);
 - 3.2.32.3. the removal of existing subsidies for the landfilling of incinerator bottom ash; and
 - 3.2.32.4. the introduction of European-style taxes on incineration¹⁶ and
 - 3.2.32.5. legally-binding requirements to follow a version of the waste hierarchy that takes account of Life Cycle Thinking (more about Life Cycle Thinking, and the need to integrate this approach within the Nottinghamshire and Nottingham Waste Core strategy, is included below).

¹⁶ PAIN cites the following statement by the Policy Exchange to support our call for an incineration tax: "By introducing taxation on incineration a clear preference is signalled to reduce, reuse, recycle or compost where possible" (from Policy Exchange, A Wasted Opportunity: Getting the most out of Britain's Bins, 20th July 2009, available from: http://www.policyexchange.org.uk/images/publications/pdfs/A_wasted_opportunity_1.pdf).

- 3.2.33. An incineration tax would be consistent with Waste Strategy 2007's statement that "the aim is to create incentives that reflect the waste hierarchy" (Paragraph xvi of the Executive Summary, page 14) which has already resulted in the Landfill Tax escalator.
- 3.2.34. There appears to be an absence of meaningful consideration, in the consultation document and the document's projections of future waste arisings, of existing and future commercial and legislative drivers that can be expected to succeed in driving waste management up the waste hierarchy and driving down the quantities of waste arisings.
- 3.2.35. Similarly, there appears to be a complete lack of consideration of obligations under the Stockholm Convention and associated legislations, etc. to prevent and eliminate Persistent Organic Pollutants (POPs)¹⁷.
- 3.2.36. Paragraph 3 of PPS10 requires all planning authorities to prepare and deliver planning strategies that are consistent with obligations required under European legislation, yet no evidence of the need to avoid producing POPs appears in the consultation document.
- 3.2.37. Waste Strategy 2007¹⁸ calls for: "...planning and building facilities with an appropriate amount of flexibility built in. This means flexible – e.g. modular – buildings, and also flexible contracts, which do not lock in fixed amounts of waste for treatment which might become obsolete" as key to achieving high rates of recycling.
- 3.2.38. Incineration is often associated with a lack of flexibility due to large fixed OPEX and CAPEX costs with only small rebates for unused capacity.
- 3.2.39. Nottinghamshire and Nottingham should keep waste facilities small, modular and local, and ensure waste contracts are flexible, i.e. responsive to changes in waste composition and new technological developments, in order to derive the environmental benefits of future innovation.
- 3.2.40. This flexible approach is echoed in the testimony of the Environment Agency's Head of Waste, delivered 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

¹⁷ The implications of the POPs Regulations for waste management are discussed by Mr. Watson at Paragraphs 660 – 689 of his original Proof of Evidence for the Rufford Public Inquiry, available from: http://www.nottinghamshire.gov.uk/large-static/erf/es1144_pain_watson_proof_of_evidence.pdf

¹⁸ At Paragraph 23 of Chapter 5

that is too big. They need to be responsive to future, technological changes"¹⁹.

3.2.41. PAIN therefore urges Nottinghamshire County and Nottingham City Councils to ensure that any emerging Waste Core Strategy follow the advice from the Waste Strategy 2007 in this respect.

3.2.42. Waste Strategy 2007 also emphasises the goal of One Planet Living as follows: "As a society, we are consuming natural resources at an unsustainable rate. If every country consumed natural resources at the rate the UK does, we would need three planets to live on. The most crucial threat is from dangerous climate change. Our goal is to make the transition towards what the WWF and BioRegional call 'One Planet Living'".

3.2.43. Waste Strategy 2007 acknowledges that "using the planet's resources within the limits of ecosystems is vital to the survival, health and prosperity of future generations". To achieve this, Government policy favours waste reduction, reuse, maximising recycling and the use of energy recovery by anaerobic digestion (AD) for food waste (which the Government says has "significant environmental benefits over other options for food waste").

3.2.44. Thus, to be consistent with the Waste Strategy for England, the Nottinghamshire and Nottingham Waste Core Strategy should aim to both greatly increase reuse, recycling and AD/composting, and greatly reduce waste arising, as it has been shown that recycling alone cannot achieve the goal of One Planet Living²⁰.

3.2.45. A report by consultants Arup assesses the ecological footprint associated with the waste strategy (Arup for Welsh Assembly Government 2009). This report emphasised that to be able to significantly reduce the size of the ecological footprint "it is fundamental that recycling becomes an option for waste management only after reduction and reuse".

¹⁹ From Transcript of Oral Evidence, EV14, 15th October 2008, published as HC 1100-i.

