

Review Participants

Annex A

With many thanks to the following people who attended workshops and/or participated in interviews and meetings:

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WM

Birmingham City Council

Coventry City Council
Dudley MBC
Herefordshire DC
Sandwell MBC

Shropshire County Council
Solihull
Staffs County Council
Walsall MBC
Worcs County Council

Y & H

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Bradford
Calderdale
Doncaster
Kirklees
Leeds

N. Lincolnshire
N. Yorkshire
Rotheram
Richmondshire
Selby
Sheffield City Council
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York
CRN
LGYH

Recycling Action Yorkshire
Yorkshire Forward

SE

Oxfordshire County Council

NE

Alnwick District Council
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Darlington Council
Durham Council

Durham City Council
Gateshead Council
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Regional Government

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GOE

GOEM

GOSE

GOL

GOWM

GONE

GONW

GOSW

GOY&H

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LATS - Summary of Local Authority Responses to Questionnaire

GUIDANCE

- DEFINITION OF WASTE
- AREAS REQUIRING FURTHER CLARITY
- OTHER LATS GUIDANCE USED
- SUGGESTED USABILITY IMPROVEMENTS

REGISTER AND BULLETIN BOARD

WDF REPORTING

- TIME REQUIRED TO COMPLETE THE REPORT

TRADING AND USE OF THE BULLETIN BOARD

- ENCOURAGING TRADING

MASS BALANCE ESTIMATOR AND ALLOWANCE MANAGER (MBEAM)

THE MASS BALANCE CALCULATION (MBC)

- ADVERSE CONSEQUENCES OF THE MBC

ENVIRONMENT AGENCY GUIDANCE ON MBT

HOME COMPOSTING

PENALTIES

- PENALTIES FOR NON-COMPLIANCE WITH REPORTING REQUIREMENTS
- PENALTIES FOR MISSING TARGETS

FUTURE REVIEWS

OTHER OPERATIONAL MATTERS OF CONCERN

This summary covers responses to the questionnaire without comment. The broad themes that emerged from these comments are addressed in the report. Issues are discussed in more detail in the report itself where

- Specific points were discussed at regional workshops,
- comments in regional workshops were amplified by questionnaire responses following the workshop discussion, or
- comments were followed up in one to one discussions with the officers concerned or others,

Guidance

Definition of waste

1. A number of authorities stressed the need for greater clarity on the definition of municipal waste, although there was recognition that this is being addressed. Comments included that Defra guidance contradicts the law on the definition of municipal waste, and that it appears to encourage local authorities to transfer municipal waste out of local authority control into the private sector.
2. A number of authorities felt that a clearer definition is needed for waste that has to be included in the LATS Mass Balance Calculation. It was felt that there should be more reference to actual waste types produced. One suggestion was that this could take the form of a waste catalogue which could be available on-line and updated when guidance is given to individual authorities. This should be linked to an explanation of the effect that different types of waste have on the Mass Balance Calculation.
3. Specific comments on definitions included:
 - There are elements of waste that come under the control of councils that have historically never been included in waste statistics; in particular cuttings etc. from public parks and gardens.
 - Further guidance is required on the reporting of local authorities' own waste e.g. that from council offices, care homes etc where it is collected and disposed of by a private contractor. There is doubt over whether this should be recorded through WDF and, if so, how to obtain some of this data.
 - A few authorities sought further guidance on the reporting of trade waste where a district council has sold off their trade waste service. It was commented that there are differing views as to how this material should be accounted for.
 - Information relating to schools waste is not clearly defined. It would be helpful to check all the guidance to make sure that the distinction between waste in the possession and control of a WDA and a LA is clearly distinguished and that the term 'LA' is never used where the meaning for legal interpretation purposes is 'WDA'.

- The recent Defra consultation on the definition of municipal waste suggests that municipal construction and demolition waste is excluded from the calculation for LATS purposes. The controlled waste regulations 1992 states that construction includes 'improvement, repair or alteration'. This suggests that anything to do with the fabric of a house, i.e. fitted wardrobes, doors, fitted kitchens etc, could be included within this category and therefore excluded from the MBC for LATS purposes. Clarification on this aspect would be beneficial. Further guidance was sought on rubble – it could be argued that this is not municipal waste but construction and demolition waste and should therefore not be reported. It is also not biodegradable so should not be included in the calculation.
- It is unclear whether charity waste is considered to be municipal waste.
- One authority was unsure whether there is any guidance on LATS accounting in terms of the RO Form.

Areas requiring further clarity

4. A number of suggestions were made for improving clarity:
 - Allowance calculations. A simple spreadsheet the WDAs can insert data into to see the effects of various reduction and recycling initiatives would be useful.
 - Clarity on ability to carry forward LATS leading up to end of trading period. One authority commented that there still seems to be some confusion as to the position on trading into target years. Can trading take place within a target year?
 - It was commented that little information is available regarding the challenges between two tier authorities, and that there should be clarification about the exchange of LATS costs between authorities in two tier areas.
 - There was a request for improved guidance on how outputs from the different treatment technologies will be handled.
 - A question which has been raised with DEFRA and the EA on WEEE is whether producer responsibility should be interpreted as taking this waste outside of the LA control (for the purposes of disposal) so that WEEE tonnages can be kept out of the MBC.

Other LATS guidance used

5. Some authorities use only the Defra guidance. However a number of authorities commented that they also use Environment Agency and CIPFA guidance. A small number of authorities commented that they use information from general internet searches. Other information sources were Local Authority seminars and inter-authority discussions on LATS.

- One authority commented that they use the CIPFA guidance on the treatment of year end valuations. Another commented that they have difficulty ascertaining the value authorities should be using for the purpose of accounting for LATS allowances at year-end.

Suggested usability improvements for Defra Guidance

6. A range of suggestions were made for improvements to the guidance:

- **Clearer structure.** It was suggested that a clear index is required for the Defra guidance, and that there is a summary of key information available, with links through to more detailed information. Another suggestion was that there should be a search engine or A-Z of queries. It was commented that it is difficult to find particular information as there is so much on the site, such as individual allowances for WDAs.
- **Updating.** Some authorities stressed the need for the guidance to be kept up to date with new information. For example it was commented that the current consultation on the definition of municipal waste is not on the LATS consultation link, and the “News and Announcements” section has not been updated since 2005.
- **Better links.** There should be links on the Defra web-site to other relevant information elsewhere on Defra website (eg MBeam and model LATS contracts within the WIP pages) and also to the Environment Agency LATS pages. This part of the website should be easy to find from the main recycling and waste page on the website.
- **Appearance and tools.** It was commented that the web-site looks antiquated, with colour and fonts that are not attractive to look at. It was suggested that it needs ‘freshening up’ with more than just the quantitative data on it – perhaps analysis tools and market tools such as trend analysis per LATS year and average prices etc. There should be a facility to directly download directly into word/ excel.

Register and Bulletin Board

7. Many authorities felt that it is difficult to comment on the register and bulletin board due to the lack of trading to date.

- The download function could be augmented to include downloading notice lists and trading boards into word or excel. The actual user guidance documentation could do with being downloadable or viewable from the site.
- The bulletin board could be enhanced, enabling its use as a discussion forum for authorities.
- Transfers on the bulletin board should not require additional authorisation from a senior user - approvals to trade are granted through internal

approvals/reporting procedures and this new requirement just adds to the bureaucracy.

WDF Reporting

8. A range of issues and problems was reported. These are categorised here under a number of key headings:

Two tier areas

- A number of WDAs reported problems with WCAs entering data on time, and the lack of time to resolve any problems and issues.
- WDAs have to report the same data as WCAs, but the two are not always checked against each other by Enviro, so WDAs have to do the checking. Getting data to match can be very difficult to do by phone or e-mail and WDAs often have to set up a meeting to go through the issues.
- Some data is reported by the both County and District questions; this appears to be duplicating efforts. Eg. the waste disposal data question. It would be far easier if only one type of council had to provide this information.
- The number of landfill definitions should be reduced to make reconciliations between WDA and WCA figures more practicable.
- Third party (community) recycling and re-use figures should be reported by the WDAs rather than by the WCAs.

Basic Usability

- The software is not user friendly and being web based is subject to delays and repeated 'time outs' occur when congested, causing great frustration. (N.B. This can be due to the LA website settings and capacity.)
- Data disappears from the system even after being saved.
- The format is specific to WDF and is not compatible with other reports. (They still have to report to CIPFA for example.) So setting up data systems to meet reporting requirements is difficult.
- The layout of the pages makes it difficult to work with some forms.
- Lack of clarity about which fields are compulsory for completion.
- Sometimes the drop down lists do not reveal all the previous entries
- Having the save button repeated at the bottom of the page, or part way down longer pages or even next to every data point would be useful.
- Sometimes data appears to be accepted but is not saved to the database or is saved but cannot be seen at the Enviro end. The way in which an authority sets its internet access up for computers looks likely to be the

cause of this (proxy servers, firewalls, web caches, browser software etc). Having a file upload option would solve the problem.

- The selection boxes are prone to cause problems to users with 'wheel mice' as they scroll down without exiting the box causing pages to reload to different pages - if you don't spot this, data could be entered incorrectly.
- When entering recycling tonnages by type, you have to select the facility, but then you get a full list of recycling types for each facility. This makes it very difficult to navigate. It would be better to be able to add the recycle types to each facility. i.e., Aquaforce Special Waste only take fridges, so only fridges should come up.
- Each authority interprets the rules their own way. Some report monthly, some quarterly. Some round up, some report to 2 decimal places. Probably some tonnages for the same items go in completely different locations from one authority to another.
- The issue of MRFs is one problem here as some authorities use the MRF as an end point or use the other/exempt option. This is compounded by the questions being in some cases ambiguous.
- Selection lists - many entries on the selection lists are incorrect, have the wrong details, and are duplicated or for many of the smaller operators, missing altogether. Searching by full postcode is prone to failure. Searching by name only works if the name has been put in correctly in the first place. Knowing which to use is difficult and different authorities may use different facility names for the same facility. This leads to the over use of other/exempt as a facility. (It was noted that the improvements to Facility Lists are useful - such as adding site license numbers, and gradually adding more facilities.)
- Some waste streams are missing. Eg. CRTs are probably put in as 'other electrical goods' or something else. There needs to be provision for more waste types. Where do WEEE items go and should they be split out (as CRT's are hazardous)? What about plasterboard or mobile phones or other items not split out?
- Lack of provision to list 3rd Party Recycling Credit tonnages that should be included in BVPI 82a for a WDA - there is no location for this.
- Within WDF negative tonnages can be entered, however when the Mass Balance is calculated they are deemed unacceptable. Perhaps it would be better to set up WDF so that it won't accept negative numbers. (Done)
- The system does not allow us to undertake a validation –ie a health check on the data, which makes checking very time consuming. (Being done)
- Why are questions raised on the same issues after each data submission? Eg. '*Is the collection of green waste seasonal?*' when it clearly is – and this is unlikely to change year on year.
- Different requirements for inclusion or exclusion of contaminant tonnages in the figures required for two different questions in WDF has led to

mistakes in entering data. However the summary provided prior to authorisation has enabled this to be spotted and is very useful.

- The validation sheet available to users only details the differences in the recycling figures, it would be more useful if it detailed all the information entered.

Comments on particular questions

9. A range of changes was suggested:

- All EA licensed and exempt waste management facilities need to be included in the register with a search facility based on the EA number.
- The register of sites needs to be kept up to date and to be accurate. Active waste facilities have been removed from the register because they have changed ownership, not because they have become inactive.
- Question 15a needs a carry forward button for the number of bring sites
- Question 19 needs to be material driven rather than reprocessor driven, which would enable several reprocessors to be allocated tonnage against the same material. The rejection wording should be changed to reflect waste rejected after completion of the process. Material rejected at the gate of the reprocessor should be included in the relevant collection question. Another comment on question 19 was that it is particularly frustrating as there is no overall summary page.
- Question 21 needs an automatic calculation of totals of home composters sold to the end of the month/period and a carry forward button.
- Materials in question 35 need to be entirely compatible with those in question 14. There is no co-mingled option in question 35 but materials collected for re-use cannot always be identified separately.
- Questions 52 and 53 need changing to either allow the same landfill site to be entered more than once (box on the left) or have more than 2 sources of waste delivering waste into the landfill site (boxes on the right). We have a case where one landfill site receives waste from 4 different sources.
- Questions 58, 61, 62 and 63 are about recycling and composting, therefore, they should not be in the disposal questions.
- Question 63 is unnecessary because this material is recorded in the relevant collection question and question 19.

Timescales and resource requirements

- RO forms are not due until the end of July, but questions on finance in WDF have to be sent and approved at level 30 by the end of June. The two timetables should be matched up. Providing the final year-end financial information can be quite tight as the financial R05 form is due towards the end of July and means that the final end of year data can not

be rolled up until this is available. This therefore makes meeting Level 35 before the deadline tight.

- Because of the way data is collected it means the same information is rounded into other groups and to be able to provide WDF with the information they always require it would mean great cost to the authority eg: Street recycling bins are collected by domestic recycling vehicles and not separate dustcarts and therefore tonnage information is not available.
- Having to report similar data under different questions makes data entry more time consuming. For example, it would be far easier if the final destination could just be stated when providing data about each Household Recycling Centre, rather than having to provide the data again in a separate question.
- Problems have been found with providing finalised data in the three month time scale required; issues have included agreeing contamination rates on mixed recyclable materials, delays arising from criminal activity, contractors weighbridge or system failures, disputes etc.
- Currently there is no time for WDAs to check submitted data from WCAs prior to it being rolled up and authorised. One suggestion was that a two week 'reconciliation period' be introduced following the deadline for initial submission of data for collection authorities. During this WDAs would be required to check and agree WCA submissions.
- The current deadlines for BVPI reporting and WDF reporting at the end of the year are incompatible. The full final data from WCAs should be available to the WDA well in advance of the requirement to report BVPIs.

Comments about Enviro/ EA/ Defra

- One suggestion was that Enviro should be given more time to validate the data to Level 35 to ensure predicted outturns can be provided.
- There should be a separate deadline for authorities to meet Level 30 then to meet Level 35. Currently authorities work towards a deadline of the 31st of July (for example), which is the same deadline as for Level 35, however authorities have no knowledge of how long it will take Enviro to validate to Level 35 once they have reached Level 30.
- It was commented that there should be better communication between Enviro and the EA. For example one authority had a letter from the EA asking why they had not submitted up to Level 35, whereas the problem was with Enviro not authorising the information submitted. Once the problem was mentioned to Enviro it was put to Level 35 that day.
- More than one authority commented that it takes a long time for Enviro to validate /comment on amended data returns. For example with the Qtr 4 Data 2006/2007, 3 days before the deadline one authority have not been informed of any amendments but the data is still yet to be rolled up to level 35. There was concern that the timing for the Enviro review is outside of authorities' control yet they are still get threatened with

penalties for late submission. One suggestion was that the EA set a timescale by which Enviros should complete their review.

- Some authorities reported that there are sometimes contradictory or confusing mixed messages from Defra/EA and Enviros - for example about which level at which data is posted. One suggestion was that it would be useful if all WCA's in a WDA area and any associated partner authorities were handled by the same person. One authority noted that contradictory instructions from two different Enviros consultants resulted in loss of allowances in 2005/2006.
- One authority had received a letter of Intent to serve Notice for Failure to roll up level 35, for Q4 06/07, although Enviros had not raised any queries.
- One authority commented that they submit info monthly, but that queries/concerns come back in relation to quarterly data, so it is extremely difficult and time consuming to pinpoint inaccuracies.
- One authority reported that their out-turn calculations differed from those of the EA and they were not allowed to correct this.
- It is very difficult to get an immediate answer out of Enviros/EA when there are queries and the number of different people involved between the different stages is confusing. Eg. The digester issue was first raised at the outset of WDF and it has taken until June 2006 to get an instruction which was subsequently amended in March 2007 requiring further retrospective amendments.
- There is a tendency for staff at Enviros/EA to over use jargon, which is confusing for staff inputting data who are less expert on WDF.
- There were a few reports of glitches in the system, which in some cases Enviros incorrectly blamed on authorities. For example one authority received a letter from the EA stating that their LATS allowance could not be calculated owing to a late submission, whereas in fact the problem has been a system glitch which took 6 weeks to identify.
- When validating data Enviros have been known to ask questions about quantities/tonnages simply because there has been a fluctuation from one month to the next. Waste Tonnages do fluctuate particularly with seasonal factors. This 'interrogation of the data' means that WDF inputters have to re-check previous data, which is time consuming and frustrating.
- There have been occasions when Enviros have asked the same questions about data from one quarter to the next. It would appear that entries in the 'Notes' facility are not always considered or it could be a turnover of staff issue?
- Reminders issued by Defra/EA about WDF deadlines have a tendency to over emphasise the penalties, fines and consequences of not reporting on time, so they are intimidatory rather than supportive.

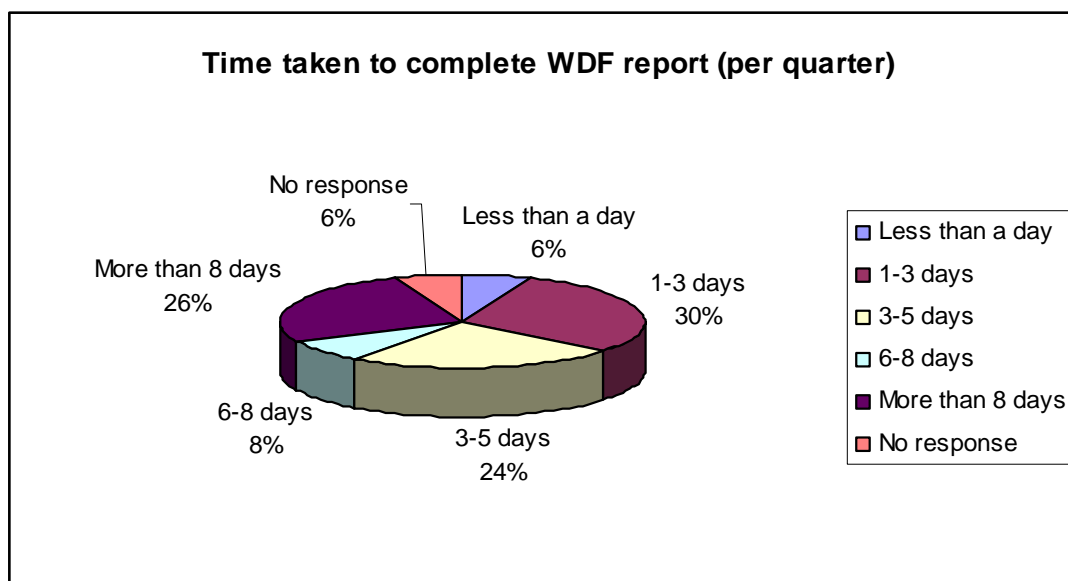
Other issues

- Difficulty in rolling back when queries identified
- One authority reported that data has been rolled down in the past for amendments to items that are outside the LATS reporting regime, e.g. home composter sales and abandoned vehicles. This has resulted in them not being provided with a LATS outturn for that quarter when all the relevant LATS data had been entered and verified by WDF.
- Reporting on the classification of output from Waste Digester – DEFRA New Tech Programme
- Need to have consistency between Audit Commission, BVPI guidance and WDF guidance. It was noted that WDF reports do not match internal BVPI calculations, despite being based on the same figures.
- WDF reports appear to be calculated in an overly complicated way, and so produce incorrect calculations.
- In order to submit a return to Level 30 you have to roll up then reject the data several times as the tool for checking the return is only available to the LA admin user – this can lead to additional delay and the need to input incorrect figures in order to get the WDF to balance.
- One authority commented that most issues with data roll back from WDF (in their area) do not affect LATS e.g. number of households receiving certain collections, and that this holds up the whole process.
- We have in some cases had to put estimates in to WDF owing to companies not returning data in time- so at year-end have a negative value in the 4th Quarter- this is very difficult to manage. Why cannot WDF accept a negative value in the 4th quarter?
- We cannot understand how it is possible to have non-mandatory questions, which seem to have mandatory answers. Either the answers to questions are required or they are not.
- Obtaining a consistent answer to a particular question posed with regard to the treatment and accounting of rubble and hardcore – different answer given by the EA and Defra reps. Now resolved but caused reporting difficulties and a significant amount of time to correct the quarterly declarations.
- Also the answers to several of the questions are the sum of other questions. It would be better if these were automatically calculated rather than the in-putter calculating and inputting. This would reduce the possibility of human error.
- The district and borough may report recyclates they have collected in the month/year they collected them in but they might not be disposed of until months or a financial year later due to 'stock in the yard'. The WDA would

rely on weighbridge tickets for an audit trail so we would report when the material reached its final destination rather than when it was collected.

- One authority was concerned that in the May 2007 EA “LATS Guidance on reporting....” that in the Serving Notices Paragraph the WDA is required to be able to provide an evidence trail of information on WCA’s rejected materials from an MRF. Under the EPA (1990) the WCA’s have powers to retain waste for recycling and the rejects from an MRF are the output of an industrial process. This reporting requirement seems at odds with the fact that MRF material is not necessarily undertaken through one of our contracts and we have no statutory duty to dispose of the reject material (it’s a process output) or viable ability to otherwise obtain the information; recycling credits are only paid on actual material recycled. We have a duty to provide accurate data without the means to be able to do so and WCA’s report this material for disposal on WDF.
 - There is an over-emphasis by WDF for “ins” and “outs” to be in balance across the quarter. Eg. Greenwich uses large facilities which take on and process large amounts of waste from a variety of customers and therefore waste in does not always go out in the same quarter.
 - It is not clear why Disposal Authorities are required to split reporting of HWRC data by District area as this requires additional work when there is no obvious benefit.
 - There can be figures from third party recyclers operating in the borough, particularly charities.
10. It was suggested that some issues with accuracy could be addressed through more frequent training programmes on WDF. A specific training day for the WDA and WCAs has been suggested and requested via the EA but nothing yet has been forthcoming. Another suggestion was that policy changes or clarifications should be published on the web and sent to local authorities by e-mail.
11. On a more positive note, one authority commented that when difficulties with the system are encountered the WDF helpdesk are very helpful at resolving the problems.

Time required to complete WDF reporting each quarter



12. The spread of responses to this question are illustrated in Figure 1. The least amount of time was 2 hours per quarter. The most common response was around two to three days per quarter. However the process took much longer for many authorities. A number of WDAs commented on the considerable extra time required for collecting, chasing and checking WCA data. Some authorities spent considerably longer, with responses including:

- Two weeks to complete each quarter's submission. With the week to week data entry it is the equivalent to one employee working two days a week.
- In total, about two months of work per year (approximately 300 man hours) is involved in collating, entering and checking data, including checking data from our constituent WCAs.
- Overall, WDF reporting is thought to utilise around 2 FTEs.

13. Other comments included:

- *It would be difficult to overstate the drain on resources that this process involves and the practical problems that it causes.*
- *A Data Officer or Manager has to enter the data and ensure that it is accurate. A great deal of data is required and calculation and judgement is required to enter the data –it is not a task that can be undertaken by someone with no knowledge of waste management. This has led to difficulties in meeting the timescales for rolling up and authorising data.*
- *The majority of the data is ready to hand but has to be reconfigured to suit WDF questions. This necessitates the use of additional spreadsheets to re-arrange the data for WDF purposes.*
- *WDF does not allow you to check BVPI performance monthly. We need monthly performance data for performance clinics- owing to the inability of*

WDF to do this simple calculation we then have to duplicate the effort in monitoring our monthly performance position for senior managers. This defeats the principle of WDF being a one stop shop for data management. Most authorities have to run two systems in order to meet internal performance clinics.