<http://www.publications.parliament.uk/pa/cm200708/cmselect/cmenvfru/uc1100-i/uc110002.htm>

²⁰ Achieving the "One Planet Living" goal means reducing the ecological footprint of to a 'fair earthshare' of 1.837 global hectares/capita from the 2004 level for the East Midlands of 5.24 global hectares/capita. The per capita 'fair earthshare' obviously reduces with increasing global population thus if a target date is taken for 2050, as for Wales, then it means that not only is it accepted that we will be living unsustainability and inequitably for the next forty years, but also, due to future increases in population, that much lower target should be set that reflect the likely 'fair earthshare' at the target date. The consequence is that rather than a target of 1.8 gha/capita a target level for 2050 should be set at 1.03 to 1.48 gha/capita. Obviously the future target date makes a significant difference to the levels of environmental impact and waste reduction required to achieve a 'fair earthshare'.

- 3.2.46. Arup demonstrate that even 70% recycling by 2025 fails to meet the trajectory necessary to achieve the current 2050 ecological footprint target unless accompanied by very significant waste reduction.
- 3.2.47. PAIN once again calls attention to Waste Strategy 2007's promotion of AD, and once again join the many others – including the Environment Agency and the Mayor of Mansfield – in calling upon Nottinghamshire County Council (and in this case also upon Nottingham City Council) to, as the EA put it²¹, “provide facilities for the segregation and composting of food waste to enable as much of this waste as possible to be recycled in this way”, i.e. via anaerobic digestion.
- 3.2.48. Much more could be said about the need to integrate the waste hierarchy and per-stream Life Cycle Thinking into the approach to be adopted by Nottinghamshire and Nottingham. The Waste Core Strategy should provide a strategic approach that better promotes zero waste (to incineration or landfill) and per-stream Life Cycle Thinking.
- 3.2.49. The evidence base to be used for the forthcoming Preferred Options consultation should examine, for example, the proportion of C&I waste that might be suitable for AD, and/or unsuitable for incineration, bearing Life Cycle Thinking in mind. For example, from a climate change / life-cycle perspective plastics are better sent to landfill (for “temporary stockpiling” for future recycling, and as a carbon sink) than sent for incineration (where carbon is immediately released into the atmosphere), as plastics do not release GHGs when landfilled, but they do when incinerated. In addition, when landfilled, plastics can be mined at a future date, when economics allow, providing future generations with the benefit of those resources.
- 3.2.50. When comparing technologies in relation to climate change impacts, short-cycle (biogenic) carbon should be included in the assessment, and not discounted as if incineration of biogenic material is somehow carbon neutral.
- 3.2.51. Whilst it is true that electricity from incineration offsets carbon emissions from substituted generation, the future electricity mix has to be modelled. Current policy requires a progressive reduction in the carbon intensity of the future fuel mix, which substantially reduces the benefits of electricity produced via incineration as future electricity comes with much lower carbon emissions.
- 3.2.52. Nottinghamshire and Nottingham's Waste Core Strategy should aspire to “zero waste to incineration or landfill”, as part of explicit

²¹ In the Decision Document for Environment Permit Number BP3035MG (Page 119 Ref 3 and Page 152 Ref 137). See http://www.nottinghamshire.gov.uk/large-static/erf/rufford_erf_decision_document_bp3035mg_02060985.pdf

commitments to One Planet Living and to climate change mitigation and adaptation.

- 3.2.53. There is an obvious and urgent need for Nottinghamshire and Nottingham's Waste Core Strategy to provide explicit support for, and to ensure compatibility with, existing and emerging Green Infrastructure plans and policies. This would avoid conflicts, such as suggesting disused railway lines be used for landfill when these are relied upon in Green Infrastructure plans and policies to provide wildlife corridors connecting habitats integral to our green infrastructure.

- 3.3. There is a lack of joined-up thinking between the City of Nottingham's draft Waste Strategy (*A Waste-Less Nottingham*) and associated evidence base, and the Nottinghamshire and Nottingham Waste Core Strategy Issues and Options document, for example:
- 3.3.1. Failure of the Nottinghamshire and Nottingham Waste Core Strategy Issues and Options document to consider bio-stabilisation / pre-treatment to landfill, as is already used by Nottingham City;
 - 3.3.2. The Nottinghamshire and Nottingham City Waste Core Strategy should be no less ambitious than the draft Nottingham City Waste Strategy;
 - 3.3.2.1. For example, Nottingham City aims "to produce the lowest amount of household waste per person of any Core City in England" – so Nottinghamshire should match this aim by committing to "produce the lowest amount of household waste per person of any Shire County in England".
 - 3.3.3. The Nottinghamshire and Nottingham Waste Core Strategy Issues and Options document provides no clear description of how the City and the County would work together to carry out the emerging Waste Core Strategy (once approved);
 - 3.3.4. There is a lack of clarity regarding the contribution each Authority will make to the recycling targets and waste arisings. Thus, questions arise about targets: e.g., if the City achieves its 55%+ target would the County be expected to only achieve around 45% to reach an overall 50%?
 - 3.3.5. PAIN is also troubled by the consultation document's lack of information about efforts to coordinate with neighbouring Waste Authorities (e.g. Derbyshire). Nottinghamshire and Nottingham should co-ordinate with neighbouring Waste Authorities to avoid over-provision and to ensure that waste is dealt with at the nearest appropriate location.