- One authority commented in considerable detail:
 - Rather than simplify data provision WDF is an unnecessary and time consuming complication. WDF is unnecessarily complicated, as evidenced by the number of guidance documents, by trying to satisfy a number of similar but crucially different legal definitions. Waste Data Flow is difficult, if not impossible, to update with corrected information.
 - Waste Data Flow is inefficient in that all data has to be re-keyed in and can't be prepared and uploaded electronically. With the abolition of Best Value indicators the opportunity should be taken to split LATS reporting away from WDF. LATS information could be reported electronically via a standard spreadsheet with data being audited in the normal manner by internal and external auditors.

Trading and Use of the Bulletin Board

14. 78% of authorities responded that trading was part of their strategy, 18% reported that it was not, and 14% did not comment. Key reasons given for trading reflected those in the question, but many respondents did not include a reason, and a few gave more than one reason:

- One authority noted that they intend to purchase treatment capacity from a PPP contractor, but use trading as a measure if for any reason the waste treatment cannot be used, the plant fails, etc.
- Some commented that they are planning to have sufficient treatment facilities to meet LATS allowances, but that if facilities are delayed due to planning, contractual or other issues they are likely to buy allowances.
- One authority noted that one reason for trading was to provide for contingencies in the uncertainty that surrounds the LATS scheme (i.e. the changing definition of MSW).

15. However authorities consistently commented on the lack of trading activity, other problems about trading:

- Some commented on the difficulties that authorities have in dealing with the uncertainty of the marketplace and taking risks with public money
- The bulletin board is not being used. Many commented that trading activity commonly takes place through e-mail or phone contact between authorities. It was mentioned that there is already an e-mail network trying to drum up interest outside the trading site.
- LATS requires stability. The potential changes highlighted with the consultation on the definition of Municipal Waste and the speculation on home composting all challenge stability and discourage trading.

Encouraging Trading

16. Some authorities favoured allowing the free market to prevail. One authority was surprised to learn that Defra wants to encourage trading when it has been stated previously that LATS trading would be only a marginal activity. However a number of authorities noted that any system that would help to stimulate or encourage trading would be a benefit. Particular suggestions included:

Better information

17. Many stressed the need for clear, accessible, up to date information about the LATS position of authorities across the country, future plans for waste capacity, and information about trades. This is necessary so authorities are able to make an assessment about the value of allowances. A number of authorities commented that there should be more transparency about transactions, with the anonymity of trades removed to assist with market intelligence. There was a request for a summary of all trades, and for each authority's position after trading.

18. Specific suggestions were:

- Defra should supply a 10 year rolling programme of planned major waste management facilities to show how much capacity is likely to be available along with the likely capacity required.
- There should be a database of WDA LATS positions up to 2020 so that authorities can see who needs what and when.
- It would be useful to find out what other authorities are doing and how successful they are being at selling allowances and how these allowances are generated (through incineration, composting, recycling etc.)

19. Other suggestions for improvement in terms of information included:

- **Transaction details.** It would be good to see details of all transactions on the bulletin board.
- **Contact details.** Update contacts list and provide telephone numbers and electronic links to trading officers including Senior Users
- **More information about buyers and sellers.** One suggestion was that there is a need to be able to create a report of authorities selling or wanting to buy allowances, instead of scrolling through numerous pages. Suggestions included a facility to sort by scheme year, local authorities, amounts available. Another suggestion was that it would be better for posts to be split into two separate tables – Buyers & Sellers.
- **Updating.** The board should be updated on the same or next working day not over a fortnight. Old/outdated posts should be removed as they unnecessarily clog up the board. Should also think about time-limiting how long posts are advertised for or some other method to remove older posts that are no longer relevant. There was also a suggestion that the ability to download postings on the bulletin board would be useful.

- **e-mails about trading.** One suggestion was that authorities should receive an e-mail about every trade that occurs with information about the trade, so that authorities do not need to look at the site.
- There should be more comprehensive guidance notes on the register site. It would be good to see a step by step guide on the website to ensure that all necessary processes are followed.
- Advice was sought on whether non-monetary goods can be traded, who trading officers should be and their responsibilities.
- Other authorities said that all trades should have a monetary value attributed to them, even if no money actually changed hands. One authority suggested that there should be information on non-monetary transfer so that market value can be estimated. There was concern that nil-value trades disproportionately affect the averages and analyses.
- One suggestion was that all trading agreements should be directed through the web site and restricted to a limited number of specified contract arrangements. Another comment was that some authorities are attaching legal constraints on the sale of LATS, and that LATS should be regulated in a manner which requires laying down the nature of legal conditions which may be attached to sale of LATS permits.
- All information about the LATS scheme, including consultants' studies carried out for government, needs to be disclosed for transparency to enable true trading to take place.
- A couple of authorities suggested that the system should provide the ability to see not just the current year's balance but future and past years' balances on one screen, as well as trading activities over the year.

Trading methods

Suggestions were:

- Defra could help facilitate trades. One suggestion was regular e-mails to all trading officers outlining market trends, likely end of year shortfalls, perhaps an annual meeting around July to provide a trading floor. Another suggestion was that Defra could arrange networking meetings / workshops. More brokering between authorities wishing to sell and those wishing to buy could make the trading scheme work more efficiently.
- A number of authorities thought that an electronic auction may be a useful tool. One view was that this could ensure that a reasonable price could be paid for an allowance, rather than having to purchase permits at an over-inflated rate.
- One suggestion was that Defra could set a cap on the price of future years allowances, providing authorities with greater certainty on the future price of allowances. Using its knowledge of the wider LATS position Defra could also take a more active marketing role by uniting WDA regions or individual WDA who plan to or find they need to trade as part of their LATS strategy.

- It was thought that many WDAs are holding LATS which in effect are worthless but which are shown on accounts at a value guided by Defra and agreed by CIPFA. Authority members assume these LATS are of value and expect an income. A couple of authorities suggested that Defra should give a minimum price guarantee.
- There should be fines for authorities that do not meet their obligations.
- Restrict the amount of allowances that authorities with incinerators are allowed to sell (they are flooding the market at present)
- Remove the need for senior user authorisation for trading – approvals already secured internally within LA's for trading activity so this requirement is unnecessary and impracticable.
- Regular training to accommodate staff changes, strategic development within LA's, etc.

Mass Balance Estimator and Allowance Manager (MBEAM)

20. A number of reasons were given for not using M-BEAM:

- Authorities' own models include local data and trends and meet their needs more closely than MBEAM which uses national average figures.
- Some authorities had already developed their own models by the time MBEAM was developed. The four West of England unitary authorities have appointed external consultants to develop another waste data modelling tool for predicting future diversion of waste and calculate LATS compliance.

Comments made about the use of MBEAM:

- It can be a little cumbersome when modelling using MBEAM to keep going backward and forward through the levels.
- The materials list needs to be much more extensive to include all likely materials collected for recycling.
- It would be useful to be able to copy in house calculations into the model and turn off certain parts of MBEAM to enable growth calculations etc to be done. The current system forces accepting growth patterns year on year.
- Further steps to prevent need for so much data entry would be useful, e.g. to enter statistics for one year, and to enter only a percentage growth figure for other years, and for estimates to automatically generate.
- (When using the first version of MBEAM) we found it difficult to track what was going on in the spreadsheet and too much of the information/ calculations were hidden and we couldn't see how the information/ calculations were used.

- Authorities already use their own spreadsheets and databases to calculate their waste arising and liability. If MBEAM is to be useful it needs to be unlocked to enable linking to other spreadsheets.
- MBEAM cannot show figures until they reach Level 35, which means that the figures will be out of date by at least 3 months and more probably up to 6 months.
- Improved and updated guidance and training sessions would be useful.
- There should be links between WDF and MBEAM so that data only needs inputting once.

The Mass Balance Calculation (MBC)

21. Some authorities proposed that the 68% 'estimate' of BMW content of total MSW should be updated with real research. It was commented that as councils strive to divert the organic waste from landfill with collections of kitchen waste, paper and cardboard and green waste, the assumed 68% biodegradability of the remaining waste to landfill will be affected. This biodegradability level should be reviewed taking into by account schemes that councils introduce.
22. There were calls for **the 68% in the MBC calculation to be reviewed**. One suggestion was that the figure should be amended, perhaps to make it more consistent with the figures applied to both Wales and Scotland. Another suggestion was that authorities with substantially different waste streams should be able to report their actual BMW diversion performance rather than the standard 68%. It was felt that the latter would require evidence to the satisfaction of the monitoring authority eg. independent waste analysis conducted at the authority's cost. The positive statements in Waste Strategy 2007 and from the Mayor of London encouraging local authorities to take a greater role in collecting commercial waste for recycling will also exacerbate this current problem or create a reluctance amongst local authorities to expand their involvement in commercial waste collections.
23. Another key area of concern was that the MBC **conflicts with the national waste strategy** that seeks to target recycling activity at 'priority' waste streams such as glass and aluminium. It was commented that consideration needs to be given as to how this conflict can be resolved. One suggestion was through setting minimum % recycling targets for these priority waste streams or banning their disposal to landfill.
24. Other comments included:
 - The calculation encourages the generation of bio-degradable waste as long as it is diverted from landfill. This has financial implications for LAs.
 - By only including those items in the list with BMW value so eliminate stuff like metals and hazardous waste etc
 - The accompanying table showing what it biodegradable could be elaborated on. Clean separated wood is not separately identified only furniture and books. Wider information on the proportion or

biodegradability of different waste streams would be useful even if they aren't covered under LATS e.g. disposable nappies.

- MBC produced for a quarter should have a section to include BMW landfilled so far for the year, and be measured against allowances, in order to give an idea of performance.
- The formula does not lend itself to easy interpretation of what is being reviewed. It was felt that considerable mathematical skills would be required to simplify this, but that it should be looked at.

25. A number of other comments were made:

- The lack of specific question for aerobic digestion has a “knock on” to the final MBC
- The MBC produces perverse outcomes. For example inert waste e.g. rubble which is deemed to be 68% biodegradable.
- The inert waste stream having an adverse impact on the BMW calculation i.e. glass segregation and stones and soil segregation, even for recycling reuse increases the amount of LATS used as it directly effects the BMW%. It does have the ability to make waste more than 100% biodegradable as well.
- The MBC encourages the generation of bio-degradable waste as long as it is diverted from landfill. This has financial implications for LA's as the extra waste generated results in additional treatment costs. This is best demonstrated by considering the collection and composting of green waste.
- The calculation does not encourage authorities to collect trade waste for recycling and composting from those businesses it is not currently collecting from. It is not beneficial to collect any additional waste.
- MBC does not take account of population growth, so fast growing areas are disadvantaged.
- Residual Metal/Materials from EFW process should be included in recycling targets/performance.
- If the assumption is that Energy for Waste output is inert there is no need for the $(L_{Th} \times 0\%)$ to be included in the equation.
- One authority commented that they had test loads of low grade wood waste (MDF & chip board scraps etc.) incinerated and for the LATS calculation could only count the BMW diverted as that quarters residual waste BMW of 58.2% when in reality it was 100% BMW.
- As Council Civic Amenity Sites take in a lot of inert waste this results in the biodegradable fraction from these sites increasing from the average 68% to 71% for these sites. This results in a loss of allowance. Waste from CA sites should be given a tolerance for this factor.
- One authority commented that they have a large tonnage of CA site waste, which has a comparatively low BMW content, which is landfilled. If

you treat WCA kerbside collected or trade waste even if the testing regime states it has 70% BMW content for the mass balance it would only be counted as the EA calculated sum the even if this was far lower. The two regimes don't correspond so you may incinerate 1 tonne of waste which if tested could have 70% BMW (0.7 tonne) content but would only count 58% BMW (0.58 tonne) if that is what the mass balance states is the BMW of residual waste in that quarter. We already have one quarter where we are at 58% BMW of residual now without composting any Kitchen Waste.

26. Some suggestions were made for alternative approaches:

- One suggestion was that the simplest solution would be to replace the current system with a standard percentage biodegradability just applied to unsegregated waste that goes to landfill. (There could possibly be different percentages for different areas e.g. metropolitan or rural.)
- Another authority suggested that all that is needed is the amount of recycled materials collected and their destinations. Then the remainder of the waste can be calculated at 68%. In the case of MBT fractions going to landfill the mass x biodegradability from analysis. *'LATS is about biodegradability sent to landfill. Why worry about the individual recycled elements that are not sent to landfill? This is far too complicated'*.
- Rather than calculate the % biodegradability of the residual waste remaining the calculation could simply calculate the BMW diverted from the derived BMW at 68% and compare this to the LATS targets.
- One authority commented that it is inconsistent to include re-used items within municipal waste definitions, particularly as it has never been able to count towards a BVPI.

27. It was also noted that the MBC is difficult for officers and Members to understand and yet plays a crucial part of the LATS scheme. It was suggested that a simple guide to how it works should be produced for authorities to distribute. Another authority commented that the calculation cannot be simplified without losing useful information, but that it would be useful if the basis of the calculations were more easily visible so that errors in entry data could be picked up more easily.

Environment Agency guidance on MBT

28. Some authorities commented positively about the guidance on MBT, for example saying that it is useful considering the complexity of the issue. Other comments were:

- The guidance is non-statutory and it is not clear what other options are available for handling treatment processes.
- The guidance is useful in that it proposes the use of the short DR4 and the longer BM100 tests. However, the fact that the guidance is just guidance and is non-statutory may give rise to there not being a uniform way of measuring MBT outputs in England. In addition it appears to be left up to the supplier to convince the EA there is a correlation between the

results of the short DR4 and the longer, more costly, BM100 test, before the supplier is able to rely on DR4 alone. This could be an expensive process, the cost of which will doubtless be passed to the local authority.

- It generalises MBT of which there is a huge range of variations i.e. Anaerobic Digestion through to in-vessel Aerobic Digestion. There needs to be more specific guidance – detailing treatments in line with current availability and research such as those sponsored under the Defra New Technologies Programme.
- It is extremely difficult for authorities to consider MBT as a viable option if they do not know what the BMW diverted will be until the plant is built and monitored in accordance with the EA guidelines. Developers and managers need more assurances on this issue if they are to plan using this option.
- There is some confusion in the waste industry as to how the MBT Reduction Factor is calculated. Some indicative MBT figures would be useful.
- There should be further information on exactly how the guidance works with WDF reporting. For example for a MBT plant's first year of operation, if it sorted and composted some waste prior to landfilling how would the testing requirements fit into the quarterly reporting timescale?
- There is an issue with the accounting of the wastes BMW content if the EA's mass balance states it's 55% and the testing states the untreated waste BMW content is 70% then 55% is used and the relative reduction applied. If this were resolved it could help the country to gain more benefit from its existing treatment plants.
- Clearer guidance is required on the uses of outputs from MBT processes and their biodegradable content. The EA should provide a protocol similar to that currently available for composting. This would establish a standard and give 'confidence' to both LA and those providing facilities.

Home composting

29. There were some positive comments about the proposed scheme, for example that the proposed methodology seems to be well thought out and attempts to make allowances for the wide variety of schemes adopted and the increased impact of supported schemes over unsupported ones. It was commented that it makes sense to relate the allowances, to the type, number and age of any composting units. One authority agreed with the need to distinguish between opt-in and opt-out schemes, as well as those which offer good levels of support to householders to ensure the successful use of the compost bins. They also welcomed the option of supplying a substitute local ratio, should local surveys indicate a difference from national ratios.

30. There were a range of concerns about the proposed methodology.

Complexity

31. Many authorities commented that the proposed methodology is overcomplicated. The complexity required verification of tonnages. It will make including home

composting impractical and too time consuming for councils particularly as the tonnages involved are likely to be small. A common concern was that proper verification will be time consuming, bureaucratic and expensive. Without regular and independent surveys of householders' use of home composting, the diversion rates will be hard to justify. The survey methodology has to be strictly observed or else some authorities could be over estimating the amount of diversion achieved. Allowances will have a value and there could be an incentive to over estimate.

32. It was also felt that the methodology has too many assumptions to be accurate. There seemed little point in bringing in theoretical calculations to what is a generally robust process. It was noted that authorities already gain a LATS benefit from home composting as it reduces the total amount of municipal waste they collect. There were reservations about how robust the methodology can be given the complicated range of factors involved; size of garden and quantity of green waste produced, experience and dedication of person doing the composting, type and size of compost bin used etc.

Lack of audit trail

33. Some authorities were concerned about the audit trail given the lack of objective evidence eg. weighbridge tickets. It was commented that re-allocation of LATS targets to take account of home composting seems to be a backward step – reporting is now based on weighbridge tickets and a clear audit trail whereas home composting will be based on a theoretical formula.

Legal challenge

34. It was noted that, with LATS penalties of £150 a tonne the tonnage diversion offered by home composters that do not meet the criteria outlined could be significant to a Council and may lead to a legal challenge. The question was posed whether the Government is comfortable that its subjective home composting methodology would stand up in court.

Concerns about inequity

35. Particularly common concerns were:
- **Authorities with existing composting schemes.** Many commented that the proposals unfairly penalise those authorities that have provided composting units over a number of years. Authorities would also be penalised if they have promoted bin sales from other organisations (eg. garden centres and community groups) or have promoted a DIY approach to home composting. One authority commented that they promote the reuse of materials to build bins as the best environmental option, and this will mean that they will not get any credit for doing this.
 - **Authorities that are not part of the WRAP scheme.** A number of authorities were concerned that the proposed approach unfairly disadvantages those who have not been part of the WRAP scheme. The weighting towards WRAP schemes was felt to be a bias against authorities that had previously undertaken intensive Home Composting promotions. WRAP have been unable (due to data protection) to provide names and addresses of where bins have been issued to authorities to check against their own databases (where they exist) so disabling the checking of duplicate addresses for deliveries before the WRAP scheme. With regard to bins distributed before the qualifying year, it is unclear from the guidelines what evidence would be needed in order to satisfy the

criteria. It could be difficult for authorities who have changed bin providers since the qualifying year as there is no incentive for previous bin suppliers to help with supplying data, names and addresses etc. It therefore seems unfair to authorities who have used schemes other than WRAP.

- **Lapse of bins.** 'Non-qualifying' bins that were distributed before 2003 can be seen to lapse, whereas other bins can effectively last forever. This does not seem like a fair system because committed long term home composters, who are using 'non-qualifying' bins distributed before 2003, will still be diverting as much waste as someone who has started home composting more recently. The decision that home composters over a specified age have ceased to be used could be seen as being arbitrary, depending on how the scheme is applied. Composters are not so fragile that they will fall apart after five years.
- There is no real justification for introducing a qualifying date of the 1st April 1998. The statement that the physical decay of the bin and the advancing age of participants means that those receiving units distributed over 10 years ago no longer compost does not seem to be substantiated. It was queried whether, if authorities were able to survey people who are already composting and prove that their bins are still active, they should be able to allocate the full diversion rate (220kg) to them, irrespective of when they started composting.

36. Other comments about inequity included:

- Is it fair that only those that have the required evidence of bin sales over the last few years will be able to claim a benefit?
- It is assumed that the calculations are based on an average bin size so authorities who provide larger bins could be penalised by using an average score.
- The methodology may not be fair to authorities who have operated opt-out schemes. Although we recognise that they are unlikely divert as much per bin, on average, as opt-in schemes, it seems unfair to assume that they'll divert nothing.
- What about a free of charge as an opt-in scheme? Despite people not putting a financial investment in, these bins should be included as they would be in a paid opt-in scheme?
- Some authorities noted that other systems should arguably be included if this type of scheme is adopted – notably food waste digesters, green cones, Bokashi, and wormeries, the Green Cone and Green Johanna ?
- The proposal will be prejudicial against urban authorities under the current Mass Balance approach. Many urban authorities have large numbers of residents living in flats who do not generate garden waste and have no need or space for a home compost bin. The BMW content of household waste in these authorities will be substantially lower than the 68% national average. These authorities will therefore be stuck with an artificially high BMW figure and not have the ability to reduce it.

- Where an authority has an opt-out scheme in combination with high levels of support (as defined by a qualifying scheme) it is felt that an allowance should be made. The proposal also does not take any account of home composting activity as a result of LA operated programmes which may not include the sale of a home compost unit. This may include the operation of workshops on building compost units or through the operation of master compost programmes. It would seem reasonable that where evidence can be provided such activity should be included in the diversion calculation as a supported scheme.
- Specific diversion rates should apply to type of composters sold, and data entry and BVPIs should be supplied through WDF in this way e.g. some LAs may sell higher proportion of 330ltr composters due to general size of houses etc.
- Some of the criteria, such as having access to local advisors, may not be as important as other criteria, provided that sufficient support is offered, so it is not necessarily fair to penalise all schemes that do not fully meet the criteria as it is currently stated.

Other comments about the methodology generally

- Within the verification process it is essential to ensure that the issue regarding the distribution of multiple bins to single households is adequately covered to minimise the incidence of double counting
- Simply providing a bin at low cost with good guidance will lead to increased home composting in most cases and the method should allow for this to be credited. We do not think it likely that the minimum standards, although laudable, would achieve a lot more; so it is not fair to only count home composting contributions where these standards are met.
- How would it affect the Best Value Performance Indicators, particularly BVPI 84? There is no mention of whether the tonnages calculated would be added to BV82b. If they were, this would finally end the perverse situation where authorities that avoid providing free green waste collections by heavily promoting home composting are judged to be performing less well than authorities who provide universal free of charge collection services.
- The inclusion of previously discounted tonnages appears to be against the principles of the tonnage levels set at the start of the scheme and will allow authorities to claim more allowances which will disguise the fact that they have not in reality diverted the other waste already in the waste stream. Currently this tonnage is not included in the tonnages declared either at the start of the scheme or on going. It appears perverse to add in tonnage and then subtract it at the same level. If tonnage is added to the gross tonnage of municipal waste and then calculated at 68% organic content and then removed from the tonnage as composted at 100% organic content this will give a skewed effect to the actual tonnage being diverted.

- There are many activities a WCA/WDA undertakes for which they may wish to claim a LATS credit – home composting being just one. A couple of respondents asked whether similar approaches would be taken for reusable nappies.
- Clarification was sought about the definition of a "certified third party": how would the 'certification' process work & who can be certified as a third party?
- How many compost bins per household can be bought through a current scheme and still count as 'new recruit households'? What about schemes that offer two sizes of bin, and allow each household to order up to three bins?
- **Difficulties in identifying qualifying bins.** To gain the maximum benefit, authorities will look to make as many compost bins as possible 'qualifying bins'. However a number of respondents noted that producing the required evidence may prove difficult. Going back to previous contractors will be time consuming and they may be unwilling to support authorities in providing evidence. Information may no longer be available in the format required by the regulating body. It would take a significant amount of time and research to trace previous names and addresses and then match them up to newer qualifying bins, therefore making it difficult to establish a base line position. What support would we get with this?
- One authority commented that they have supplied bins through three different contractors, run schemes with district councils, provided bins at different prices and run schemes that don't correspond with financial years. It is difficult to work out our position as both bins and schemes themselves are referred to as qualifying and non-qualifying in the supporting documents with this consultation. The flow-chart provided would be more useful if it helped the authority to categorise each bin – using statements that correspond to the table would be most useful.
- Who would be responsible for bringing un-qualifying bins distributed since 2003 into being qualifying bins through support? Would it be up to the local authority to collect names and addresses of customers and then provide support or would WRAP (as our current bin supplier) be willing to take on and support previous customers?