- 3.4. PAIN is not satisfied with any of the options (A – D), and instead calls for the formulation of an Option E:
- 3.4.1. PAIN is not satisfied with any of the options put forward in the Further Issues and Options consultation document – due to their lack of ambition, false premises, and incompatibility with Government policy – especially those advocating for the construction of new incinerators.
 - 3.4.2. PAIN believes that a focus on waste minimisation is paramount, followed by efforts to maximise re-use, recycling and composting (including AD).
 - 3.4.3. There should be alternate weekly collections of waste with weekly separate collection of food waste for anaerobic digestion and preferably kerbside sorting of recyclables.
 - 3.4.4. In addition to strong strategic support for kerbside sorting of alternate weekly collected discards (residuals and recyclables / compostables), complemented by weekly separate collections of food waste for AD, ambitious targets to reduce arisings (and residuals) should be formulated and enshrined in the Waste Core Strategy's Preferred Option.
 - 3.4.5. Residual waste should then be dealt with using MBT to reduce its mass and to allow for bio-stabilised waste to be sent to landfill.
 - 3.4.6. If there is to be waste sent for incineration, it should be strictly limited to only residual material remaining after maximised pre-sorting – and plastics, food waste, and other reusable, recyclable or compostable material should never be incinerated. Materials that cannot be recycled, re-used and/or composted should be a priority for minimisation efforts.
 - 3.4.7. The Preferred Option (Option E) should be part of a true “zero waste” approach where Nottinghamshire and Nottingham work together towards bringing about a closed loop resource management system²².
 - 3.4.8. Zero waste implies the goal of total waste prevention. It assumes that reuse and recycling can account for 90% or more of “surplus resources”, all (or nearly all) of which are salvageable.
 - 3.4.9. Zero waste assumes that material passes around a loop: manufacture → sell → use → become surplus → reuse / recycle / remanufacture. Zero waste assumes that biological materials should be allowed to follow the natural lifecycle processes.

²² As outlined in the UKWIN submission to the recent Defra Call for Evidence to inform the Review of Waste Policies, available from:
http://www.ukwin.org.uk/files/pdf/UKWIN_DEFRA_Submission_4_October_2010.pdf

- 3.4.10. The “zero waste” concept does not imply that people and businesses will cease to have material for which they have no further use. What it does imply, by definition – for manufactured products – is total recycling and reuse, and – for food and garden waste – a state of total recycling that, in part, may include energy recovery via AD. For this to be realised, consumers, domestic and commercial, have to view what might seem today to be “waste” to them, as someone else’s valuable resource.
- 3.4.11. Whilst the ultimate goal of zero waste is aspirational, the steps that can be carried out by local government to work towards this goal are practical, achievable, cost effective and entirely consistent with Government policy and sustainable waste / resource management.
- 3.4.12. One way to support waste minimisation, reuse and recycling is through the promotion of one or more appropriately-sited EcoParks.

3.4.13. **Minimisation, Reuse and Recycling**

3.4.14. It is clear that the best approach to dealing with waste is to prevent it, and what is not prevented should be reused or recycled, in that order.

3.4.15. One of the key objectives of Waste Strategy 2007 is to "put more emphasis on waste prevention and re-use"²³. Also according to Waste Strategy 2007²⁴ 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.

3.4.16. PAIN agrees with the EFRA Committee 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"²⁵.

3.4.17. PAIN also agrees with the Government's advice (in Paragraph 3.7 of the PPS10 Companion Guide) that: "Policies will need to be particularly supportive of the upper end of the hierarchy if they are to be effective in practice".

3.4.18. The most frequent waste minimisation activities carried out by local authorities are the distribution of home composting bins, the provision of real nappy schemes, and ongoing education campaigns. Waste minimisation education with the public and with businesses can prevent material from entering the waste stream.

3.4.19. It is important that there is significant investment and strategic planning to promote waste minimisation efforts in both the County and the City. Cutting waste minimisation budgets represents a false economy, as it inevitably results in higher waste management costs.

3.4.20. Results of a study by Resource Futures found that: "where there has been noticeable reduction in household waste arisings, there appears to have been a relatively large investment and belief in widespread householder waste awareness raising activities"²⁶.

²³ Paragraph ix of the Executive Summary, and again at Paragraph 23 of Chapter 1

²⁴ Annex C2 Table C2.1

²⁵ Paragraph 48 of Volume I of the Third Report of Session 2009–10 of the House of Commons Environment, Food and Rural Affairs Committee, available from:
<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenvfru/230/230i.pdf>

²⁶ Resource Futures, 2009, *WR0121 – Understanding Waste Growth at Local Authority Level, FINAL REPORT to Defra*, available from:
www.pbmsolutions.co.uk/11%20Knowledge%20Sharing%20Centre/Resouce%20Futures%20Underst%20anding%20Waste%20Growth%20at%20Local%20Authority%20Level.pdf

- 3.4.21. Evidence shows that smaller waste receptacles for residual waste also results in lower waste arisings²⁷.
- 3.4.22. Furthermore, Nottinghamshire and Nottingham should provide increased support to community reuse and recycling schemes.
- 3.4.23. 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.
- 3.4.24. 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.
- 3.4.25. Flanders has developed a thriving network of reuse stores, with one per 60,000 people²⁸, 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.
- 3.4.26. 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"²⁹.