Suggestions for improvement or alternative methodologies:

- There should be an option to opt-out of the inclusion of this data if it over-burdens authorities as the monitoring and reporting requirements of the current scheme are potentially in excess of any benefits enjoyed.
- There should be flexibility in the scheme to allow for LA surveys throughout the period and to adjust the biodegradability figures (if an LA wishes to undertake them).
- Lapse rates for subsidised schemes should be variable through LA surveys.
- Home composting scheme tonnage should just slot in as another recycling stream to strengthen WDA position against LATS

- Account should be taken for home-built composting schemes where supported by the LA (the most sustainable solution).
- The standard biodegradability percentage should be applied to residual waste only perhaps with differences for rural and metropolitan areas.
- The criteria for being a 'supported scheme' should not include the requirement to provide face-to-face contact with composters to answer queries and provide advice. It is considered that the provision of support through help lines and web pages is sufficient and that face-to-face support is an expensive and unnecessary.
- The requirement to check addresses to ensure that composters have not previously bought a bin during earlier promotions is impracticable and unnecessary. If a new bin is ordered then they are not necessarily replacing their old one, and instead may just need the extra capacity as they are diverting so much!
- Re-assess the BMW content of total MSW. If councils run extensive, well promoted home compost initiatives then the BMW content of MSW coming under the control of the council will be less than 68% and they would benefit in this way rather than trying to calculate a tonnage of BMW that might be removed by home composting.
- One suggested preferable methodology would allow for all compost units distributed through opt in schemes, after the 31st March 1996 (the year after the baseline setting year for the Landfill Directive) to be included. Schemes would either be qualifying or non-qualifying as summarised below: Unsupported (non-qualifying) schemes implemented after the qualifying date would be subject to a lower diversion figure of 60Kg, a lapse rate of 6% as well as a 10 year retirement date, supported (qualifying schemes) after the qualifying date would be either enhanced or new composters and subject to the 60kg or 220Kg diversion rate and a lapse rate of 2%.
- Shouldn't the scheme be a BVPI indicator rather than linking to a possibly unfair financially beneficial scheme?

37. There were few comments on the question of effects on trading. A couple of respondents commented that the change would be unlikely to affect the market in trading allowances. Conversely, a couple of respondents were concerned that such changes to the scheme will disrupt the market and jeopardise future trades. One authority was concerned that any move that would increase the current LATS surplus further could undermine the financial case for investing in new waste infrastructure. This would unfairly impact on those Councils that had committed to major new infrastructure on the basis that they would secure LATS income to help offset their additional costs.

38. It was also noted that separate consultation is taking place on the inclusion of home composting for a new performance indicator is being pursued by Defra under "Indicators; Reducing Waste and Making Better Use of it as a Resource".

Penalties

39. Some authorities stressed that penalties are needed to ensure that the scheme is adhered to by all authorities. A number commented on the need to ensure that penalties are applied consistently and transparently.
40. A very common concern was that current regulations make WDAs liable for non reporting by WCAs, but WDAs have no powers to require WCAs to produce information. Some authorities commented that if it is necessary to apply penalties for non reporting these should be applied to the authority responsible for the omission.
41. One suggestion was that any funding raised through penalties should be put back into 'resolving the LATS situation'.
42. Some authorities suggested that **penalties should not be applied in some circumstances:**
- Penalties should not be applied where authorities can demonstrate their commitment to diverting biodegradable waste from landfill and nationally we meet the EU target. The ability to carry over allowance into reporting years e.g. 08/09 to 09/10 could potentially reduce authorities' exposure in key years while still complying with the overall allowance. Added flexibility is required to allow this.
 - Penalties should only be applied in circumstances where it is obvious an authority has made a conscious decision to work against the LATS regime and therefore cannot show reasonable evidence of some action to either trade allowances, increase efforts to divert BMW from landfill or progress plans to invest in future additional waste treatment infrastructure.
 - Penalties should only be applied where the LA has not exhausted all opportunities for trading of LATS and has built up insufficient surplus to cover the deficit in their allowance.
 - Penalties do not take account of Governmental delays that have frustrated the provision of new infrastructure.
 - Where there are circumstances outside authorities' control eg growth and inaccuracies in calculation of allowances.
 - Exceptions could be allowed for one off events causing an authority to fail its target, for example the recent flooding could greatly increase the amount of household waste generated and place undue pressure on a few authorities.
 - National policies could change and this could have a major effect on an authority. Special dispensation should be applied in such cases.

Penalties for non-compliance with reporting requirements

43. A number of authorities commented that the levels of penalties are appropriate. However a number made the point (see above) about the need to be able to apply penalties to WCAs. One authority felt that there appears to some inconsistency as to whether these penalties apply to non-reporting of individual entry, month or quarter. One alternative suggestion was that penalties should be proportionate to the non-compliance and attitude of the authority.
44. One authority commented that the penalties relating to reporting appear less than the extra contract costs that may be incurred to ensure the requirements are met. Another comment was that the potential size of the reporting penalties does not seem proportionate to the potentially small queries related to the rollup to Level 35.

Penalties for missing targets

45. Comments included that the current LATS fines are of sufficient size to encourage WDAs to meet the targets, and they do not need to be increased in this review. A few authorities commented that landfill limits do not take account of population growth. One high growth area commented that their landfill limits should be adjusted upwards. One authority commented that whilst a waiver process does exist and growth is one factor that it can be applied to, it is not useable as it does not fit with the Council's budgetary process.
46. A number of authorities did not want the penalties to rise. Some stressed that it is critical that the government remains consistent in its penalty structure otherwise policy strategies and investment decisions will be undermined. Some commented that the penalty could be index-linked. A couple of authorities noted that penalties were originally lowered from £200 to £150 on the basis of the additional Landfill Tax burden imposed in 2004. There was a question of whether the size of the penalty will be reviewed in light of future increases in landfill tax rates. Conversely, one respondent felt that penalties should be increased to £200/tonne to further stimulate investment in recycling/ recovery infrastructure.
47. Another comment was that landfill limits, as with BVPIs, do not reflect the link between demographics and propensity to recycle. The landfill diversion targets are therefore biased toward more affluent areas.
48. A couple of authorities were concerned that the size of current penalties could unfairly bias the trading value of allowances. It was suggested that penalties for landfilling BMR in excess of the allocation should be linked to the market value of allowances with a multiplier to make them robust enough to encourage diversion. For example if the average market value is £25 and the multiplier is 4 then the penalty would be £100 per tonne in excess of the allocated allowance. A fixed price penalty corrupts the free market intention of the tradable allowance scheme by setting a benchmark.

Future Reviews

49. Most authorities wanted future reviews. One comment was that the frequency of future reviews should be dependent on the findings of this one. A number of authorities commented that there should be reviews every two or three years. Some authorities felt that there should be an annual review. In terms of timings, a

few authorities suggested that a review after the first target year might be useful, and some also suggested another review after the second target year. An alternative suggestion was that reviews should take place every five years.

50. Other comments about reviews were:

- If agreement is made to include Home Composting this needs to be reviewed quickly.
- There should be some review mechanism to look at the impact of housing growth in areas such as Thames Gateway, MKSM and Northamptonshire etc on LATS allowances and funding.
- There should be a review of the options to address the inability for carrying allowances over target years.
- There should be future reviews of WDF and the complexity of the formulas and rolling up process.

Other operational matters of concern

51. The other issues raised were:

- More joined up thinking is required between EA and Defra
- If we are to achieve success with waste management in the UK we need to view the service holistically and take account of all legislation and drivers and ensure they are co-ordinated. We also need to ensure that we work in partnership and drivers and legislation should aim to support this.
- At present LATS is only applicable to WDs and therefore there are no drivers for WCAs especially those who have reached the 30% recycling rate ceiling, even though best practice shows that 50% plus is now achievable. We are moving more towards area working and assessments, the ethos and principals of Local Area Agreements are a prime example of this. It is fully anticipated that future waste management targets will be set through the new statutory LAA process. To help drive partnership working and ensure a holistic approach to the service, the Government should give strong consideration to the idea that LATS be included in the new statutory LAA process. This will ensure all parties with a responsibility for waste have responsibility for helping deliver the key UK driver for waste management. This in turn should ensure the service is viewed holistically and decisions are made in partnership and for the right reasons.
- Defra should seek to audit WDA performance against initial LATS allocations to ensure that achievement of surplus LATS has been met through increased recycling, recovery and waste minimisation rather than as a result of selling off trade waste services, housing stock etc to the private sector and no longer including grounds/highway maintenance waste as MSW even though in some cases this was included in the initial baseline data upon which allocations were given.

- Planning for future facilities and timescales will vary and may place LAs in a deficit position due to delays. Need therefore to take into consideration this effect and what can be done to offset LAs exceeding their LATS allowances due to delays and loss of their surplus. Also need to provide transparency of information regarding procurement and stimulate the market to encourage more active trading. It worked in the workshops however it is not working on the ground.
- There is a lot of concern that WDAs feel that the way LATS is set up tends to push them into EfW schemes, whose carbon agenda credentials are not as good as MBT or other biological treatment methodologies.
- The definitions used for BV purposes make the use of WDF to calculate performance indicators undesirable.
- The time scale for this consultation was extremely short.

Summary of Reports available

1. Reports available (at level 10 or higher) for all authorities to check and self-validate their own data -
 - validation summary
 - BVPIs
 - MBC (UA & WDA only - for WDA includes all WCA recycling figures). These are run from the 'Data Authorisation' screen in WDF. (See examples)
2. For WDAs to check WCA data. Once the WCA data has been rolled up the WDA can
 - see it in their mass balance report,
 - view the validation summary & BVPI report for the WCA if they have added the WCA to the 'my authorities' list
 - view the answers to individual questions as they would for their own authority.
3. The csv download is a raw excel dump of data that can be run by authorities and by the general public. Depending on who you are, you can get data at L40 (public) or L10 (data entry user for own authority) or L20 (data authoriser person).
4. Benchmarking and general information reports are currently in pdf (crystal) form and LAs can run them for other authorities. The public can also run them for data at I40. This is moving to Excel based reports.

Data Entry detailed Comments

Commentators noted that the layout of pages makes it difficult to work with some forms.

- Having more save buttons (part way down longer pages or even at the end of every data point) would help, or placing the save button next to the completed question box. The recent prompt to 'save now' button probably gets around this in most cases. Anchoring question header boxes with the save button so that only the question body scrolls down the screen could also help. Further development must be balanced with the need to avoid screen clutter with more buttons.
- Selection boxes can cause problems when people move on without clicking to leave the box they are on, causing data to be entered incorrectly. (This happens in generally in Internet Explorer web if the user does not click on the main body of the page.)
- You are told that data are missing, but not what it is. This led to a view that 'Optional' questions actually are not optional, while another WDA commented that they could not understand how it is possible to have non-mandatory questions that seem to have mandatory answers. (This may be caused by not answering 'not applicable' when appropriate.)

- The **rejection** wording could be changed to reflect waste rejected after completion of the process and material rejected at the gate of the reprocessor could be included in the relevant collection question. However, since there are rejects at different points in the waste management chain, the questions are designed to explicitly pick these up at collection, at the Mechanical Recovery Facilities (MRF) and, in question 19, at the gate of the reprocessor.
- When entering recycling tonnages by type you have to find the facility first. The full list of recycling types is then provided even when not all these are available at that site. It was suggested that if entry continues to be by facility only that facility's recycles should be listed, for example when the site only takes paper and card, the WDF list should only offer paper and card. However, Defra took the view that it would be difficult to pre-specify what facilities take what materials given that there are around 8000 in the WDF data base and these frequently change what they handle. Instead, LAs manage their own selection lists by building a sub-list of the destinations they use relevant to the question. They are then only presented with the facilities they have identified.
- One WDA commented that since the answers to several questions are the sum of other questions, it would be better if these were automatically calculated. However, it is not that straightforward. For example, the total reported in Question 19 should be the same as that reported in the sum of Questions 10, 11, 12, 16, 17, 33, and 34 but only after any collection and MRF rejects have been deducted, and taking into account any stockpiling of waste. Also a co-mingled recycling collection would need to be reported by separate materials. This makes automatic calculation impractical.
- WDF is populated by destination lists of facilities from the EA supplemented with some brokers/reprocessors that are exempt from Agency control. There are many thousands of exempt sites, including destinations overseas which are not held lists in WDF. For these there is an 'other/exempt' category. Defra acknowledge there is room for improvement here and are updating destination lists again and looking at ways to include more exempt sites and Enviro is implementing a quarterly update of waste destinations.

Some points were quite detailed, including

- Question 15a needs a carry forward button for the number of bring sites.
- Question 21 needs an automatic calculation of totals of home composters sold to the end of the period and a carry forward button.

There were some quite detailed comments and modest suggestions aimed to reduce duplication of effort:

- Materials in Question 35 need to be entirely compatible with those in Question 14.
 - Where a WDA answers Question 14 (on recycling and reuse) and where there is no sorting of co-mingled collections through

a MRF then the data will match Question 19 (recycling) and Question 35 (reuse). However, this is not invariably the case.

- There is no co-mingled option in Question 35 but materials collected for re-use cannot always be identified separately.
 - However, Defra has responded that if there was a co-mingled category here they would have to assign 0% BMW which would not necessarily give a true picture and credit for diversion.
- Questions 58, 61, 62 and 63 are about recycling and composting, therefore they should not be in the disposal questions.
 - Questions 51-65 are about how waste is ultimately managed. Defra has responded that there would be some benefit in overhauling the question structure in WDF to give a more logical flow between collection, sorting, treating and final destination but this would be a major task and a decision to embark on this would need to be balanced against the disruption for users who are becoming familiar with the current approach.
- Question 63 is unnecessary because this material is recorded in the relevant collection question and in Question 19.
 - It is true that most separately collected organics recorded as collected in Question 19 go to a windrow and are therefore recorded in Question 63. However, the options for the final destination of organics include anaerobic digestion (Question 61) and in-vessel composting (Question 62).

Helpline Statistics

Figure 1: Helpline Calls per Month 2005/06 and 2006/07

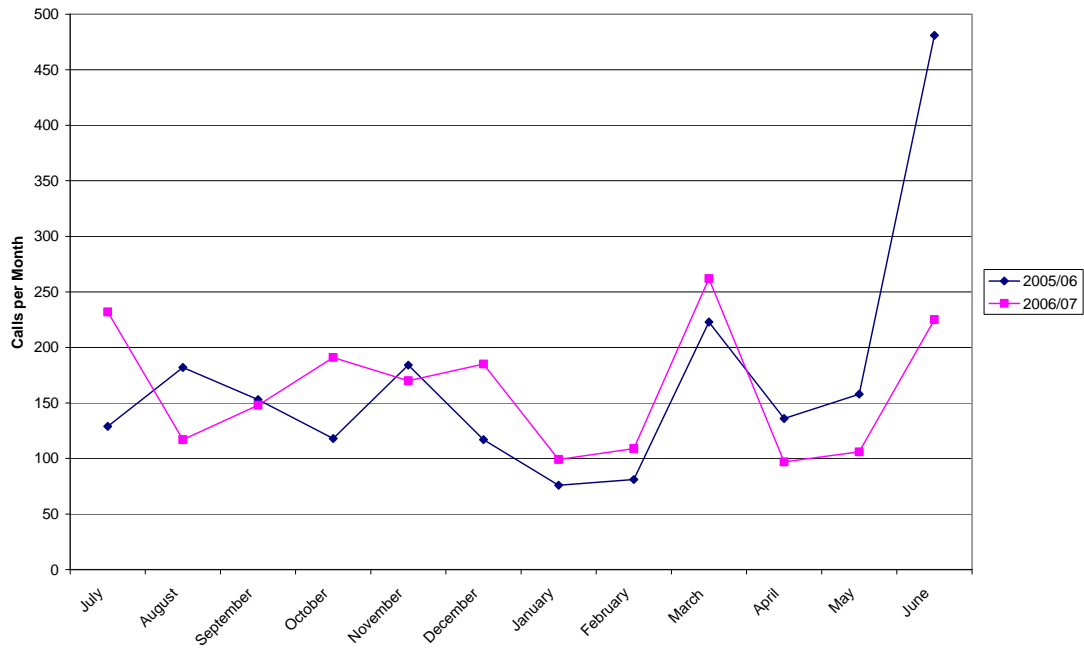


Figure 2: Average time spent on helpdesk activities against the number of calls

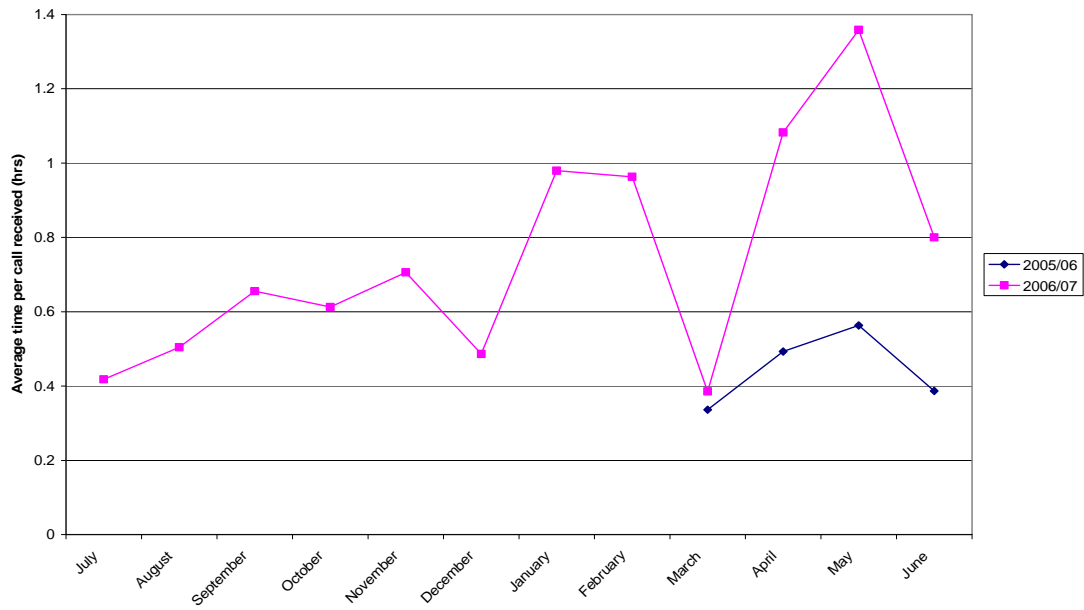
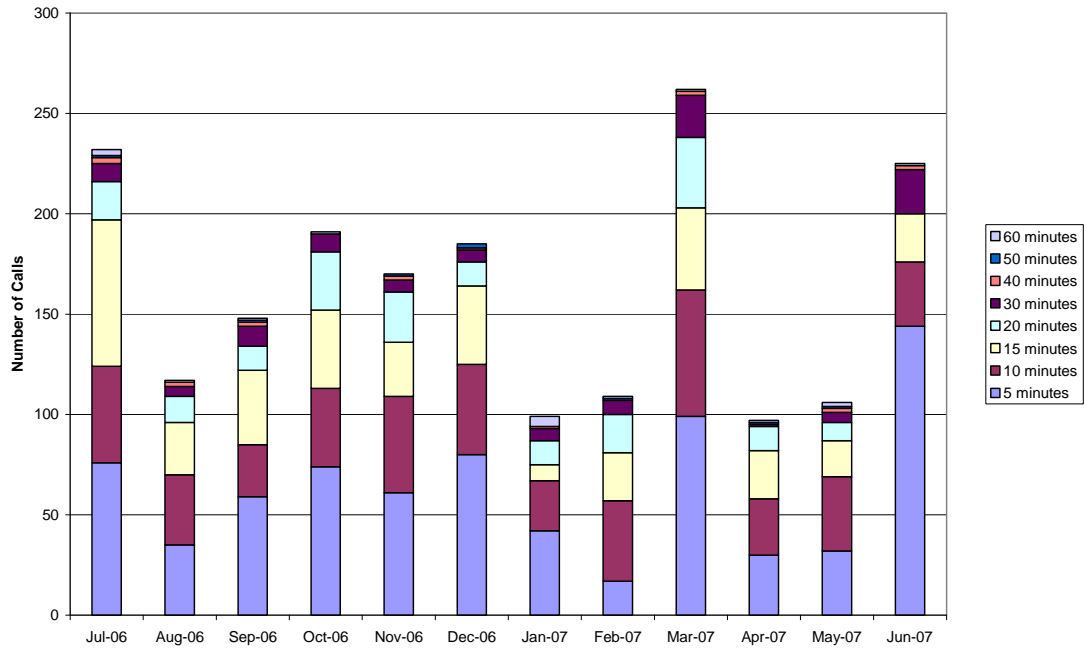


Figure 3: Breakdown of Call Duration



Validation Report For County Council for period Jan 07 - Mar 07

This is a summary of the information entered for this quarter. Please look carefully at the figures and checks (see the Notes page for an explanation of these) and consider whether they are what you would expect. Figures marked with a red 'Check!' or '!' indicate a discrepancy which may reflect an error in your data. If you need further guidance on what these indicators may denote please contact the WasteDataFlow helpline on 0161 874 3602 or e-mail helpdesk@wastedataflow.org.

If changes are to be made to the quarter's data, the quarter must first be returned to Data Entry level; this is done through the Data Authorisation screen.

THIS INFORMATION IS PROVIDED FOR GUIDANCE ONLY – VALIDATION OF THE QUARTER MAY LEAD TO INFORMATION HAVING TO BE CHANGED.