²⁷ "Where it works well, alternate week collections increase the amounts recycled dramatically. 90 per cent of the top recycling councils operate an alternate week collection scheme...bizarre as it may seem, but the evidence shows that a bigger bin leads to people throwing away more waste. There is still disagreement about the actual reasoning for this, but it is undeniable that a weekly refuse collection with a large wheeled bin collects more waste than areas with smaller bins, less frequent collections or on a (smaller) traditional bin." Source: Audit Commission Guidance – available from: http://www.letsrecycle.com/resources/doc/news/Waste_Management_Quick_Guide.pdf

²⁸ Lore Mariën, OVAM, cited in Friends of the Earth's (2009) "Taking out the Rubbish" conference notes. www.foe.co.uk/resource/reports_on_events/taking_out_the_rubbish.pdf

²⁹ http://www.london.gov.uk/media/press_releases_mayoral/%C2%A38m-create-uk%E2%80%99s-first-city-wide-reuse-and-repair-service

- 3.4.27. Nottinghamshire County and Nottingham City Councils should do likewise and plan to facilitate communication between reuse organisations, housing departments and registered social landlords. Local authority bulky waste collection services, and bring sites, should be re-cast to aim for reuse of items collected as the highest priority option. There is potential for a much greater role for Community and Voluntary sector organisations in reuse³⁰.
- 3.4.28. PAIN agrees with the statement in Waste Strategy 2007 that: "EfW should be set in a context of both greater emphasis on waste prevention and more ambitious recycling targets"³¹.
- 3.4.29. PAIN advocates for the setting of a 70% recycling target for municipal waste by 2020, and 75% by 2025, as called for by Friends of the Earth³².
- 3.4.30. However, the focus on recycling should not be exclusively to maximise recycling levels, but also to maximise the quality of recyclates, in order to maximise economic, social and environmental returns³³.
- 3.4.31. Material value achieved by keeping the materials apart outweighs any saving in collection costs by commingling them to seemingly simplify collection. Keeping materials separate from each other and thus maintaining quality is a defining factor in achieving best possible value for the service and of materials and therefore the greatest economic benefit.
- 3.4.32. The UK landfills and incinerates at least £650m recyclable resources in the Municipal and Commercial & Industrial waste streams every year³⁴.
- 3.4.33. PAIN notes Paragraphs 71 and 72 of the Appeal Decision of 16th November 2010 for the Sinfin Incinerator application (APP/C1055/A/10/2124772). Dismissing the appeal, the Inspector stated that:
- 3.4.33.1. "The quantity of waste nationwide is reducing, largely because of decreases in excess packaging and increases in re-use, recycling

³⁰ For further information please see: Bulky waste collections: maximising re-use and recycling – a step-by-step guide: www.frn.org.uk/pdfs/New%20Toolkit%20Jan%202006.pdf and Sorting Residual waste: a guide for councils to save money and help the environment by cutting back on residual waste www.foe.co.uk/resource/briefings/residual_waste.pdf

³¹ Waste Strategy 2007, Annex K: Environmental Statement, Paragraph 54
<http://www.defra.gov.uk/environment/waste/strategy/strategy07/documents/waste07-annex-k.pdf>

³² See http://www.foe.co.uk/resource/submissions/policy_review.pdf

³³ Welsh Assembly Government (2007): *Survey of Funding of Municipal Waste Management Kerbside Collection in Wales*
[www.realrecycling.org.uk/resources/files/collection_and_sorting/Local%20authority%20collection%20costs%20analysed%20\(Wales\).pdf](http://www.realrecycling.org.uk/resources/files/collection_and_sorting/Local%20authority%20collection%20costs%20analysed%20(Wales).pdf)

³⁴ See Friends of the Earth (2010): *Gone to Waste*
www.foe.co.uk/resource/reports/gone_to_waste.pdf

and composting; a trend that is replicated in Derbyshire. In that regard, I note that the *Waste Strategy for England 2007* states that the government is going to review its targets for 2015 and 2020 to see if they can be made more ambitious. I accept that there is a limit to the extent of waste minimisation that can be achieved; for example, some packaging will always be necessary. Nevertheless, there is no reason to suppose that the downwards trend in the amount of municipal waste in Derbyshire will come to a halt in the foreseeable future. Much will depend upon the amount of effort the Councils decide to put into the promotion and encouragement of waste prevention and minimisation.”

3.4.33.2. “I am therefore not convinced that within the 25-year life of the proposed WTF [Waste Treatment Facility] there would always be sufficient waste within Derbyshire to justify its capacity. Furthermore, I am concerned that the Councils’ commitment to the WTF, and the WTF’s appetite for waste, could divert efforts and resources away from the promotion and encouragement of waste reduction, re-use, and recycling/composting; the first three stages of the waste hierarchy. In that regard, I am mindful of the recent speech by Caroline Spelman, the Secretary of State for Environment, Food and Rural Affairs, in which she emphasised the government’s objective of a zero waste economy, gave a positive message about anaerobic digestion, and stated that, although recycling levels have been moving in the right direction, ‘it’s the pace that’s the problem””.