Headline Figures

Tonnages Residual Waste (Municipal) collected	62,742
Total Household Recycling	6,186
Total Rubble	2,250
Total MSW Arising (total residue plus recycling and reuse)	71,178
Total Household Arising (MSW excluding Non-Household and Rubble)	57,789
CA Site Recycling Rate	69.5%
CA Site Collected Green Waste	582

Total Tonnage to Landfill	62,651
Total Tonnage to Incineration	90.6
Total Tonnage to MRF	-
Other Treatment Routes	-
Total Collected for Recycling not via MRF, including rubble but excluding source-segregated organics	7,854
Total Sent for Reuse	-
Total Tonnage to Organic Treatment (source-segregated)	582

Cross-check Summary

Tonnage difference between residual collected and treated/disposed	-
--	---

Tonnage difference between green waste collected and sent for treatment	-
---	---

	Total collected	MRF rejections	'Total collected' minus 'MRF rejections'	Total sent
Total collected minus MRF rejections should equal total sent for reprocessing & composting	8,435.7	-	8,435.7	8,436.5

Validation Report For Cornwall County Council for period Jan 07 - Mar 07

Material Specific Recycling and Reuse Data

Material	Recycling						Reuse			
	Recycling collected (all routes)			Recycling sent to Destinations			Reuse collected (all routes)			Reuse
	Collected	Rejected	Total	Sent for	Rejected	Total	Collected	Rejected	Total	Sent for
Green glass	-	-	-	-	-	-	-	-	-	-
Brown glass	-	-	-	-	-	-	-	-	-	-
Clear glass	-	-	-	-	-	-	-	-	-	-
Mixed glass	356.0	-	356.0	355.7	-	355.7	-	-	-	-
Paper	773.4	-	773.4	773.4	-	773.4	-	-	-	-
Card	362.2	-	362.2	362.2	-	362.2	-	-	-	-
Books	-	-	-	-	-	-	-	-	-	-
Mixed paper & card	-	-	-	-	-	-	-	-	-	-
Steel cans	-	-	-	-	-	-	-	-	-	-
Aluminium cans	-	-	-	-	-	-	-	-	-	-
Mixed cans	9.7	-	9.7	9.7	-	9.7	-	-	-	-
Plastics	46.2	-	46.2	46.2	-	46.2	-	-	-	-
Textiles & footwear	375.8	-	375.8	375.8	-	375.8	-	-	-	-
Co-mingled materials	-	-	-	-	-	-	-	-	-	-
Green waste only	582.0	-	582.0	582.0	-	582.0	-	-	-	-
Other compostable waste	-	-	-	-	-	-	-	-	-	-
Wood	1,516.8	-	1,516.8	1,516.8	-	1,516.8	-	-	-	-
Furniture	-	-	-	-	-	-	-	-	-	-
Rubble	2,250.2	-	2,250.2	2,250.2	-	2,250.15	-	-	-	-
Fridges & Freezers	352.5	-	352.5	352.5	-	352.5	-	-	-	-
Other electrical goods	303.0	-	303.0	303.4	-	303.4	-	-	-	-
Other white goods	-	-	-	-	-	-	-	-	-	-
Other scrap metal	1,348.0	-	1,348.0	1,348.0	-	1,348.0	-	-	-	-
Fluorescent tubes	-	-	-	-	-	-	-	-	-	-
Aluminium foil	-	-	-	-	-	-	-	-	-	-
Automotive batteries	83.0	-	83.0	83.6	-	83.6	-	-	-	-

Post-consumer, non-automotive batteries	-	-	-	-	-	-	-	-	-	-
Vegetable oil	-	-	-	-	-	-	-	-	-	-
Mineral oil	4.7	-	4.7	4.8	-	4.8	-	-	-	-
Paint	-	-	-	-	-	-	-	-	-	-
Other materials	72.3	-	72.3	72.3	-	72.3	-	-	-	-
Totals	8,435.7	-	8,435.7	8,436.5	-	8,436.5	-	-	-	-

Validation Report For Cornwall County Council for period Jan 07 - Mar 07

Notes for Headline Figures

Tonnages Residual Waste (Municipal) collected	Total tonnage from Question 23
Total Household Recycling	Tonnages collected (excluding rubble and all rejects) from Question 14 minus the total rejected from Question 58
Total Rubble	From Question 14, excluding rejects
Total MSW Arising (total residue plus recycling and reuse)	Total recycling and reuse from Question 14 (including rejects) plus total residual waste collected from Question
Total Household Arising (MSW excluding Non-Household and Rubble)	Calculated as 'Total MSW Arising (total residue plus recycling and reuse)' minus all non-household waste from Question 23 (highways waste, C&D, grounds, C&I, other, beach-cleansing, fly-tipping, separate asbestos, CA non-household) minus recycling and reuse from Question 11 minus reuse and rubble from Question 14
CA Site Recycling Rate	From Questions 14 and 23
CA Site Collected Green Waste	From Question 14
Total Tonnage to Landfill	From Questions 51, 52 and 53
Total Tonnage to Incineration	From Questions 54 and 55
Total Tonnage to MRF	From Question 58
Other Treatment Routes	From Questions 56, 57, 59, 60, 64 and 65
Total Collected for Recycling not via MRF, including rubble but excluding source-segregated organics	Total recycling collected (excluding rejects) from Question 14 minus green waste sent to final destination (excluding rejects) from Question 19 minus total input to MRF from Question 58
Total Sent for Reuse	From Question 35
Total Tonnage to Organic Treatment (source-segregated)	From Questions 61, 62 and 63

Notes for Cross-check Summary

Tonnage difference between residual collected and treated/disposed	Inputs from Questions 51, 52, 53, 54, 55, 56, 57, 59, 60, 64 and 65 minus the total tonnage from Question 23
Tonnage difference between green waste collected and sent for treatment	Calculated as 'Total Tonnage to Organic Treatment (source-segregated)' minus 'CA Site Collected Green Waste'
Total collected	Total recycling collected (excluding rejects) from Question 14
MRF rejections	From Question 58
Total sent	From Question 19

Notes for Material Summary

Recycling collected (all routes)	Tonnages from Question 14
Recycling sent to Destinations	From Question 19

Reuse collected (all routes)	Tonnages from Question 14
Reuse sent to Destinations	From Question 35

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Diii WDF Annex MassBalanceSpreadsheet example

Indicative Mass Balance Calculation For County Council For Jan 07 - Mar 07

	Residual Municipal Waste	33,447	
MSW _T	Total Collected Municipal Waste	49,410	Recycling and reuse tonnages from Q10, 11, 12, 16, 17, 18, 33, 34 (WCA) & Q11 & 14 (WDA) (including collection rejects) plus residual waste from Q23 (WDA).
	BMW %	68	National figure under LATS Deemed percentage of biodegradable component of municipal waste in England.
BMW _T	Total Biodegradable Municipal Waste	33599	BMW% x MSW _T
Div _T	Total Collected Municipal Waste Diverted	14867	Recycling & Reuse tonnages sent to final destination Q19 & 35 (WCA & WDA) minus any tonnage rejected at the gate of the reprocessor.
Div _B	Biodegradable Content of Diverted Waste	10611	Nominal biodegradable content of each material (see Material Summary) multiplied against the Net total collected municipal waste diverted in Q19 & 35 (DivT).
Res _T	Total Residual Waste	34543	MSW _T - Div _T
Res _B	Biodegradable Content of Residual Waste	22988	BMW _T - Div _B
RB%	Residual Biodegradable Percentage	66.5%	$(Res_B / Res_T) \times 100$
L _D	Directly Landfilled Municipal Waste	33421.9	Tonnage of waste sent directly to landfill Q51-53 (WDA).
L _{Th}	Landfilled after Thermal Treatment	0	Tonnage of Incinerator Bottom Ash sent to landfill Q54 & 55 (WDA) and tonnage of char/slag sent to landfill Q57 (WDA).
L _{MBT}	Landfilled after MBT	0	Tonnage sent to landfill Q59 (WDA).
MBT _{RF}	MBT Reduction Factor	1	Site-specific factor calculated by Environment Agency by which MBT reduces RB%
L _{OT}	Landfilled after Other Treatment	0	Output tonnage of waste sent to landfill from Q56, 60, 64, 65. Residue to landfill Q61, 62 & 63 (WDA).
Div _R	Rejected Diverted	1096	Recycling and reuse reject tonnages from Q10,11,12,16,17,33,34 (WCA) & Q11 & 14 (WDA). Rejects at gate of reprocessor Q19 & 35 (WCA&WDA). Plus MRF rejects Q58 (WCA&WDA).
BMW _L	Biodegradable Municipal Waste Landfilled	22971.3	$(L_D \times RB\%) + (L_{Th} \times 0) + (L_{MBT} \times (RB\% \times MBT_{RF})) + (L_{OT} \times RB\%) + (Div_R \times RB\%)$

[See Notes](#)

[See Disclaimer](#)

Diii WDF Annex MassBalanceSpreadsheet example

Authority	Data Level
County Council	35
Borough Council	35
District Council	35
District Council	35

Disclaimer

The mass balance calculation is designed to give an indication of an authority's LATS performance.

The accuracy of the calculation is dependent on the quality of the quality of the quarterly data which has been reported.

The calculation is available once entered data has been rolled into a quarter and so can be used on unvalidated data.

There is a risk associated with using the output figures from mass balance for any other purpose than as an estimate of performance.

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- Note 1: Mechanical Biological Treatment
- Note 2: Mechanical Biological Treatment Reduction Factor is the % by which the MBT process reduces the biodegradability of the Municipal Solid Waste
- Note 3: Material Recycling Facility
- Note 4: Material Recycling Facility
- Note 5: Blank Tabs: Where a tab of this spreadsheet is blank it means that the WCA has not yet rolled up the monthly data into a quarterly return. For the WDA it would mean no entry in question 14.
- Note 6: Numbers in the MBC are shown as whole numbers, but the calculations will have used the full number with decimal places

Material Specific Recycling and Reuse Data

Mat REF	Material	Recycling						Reuse						Net Diversion	Nomial Biodegradable Content
		Collected (all routes)			Sent to Destinations			Collected (all routes)			Sent to Destinations				
		Collected	Rejected	Total	Sent for	Rejected	Total	Collected	Rejected	Total	Sent for	Rejected	Total		
1	Green glass	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
2	Brown glass	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
3	Clear glass	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
4	Mixed glass	283.8	-	283.8	283.8	-	283.8	-	-	-	-	-	-	283.8	0%
5	Paper	125.2	-	125.2	125.2	-	125.2	-	-	-	-	-	-	125.2	100%
6	Card	350.8	-	350.8	350.8	-	350.8	-	-	-	-	-	-	350.8	100%
7	Books	-	-	-	-	-	-	-	-	-	-	-	-	-	100%
8	Mixed paper & card	-	-	-	-	-	-	-	-	-	-	-	-	-	100%
9	Steel cans	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
10	Aluminium cans	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
11	Mixed cans	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
12	Plastics	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
13	Textiles & footwear	112.9	-	112.9	112.9	-	112.9	-	-	-	-	-	-	112.9	50%
14	Co mingled materials	-	-	-	-	-	-	-	-	-	-	-	-	-	N/a
15	Green waste only	968.3	-	968.3	968.3	-	968.3	-	-	-	-	-	-	968.3	100%
16	Other compostable waste	-	-	-	-	-	-	-	-	-	-	-	-	-	100%
17	Wood	1,289.9	-	1,289.9	1,289.9	-	1,289.9	-	-	-	-	-	-	1,289.9	100%
18	Furniture	-	-	-	-	-	-	24.1	-	24.1	24.1	-	24.1	24.1	50%
19	Rubble	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
20	Fridges & Freezers	201.4	-	201.4	201.4	-	201.4	-	-	-	-	-	-	201.4	0%
21	Other electrical goods	212.3	-	212.3	212.3	-	212.3	-	-	-	-	-	-	212.3	0%
22	Other White Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
23	Other Scrap metal	983.8	-	983.8	983.8	-	983.8	-	-	-	-	-	-	983.8	0%
24	Fluorescent tubes	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
25	Aluminium foil	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
26	Automotive batteries	59.9	-	59.9	59.9	-	59.9	-	-	-	-	-	-	59.9	0%
27	Post consumer, non automotive batteries	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
28	Vegetable Oil	-	-	-	-	-	-	-	-	-	-	-	-	-	100%
29	Mineral Oil	12.3	-	12.3	12.3	-	12.3	-	-	-	-	-	-	12.3	0%
30	Paint	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
31	Other materials	40.4	-	40.4	40.4	-	40.4	-	-	-	-	-	-	40.4	0%
Totals		4,640.9	-	4,640.9	4,640.9	-	4,640.9	24.1	-	24.1	24.1	-	24.1	4,664.9	

If collection system includes a MRF, ignore material specific validation. However check that total collected minus MRF reject equal total sent for reprocessing/composters.