3.4.34. At Paragraph 63 of the Decision Document, the Inspector also stated that: “...in view of successes elsewhere in the UK, I consider SSAIN’s and FOE’s long-term aspiration of a 70% recycling rate to be realistic. Basing a waste strategy on a 55% recycling level when, within the life-span of the proposed WTF, much higher recycling levels could be achieved gives me some cause for concern...”

3.4.35. **Kerbside sorting, and separate weekly collection of food waste for anaerobic digestion (AD)**

3.4.36. The way that discarded material is collected has a big impact on the way that this material can be managed further down the line. Nottinghamshire County Council, as a Waste Disposal Authority, should work with the County's Waste Collecting Authorities by investing in collection schemes, learning lessons from the "Invest to Save" approach pioneered by Somerset County Council³⁵.

3.4.37. Paragraph 45 of Volume I of the Third Report of Session 2009–10 of the House of Commons Environment, Food and Rural Affairs Committee explains that: "Recyclates must be of sufficient quality to ensure maximum use of materials for premium purposes and this requires care in collection"³⁶.

3.4.38. Key to both the quality and the quantity of recycling is the type of recycling service offered to householders (and businesses). Kerbside separated recycling, coupled with weekly food waste collection and alternate weekly collection of residual waste, has been shown to boost quality and quantity of recyclates. 87% of householders surveyed in one study said that they did not mind separating recyclables into different containers³⁷.

3.4.39. Kerbside separation of recyclables has been shown to consistently and significantly outperform commingled collections in terms of quality, and to perform equally well in terms of quantity of final recyclables sent for reprocessing.

3.4.40. PAIN draws attention to 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"³⁸.

3.4.41. WRAP 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".

³⁵ See http://www.foe.co.uk/resource/event_presentations/somerset.pdf

³⁶ See <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenvfru/230/230i.pdf>

³⁷ WRAP (2009): www.wrap.org.uk/media_centre/press_releases/kerbside_or.html

³⁸ WRAP (2009): *Choosing the right recycling collection.*
www.wrap.org.uk/downloads/Choosing_the_right_recycling_collection_system.93ae1144.7179.pdf

- 3.4.42. In terms of environmental practicability, research published by the Welsh Assembly Government found that kerbside sort makes more carbon sense than commingled collections³⁹.
- 3.4.43. A similar WRAP report from 2008, entitled "*Kerbside Recycling: Indicative Costs and Performance*"⁴⁰ modelled thirteen different domestic recycling collection scenarios occurring in the UK and concluded that kerbside-sorted systems make greater financial sense.
- 3.4.44. Paragraph 2.99 of the Stage Two: Consultation on the transposition of the revised Waste Framework Directive (Directive 2008/98/EC) – a July 2010 consultation document issued jointly by Defra and the Welsh Assembly Government (WAG) – makes clear that: "Defra/WAG support and endorse WRAP's assessment that kerbside sort should be preferred where this is practicable..."⁴¹.
- 3.4.45. PAIN calls for an increase in the range of material accepted / collected for recycling, e.g. plastic bags. Plastic bags are readily recyclable, and should not be counted as capable of "contaminating" a consignment of recyclable plastics (sent to the MRF). PAIN is aware of Veolia's "problem" with plastics bags wrapping themselves around the MRF's rollers, and we are aware of other sorting facilities when the rollers are routinely (e.g. once a week) switched off to allow the plastic bags to be harvested for recycling. There is no good reason why plastic bags should not be collected for recycling.
- 3.4.46. PAIN is also aware of recyclers, including Omnia Recycling, who are quite happy to recycle all forms of plastic (apart from polystyrene and PVC – although other recyclers do recycle polystyrene). Accepting a much wider range of plastics would make recycling easier for the residents of Nottinghamshire and Nottingham, and a scheme could be launched to accept virtually all plastics for recycling from businesses as well as households.
- 3.4.47. AD should also play a big role in the Preferred Option, as Paragraph 24 of Waste Strategy 2007 states: "Our recent research has suggested that anaerobic digestion has significant environmental benefits over other options for food waste and may be particularly cost effective for food waste if separately collected".
- 3.4.48. Separate food waste collections have been found to lead to a reduction in overall waste generated by households, and PAIN believes

³⁹ Kerbside Recycling in Wales: Environmental Costs

www.wales.gov.uk/docs/desh/consultation/090429wastekerbreecyclecostsen.pdf

⁴⁰ Kerbside Recycling: Indicative Costs and Performance (2008)

www.wrap.org.uk/downloads/Kerbside_collection_report_160608.6459f192.5504.pdf

⁴¹ <http://www.defra.gov.uk/corporate/consult/waste-framework-revised/20100708-waste-consult-doc.pdf>

that, wherever practicable, households in Nottinghamshire and Nottingham should be provided with a weekly separate collection of food waste. We also commend the Love Food Hate Waste campaign for starting to tackle the problem of food waste.

3.4.49. Veolia are on record as having said: "It is anticipated that this 52% [recycling] target will be reached and exceeded by utilising collection methodology that does not currently include separate food waste collections. Nottinghamshire County Council is aware that if they wish to consider such a system Veolia Environmental Services are happy to discuss this..."⁴².

⁴² VE1.1, Para 4.40 of Mr. Mitchell's Proof of Evidence, available from: http://www.nottinghamshire.gov.uk/large-static/erf/es1144_veolia_pe_proof_of_evidence_of_steve_mitchell_1_of_8.pdf

3.4.50. **Pre-sorting, MBT, bio-stabilised waste to landfill**

3.4.51. PAIN agrees with Friends of the Earth that “the current optimum treatment for residual waste is via high quality mechanical biological treatment, maximising the removal of recyclables before composting or anaerobically digesting the remaining residual to remove biological activity ahead of landfilling or use as a low grade soil”⁴³.

3.4.52. A well designed mechanical biological treatment (MBT) facility should be used to maximise the removal of any recyclable materials remaining in the waste stream. MBT plants should be designed to maximise removal of recyclable materials, including metals, mixed plastics, paper, glass, card and textiles by combining a number of screening and sorting techniques.

3.4.53. An effective MBT technology also removes most of the biological activity of the waste, stabilising it so that it can be landfilled without releasing significant amounts of methane.

3.4.54. The biological activity should be reduced sufficiently to meet Environment Agency requirements, meaning landfilling the MBT residue will not count towards Landfill Allowance Trading Scheme (LATS) targets for landfilled biodegradable municipal waste.

3.4.55. If the residue is clean enough it may also be usable for low-grade soil, e.g. for land reclamation on brownfield sites, landfill restoration or as a soil additive.

3.4.56. Research has clearly shown that, even if the residue is landfilled, this is better for the climate than incineration (including incineration with heat recovery)^{44,45}. The reason for this is that incinerating the residue releases fossil-fuel-derived CO₂, from plastics and other materials, into the atmosphere.

⁴³ See www.foe.co.uk/resource/submissions/policy_review.pdf

⁴⁴ Friends of the Earth (2007): *Up in smoke: Why Friends of the Earth opposes incineration* www.foe.co.uk/resource/media_briefing/up_in_smoke.pdf#page=4

⁴⁵ Eunomia Research and Consulting (2006): *A changing climate for energy from waste?* www.foe.co.uk/resource/reports/changing_climate.pdf

4. Responses to specific questions

4.1. Comments on the Forward

- 4.1.1. Avoid scare mongering about future waste increases.
- 4.1.2. The “has to go somewhere” mindset undermines the reduction culture / zero waste economy paradigm.
- 4.1.3. “Running out of landfill” is overstated and incorrect / misleading – calling the reliability of the whole consultation process into question.
- 4.1.4. The “Balance” equation, when framed as being between waste facilities and environment/quality of life, is false. The true balance to be struck is more of a straightforward choice between minimising waste arisings whilst making maximum use of resources on the one hand, and dumping or burning these resources on the other.

4.2. Comments on Page 8

- 4.2.1. The Waste Hierarchy should emphasise Life Cycle Thinking and reflect incineration as potentially classed as disposal.
- 4.2.2. PAIN raises a series of queries regarding the cost of recycling: Where is the evidence? What does WRAP say, if anything? Why consider cost of recycling without reference to potential earnings from resale?

4.3. Comments on Page 13 / Question 1

- 4.3.1. We disagree with arisings figure, and with the projected increase.
- 4.3.2. The document should refer to the vision for the Sherwood Forest Regional Park, and the emerging Sherwood Forest Special Protection Area within the context of the spatial portrait of Nottinghamshire.
- 4.3.3. The claim that “all evidence shows incineration is safe” is contentious, and should not be made without qualification.
- 4.3.4. One Planet Living and drivers should be mentioned in relation to Question 1.

4.4. Comments on Figure 1, Page 14

- 4.4.1. Other designations should be noted in addition to Green Belt, e.g. SPA, SSSI, SINC, LNR, etc.

4.5. Comments on Question 2

- 4.5.1. Plastics should be recycled (now, or later – i.e. after temporary stockpiling / landfill).
- 4.5.2. Landfill acts as a carbon sink, stores plastics for later use, while incineration destroys resources and immediately releases carbon into the atmosphere.

- 4.5.3. The Strategy should anticipate stabilisation / reduction in arisings.
- 4.5.4. The Strategy should aim to promote social enterprise.
- 4.5.5. The Strategy should highlight opportunities to maximise reduction, re-use and recycling/composting.

4.6. Comments on Page 16

- 4.6.1. The phrase “new and innovative waste technologies” is vague and undefined, possibly equivalent to “unproven technologies”.
- 4.6.2. “Involving local people” is not properly defined. What influence will local people have, beyond making consultation responses to planning applications? The Strategy should set out clear ways that local people will be “engaged” and “empowered”.
- 4.6.3. In relation to Climate Change – The Strategy should emphasise minimisation, including reuse – also true for meeting future needs.
- 4.6.4. Avoid overcapacity – Note the Audit Commission *Well Disposed* report: “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).
- 4.6.5. Also note need for “flexibility” from WS2007.

4.7. Comments on Question 3

- 4.7.1. PAIN agrees with Nottingham FoE's comment regarding the need to decouple waste growth (in all sectors) from economic growth (see Waste Strategy for England 2007, Pages 12 and 28).
- 4.7.2. PAIN also agrees with Friends of Kingsway Park's comment that: under 'High quality design and operation' add: "Include the community affected in all stages of the development of any facility". This is reflected in the Defra Guidance *Designing Waste Facilities*.

4.8. Comment on Pages 18-19 / Question 5

- 4.8.1. PAIN strongly disagrees with the arisings figures.

4.9. Comments on Questions 6 and 7

- 4.9.1. Data from the North West study and the latest C&I survey should be used here.
- 4.9.2. Some of the waste landfilled in Nottinghamshire has been imported into the County and therefore the gap could be larger.

4.10. Comment on Page 24

- 4.10.1. Add minimisation.
- 4.11. Comment on Page 25
 - 4.11.1. The proposed incineration facility at Rufford does not qualify as “recovery”.
- 4.12. Comment on Questions 8 and 9 – Option A
 - 4.12.1. PAIN objects to the underlying assumptions used to produce Option A, as outlined above in our Overarching Comments.
- 4.13. Comments on Questions 10 and 11– Option B
 - 4.13.1. PAIN objects to the underlying assumptions used to produce Option B, as outlined above in our Overarching Comments.
 - 4.13.2. Note should be made of the Country’s best recyclers (e.g. the English top 3 recycled/composted 61.84%, 61.41% and 61.19% in 2009/10⁴⁶), and of the Welsh Assembly Government study (showing 93.3% of discarded material could be recycled or composted), the Audit Commission’s assessment (that “70% is readily recyclable”), the North West study, and the latest study for C&I.
 - 4.13.3. Option B should have included Invest to Save, etc.
 - 4.13.4. Eastcroft – less use by City could mean more use for County MSW.
 - 4.13.5. Option B could easily be 65% → 70% by 2020 → 75% by 2025. We expect national targets for recycling to rise in the next Waste Strategy for England, in light of Defra’s Waste Review and EFRA Committee recommendations, in line with ambitions enshrined in Waste Strategies for Wales and for Scotland.
 - 4.13.6. Benefits of segregation, e.g. increased income from higher quality recyclates, and AD of kitchen waste should be highlighted, including soil improvements, etc. (Note: we acknowledge that some mention is made of this in the Glossary).
- 4.14. Comment on Question 12 and 13 – Option C
 - 4.14.1. PAIN objects to the underlying assumptions used to produce Option C, as outlined above in our Overarching Comments.
- 4.15. Comments on Page 29
 - 4.15.1. The phrase “suitable for energy recovery” is unhelpful, as AD is good, but incineration of recyclable/compostable material goes against Government policy, the waste hierarchy, life cycle thinking, the Revised Waste Framework Directive, etc.

⁴⁶ Also note Rugby’s achievement of rising from 32.24% to 50.99% in just one year.

- 4.15.2. Separate collection of glass should be promoted, as requested by some Waste Collecting Authorities.
- 4.15.3. The County should consider pre-treatment, as is already the practice in Nottingham City.
- 4.15.4. There is an apparent conflict between City expectations and County expectations re: future arisings, future recycling rates – creating the impression of a lack of coordination between the County and the City (and between the joint Waste Core Strategy and the City's draft Municipal Waste Strategy).
- 4.15.5. Incineration below 0.65 relative efficiency (i.e. inefficient incineration, including incineration without maximum heat use) is properly classed as disposal.
- 4.15.6. Eastcroft's 3rd line is not limited to C&I – see the Eastcroft Planning Inspector's report and the EA's permit for Eastcroft.
- 4.15.7. Incineration is neither cheap nor sustainable.
- 4.16. Comment on Page 30
 - 4.16.1. PAIN questions the claim regarding “benefits from reducing landfill” - if this comes at the expense of reduction, reuse, recycling/composting/AD then this would be a dis-benefit.
- 4.17. Comment on Questions 14 and 15 – Option D
 - 4.17.1. PAIN objects to the underlying assumptions used to produce Option D, as outlined above in our Overarching Comments.
- 4.18. Comments on Page 31
 - 4.18.1. How would it be possible to limit energy recovery to a maximum of 30% when dealing with C&I waste?
 - 4.18.2. Recovering energy from as much as possible should not include plastic (or kitchen waste – unless via AD).
 - 4.18.3. Costings do not include potential incineration tax (as is the case in Ireland and other parts of Europe), or tax/increase on incinerator bottom ash / air pollution control residues to landfill.
 - 4.18.4. Incinerators create hazardous and eco-toxic waste, therefore not dealing with waste responsibly (if we are generating toxic waste).
 - 4.18.5. PAIN also notes that there are no Hazardous landfill sites in the area covered by this Waste Strategy (and that this is acknowledged in the consultation document).
 - 4.18.6. The figures provided do not quite add up for 2025: if there is 70% recycling, 30% recovery/incineration and 10% landfill = 110%

4.19. Comment on Question 16

4.19.1. Although PAIN is dissatisfied with all four options on offer, Option B is the most consistent with the waste hierarchy, and is therefore our favoured approach of the four options.

4.20. Comment on Question 17

4.20.1. PAIN calls for consideration of much greater emphasis on waste minimisation, reuse, recycling and AD/composting, with MBT for residuals, and kerbside sorting for better quality recyclates, and a much wider range of recyclates to be collected and recycled, with weekly separate collection of food/kitchen waste for AD, all supported by an Invest to Save policy and an ambition to achieve zero waste to incineration and zero biodegradable waste to landfill – see Option E as outlined above.

4.21. Comments on Page 34

4.21.1. What if waste growth is lower? Note the Audit Commission's view of the poor value for money that accompanies over-provision of waste management facilities.

4.21.2. What evidence is there that land-raising could have unacceptably high social, economic and environmental impact, and wouldn't the same arguments apply to incineration?

4.21.3. What are the differences between land-raise and incineration in terms of social, economic and environmental impacts? Where is the evidence?

4.21.4. The consultation document's comments about land-raise seem to have been supported by evidence-based arguments.

4.21.5. What monitoring (e.g. of changing waste arisings and composition) will be in place, and what would the response be should future monitoring indicate waste growth is falling below (or rising above) that forecast?

4.21.6. The document does not make clear if monitoring covers only MSW or also extends to C&I and/or C&D.

4.21.7. Figures 3 and 4 are not clear about which waste streams are covered by the statement on Page 34.

4.22. Comments on Page 35

4.22.1. "Most of our waste comes from..." – there is an obvious need to differentiate between the various waste streams, as this data is required to identify suitable facilities and locations, e.g. agricultural waste arisings and composting facilities.

- 4.22.2. We need more detail regarding not just quantities of arisings, but also the types / qualities.
- 4.22.3. We also require more detail regarding future arisings, (which could actually be lower than current), including population growth and population movement (e.g. from or to the City).
- 4.22.4. This should also take account of potential increasing / decreasing recycling / composting and waste reduction measures – sensitivity analysis should be carried out and made public. This analysis should take account of legislative and other drivers and potential drivers (e.g. incineration tax).
- 4.22.5. PPS10 calls for priority to be given to brownfield sites – some former colliery sites are greenfield due to restoration conditions. Building on such sites would harm regeneration, e.g. of environment, and would go against emerging Green Infrastructure plans and policies.
- 4.22.6. The importance of wildlife corridors in the interim CLG guidance on the revocation of Regional Strategies should be noted.
- 4.23. Comment on Question 19
 - 4.23.1. Nottinghamshire and Nottingham must not forget the vision to "protect Nottinghamshire's environment, wildlife, and heritage".
- 4.24. Comment on Page 40
 - 4.24.1. PAIN is confused by the document's use of the term "recycling facility". Is this limited to sorting facilities (like the MRF in Forest Town), or could it include actual recycling facilities?
- 4.25. Comment on Page 42 / Question 32
 - 4.25.1. Reference should be made to the process involving MBT to bio-stabilisation as pre-treatment before landfill.
- 4.26. Comments on Page 43
 - 4.26.1. Former colliery sites should not be classed as brownfield if they have a restoration condition.
 - 4.26.2. Would inclusion in a Green Infrastructure plan count as an "environmental designation"?
 - 4.26.3. A "cultural heritage" designation should also be added.
- 4.27. Comments on Page 44
 - 4.27.1. "Resource recovery park" is listed twice (i.e. in two sections of the table). Is there a difference between the two listings?
 - 4.27.2. Why are small AD plants deemed unsuitable for derelict greenbelt land?

4.28. Comment on Page 45

4.28.1. There is obviously scope for viewing landfill / land-raise as “temporary stockpiles” of resources for future recycling.

4.29. Comments on Page 54

4.29.1. Only biodegradable MSW is covered by LATS, also there is an option to buy LATS, or even to pay the fines – so this portion of the consultation document is incorrect.

4.29.2. An incinerator would burn material that would otherwise be recycled.

4.29.3. PAIN would like more detail of the County’s capacity to compost 100,000 tonnes of green waste. The public inquiry mentioned in the consultation document is only to consider one 30,000 tonne facility.

4.29.4. Also, PAIN would have liked to see a comment about the prospect of the County sharing the proposed AD facility with Nottingham City.

4.30. Comment on Question 37

4.30.1. The pre-consultation letter stated that waste data “*is a key issue for the Waste Core Strategy*”. PAIN went further to suggest that the adequacy or otherwise of waste data is THE key issue upon which the remainder of the strategy will succeed or fail. PAIN is therefore disappointed that a more robust evidence base has not been provided.