Total collected	4,640.9	4,640.9	Total sent	4,640.9
MRF Reject Total	0			
MRF Reject EfW	0			
Recycling, Sent, Rejected To Landfill	0			

Net Biodegradable Diversion
-
-
-
-
125.2
350.8
-
-
-
-
-
56.4
968.3
-
1,289.9
12.0
-
-
-
-
-
-
-
-
-
-
-
2,802.6

		Recycling							
Mat REF	Material	Collected (all routes)			Sent to Destinations			Collected (all rou	
		Collected	Rejected	Total	Sent for	Rejected	Total	Collected	Rejected
1	Green glass	258.6	-	258.6	258.6	-	258.6	-	-
2	Brown glass	83.7	-	83.7	83.7	-	83.7	-	-
3	Clear glass	171.7	-	171.7	171.7	-	171.7	-	-
4	Mixed glass	-	-	-	-	-	-	-	-
5	Paper	-	-	-	-	-	-	-	-
6	Card	33.3	-	33.3	33.3	-	33.3	-	-
7	Books	-	-	-	-	-	-	-	-
8	Mixed paper & card	113.8	-	113.8	1,857.7	-	1,857.7	-	-
9	Steel cans	-	-	-	-	-	-	-	-
10	Aluminium cans	-	-	-	-	-	-	-	-
11	Mixed cans	-	-	-	118.9	-	118.9	-	-
12	Plastics	-	-	-	118.9	-	118.9	-	-
13	Textiles & footwear	-	-	-	-	-	-	-	-
14	Co mingled materials	2,260.5	-	2,260.5	-	-	-	-	-
15	Green waste only	930.8	-	930.8	930.8	-	930.8	-	-
16	Other compostable waste	-	-	-	-	-	-	-	-
17	Wood	-	-	-	-	-	-	-	-
18	Furniture	-	-	-	-	-	-	-	-
19	Rubble	-	-	-	-	-	-	-	-
20	Fridges & Freezers	57.0	-	57.0	57.0	-	57.0	-	-
21	Other electrical goods	-	-	-	-	-	-	-	-
22	Other White Goods	-	-	-	-	-	-	-	-
23	Other Scrap metal	163.1	-	163.1	163.1	-	163.1	-	-
24	Fluorescent tubes	-	-	-	-	-	-	-	-
25	Aluminium foil	-	-	-	-	-	-	-	-
26	Automotive batteries	-	-	-	-	-	-	-	-
27	Post consumer, non automotive batteries	-	-	-	-	-	-	-	-
28	Vegetable Oil	-	-	-	-	-	-	-	-
29	Mineral Oil	-	-	-	-	-	-	-	-
30	Paint	-	-	-	-	-	-	-	-
31	Other materials	-	-	-	-	-	-	-	-
Totals		4,072.5	-	4,072.5	3,793.8	-	3,793.8	-	-

If collection system includes a MRF, ignore material specific validation. However check that total collected minus MRF reject equal total send for reproce

Total collected	4,072.5	3,793.8	Total sent	3,793.8
MRF Reject Total	278.7			
MRF Reject EfW	0			
Recycling, Sent, Rejected To Landfill	0			
Reuse, Sent, Rejected To Landfill	0			

Reuse				Net Diversion	Nomial Biodegradable Content	Net Biodegradable Diversion
ites)	Sent to Destinations					
Total	Sent for	Rejected	Total			
-	-	-	-	258.6	0%	-
-	-	-	-	83.7	0%	-
-	-	-	-	171.7	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	100%	-
-	-	-	-	33.3	100%	33.3
-	-	-	-	-	100%	-
-	-	-	-	1,857.7	100%	1,857.7
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	118.9	0%	-
-	-	-	-	118.9	0%	-
-	-	-	-	-	50%	-
-	-	-	-	-	N/a	-
-	-	-	-	930.8	100%	930.8
-	-	-	-	-	100%	-
-	-	-	-	-	100%	-
-	-	-	-	-	50%	-
-	-	-	-	-	0%	-
-	-	-	-	57.0	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	163.1	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	100%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	3,793.8		2,821.9

ssing/composters.

		Recycling							
Mat REF	Material	Collected (all routes)			Sent to Destinations			Collected (all rou	
		Collected	Rejected	Total	Sent for	Rejected	Total	Collected	Rejected
1	Green glass	-	-	-	-	-	-	-	-
2	Brown glass	-	-	-	-	-	-	-	-
3	Clear glass	-	-	-	-	-	-	-	-
4	Mixed glass	573.4	-	573.4	573.4	-	573.4	-	-
5	Paper	-	-	-	-	-	-	-	-
6	Card	-	-	-	-	-	-	-	-
7	Books	-	-	-	-	-	-	-	-
8	Mixed paper & card	-	-	-	2,014.2	-	2,014.2	-	-
9	Steel cans	-	-	-	-	-	-	-	-
10	Aluminium cans	-	-	-	-	-	-	-	-
11	Mixed cans	-	-	-	137.3	-	137.3	-	-
12	Plastics	-	-	-	137.3	-	137.3	-	-
13	Textiles & footwear	-	-	-	-	-	-	-	-
14	Co mingled materials	2,854.5	-	2,854.5	-	-	-	-	-
15	Green waste only	422.9	-	422.9	422.9	-	422.9	-	-
16	Other compostable waste	-	-	-	-	-	-	-	-
17	Wood	-	-	-	-	-	-	-	-
18	Furniture	-	-	-	-	-	-	-	-
19	Rubble	-	-	-	-	-	-	-	-
20	Fridges & Freezers	24.1	-	24.1	24.1	-	24.1	-	-
21	Other electrical goods	-	-	-	-	-	-	-	-
22	Other White Goods	-	-	-	-	-	-	-	-
23	Other Scrap metal	-	-	-	-	-	-	-	-
24	Fluorescent tubes	-	-	-	-	-	-	-	-
25	Aluminium foil	-	-	-	-	-	-	-	-
26	Automotive batteries	-	-	-	-	-	-	-	-
27	Post consumer, non automotive batteries	-	-	-	-	-	-	-	-
28	Vegetable Oil	-	-	-	-	-	-	-	-
29	Mineral Oil	-	-	-	-	-	-	-	-
30	Paint	-	-	-	-	-	-	-	-
31	Other materials	-	-	-	-	-	-	-	-
Totals		3,874.8	-	3,874.8	3,309.2	-	3,309.2	-	-

If collection system includes a MRF, ignore material specific validation. However check that total collected minus MRF reject equal total send for reproce

Total collected	3,874.8	3,309.2	Total sent	3,309.2
MRF Reject Total	565.6			
MRF Reject EfW	0			
Recycling, Sent, Rejected To Landfill	0			
Reuse, Sent, Rejected To Landfill	0			

Reuse				Net Diversion	Nomial Biodegradable Content	Net Biodegradable Diversion
ites)	Sent to Destinations					
Total	Sent for	Rejected	Total			
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	573.4	0%	-
-	-	-	-	-	100%	-
-	-	-	-	-	100%	-
-	-	-	-	-	100%	-
-	-	-	-	2,014.2	100%	2,014.2
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	137.3	0%	-
-	-	-	-	137.3	0%	-
-	-	-	-	-	50%	-
-	-	-	-	-	N/a	-
-	-	-	-	422.9	100%	422.9
-	-	-	-	-	100%	-
-	-	-	-	-	100%	-
-	-	-	-	-	50%	-
-	-	-	-	-	0%	-
-	-	-	-	24.1	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	100%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	-	0%	-
-	-	-	-	3,309.2		2,437.1

ssing/composters.

		Recycling							
Mat REF	Material	Collected (all routes)			Sent to Destinations			Collected (all rou	
		Collected	Rejected	Total	Sent for	Rejected	Total	Collected	Rejected
1	Green glass	-	-	-	-	-	-	-	-
2	Brown glass	-	-	-	-	-	-	-	-
3	Clear glass	-	-	-	-	-	-	-	-
4	Mixed glass	268.8	-	268.8	268.8	-	268.8	-	-
5	Paper	-	-	-	-	-	-	-	-
6	Card	-	-	-	-	-	-	-	-
7	Books	-	-	-	-	-	-	1.4	-
8	Mixed paper & card	-	-	-	1,705.5	-	1,705.5	-	-
9	Steel cans	-	-	-	-	-	-	-	-
10	Aluminium cans	-	-	-	-	-	-	-	-
11	Mixed cans	-	-	-	116.3	-	116.3	-	-
12	Plastics	-	-	-	116.3	-	116.3	-	-
13	Textiles & footwear	46.8	-	46.8	46.8	-	46.8	-	-
14	Co mingled materials	2,190.0	-	2,190.0	-	-	-	-	-
15	Green waste only	819.1	-	819.1	819.1	-	819.1	-	-
16	Other compostable waste	-	-	-	-	-	-	-	-
17	Wood	-	-	-	-	-	-	-	-
18	Furniture	-	-	-	-	-	-	-	-
19	Rubble	-	-	-	-	-	-	-	-
20	Fridges & Freezers	24.9	-	24.9	24.9	-	24.9	-	-
21	Other electrical goods	-	-	-	-	-	-	-	-
22	Other White Goods	-	-	-	-	-	-	-	-
23	Other Scrap metal	-	-	-	-	-	-	-	-
24	Fluorescent tubes	-	-	-	-	-	-	-	-
25	Aluminium foil	-	-	-	-	-	-	-	-
26	Automotive batteries	-	-	-	-	-	-	-	-
27	Post consumer, non automotive batteries	-	-	-	-	-	-	-	-
28	Vegetable Oil	-	-	-	-	-	-	-	-
29	Mineral Oil	-	-	-	-	-	-	-	-
30	Paint	-	-	-	-	-	-	-	-
31	Other materials	-	-	-	-	-	-	-	-
Totals		3,349.6	-	3,349.6	3,097.6	-	3,097.6	1.4	-

If collection system includes a MRF, ignore material specific validation. However check that total collected minus MRF reject equal total send for reproce

Total collected	3,349.6	3,097.6	Total sent	3,097.6
MRF Reject Total	252.0			
MRF Reject EfW	0			
Recycling, Sent, Rejected To Landfill	0			
Reuse, Sent, Rejected To Landfill	0			

C-Variable	Definition
1	Q10,12, 16, 17, 33, 34 Collected For Recycling (excl green, other compost, rubble)
2	Q10, 12, 16, 17, 33, 34 Rejected For Recycling (excl green, other compost, rubble)
3	Q18 Household Recycling
4	Q11 Non-household collected For Recycling (excl green, other compost, rubble)
5	Q11 Non-hh Rejected For Recycling (excl green, other compost, rubble)
6	Q19 Rejects (excl green, other compost, rubble)
7	Q58 Rejected to Landfill and Energy Recovery
8	Q10, 12, 16, 17, 33, 34 Co-mingled Collected
9	Q10, 12, 16, 17, 33, 34 Co-mingled Rejected
10	Q11 Co-Mingled Collected
11	Q11 Co-Mingled Rejected
12	Q14 HH Collected For Recycling (excl green, other compost, rubble)
13	Q14 HH Rejected For Recycling (excl green, other compost, rubble)
14	Q14 Co-Mingled Collected
15	Q14 Co-Mingled Rejected
16	Q56, 57, 59, 60, 64, 65 Diverted For Recycling
17	Q23 HH Residual Waste
18	Q23 Non-hh Residual Waste
19	Q69 Household To Landfill
20	Q69 Non-Household To Landfill
21	Q10, 12, 16, 17, 33, 34 Collected For Recycling (excl rubble) plus Q18 HH
22	Q14 Collected For Recycling (excl. rubble)
23	Q10, 12, 16, 17, 33, 34 Green and other Compostable Collected For Recycling
24	Q10, 12, 16, 17, 33, 34 Green and other Compostable Rejected For Recycling
25	Q11 Green and other Compostable Collected For Recycling
26	Q11 Green and other Compostable Rejected For Recycling
27	Q18 HH Parks and Grounds Waste Collected
28	Q14 Green and other Compostable Collected For Recycling
29	Q14 Green and other Compostable Rejected For Recycling
30	Q19 Green and other Compostable Rejected
31	Q54,57 Sent to incineration with energy recovery
32	Q57 Diverted for Recycling
33	Q56 RDF Input
34	Q56 Diverted For Recycling
35	Q59, 64, 65 Diverted For Energy Recovery

36	Q51, 52, 53 Tonnage inputs to Landfill
37	Q19 Rubble Rejected For Recycling
38	Q58 Rejected For Energy Recovery
39	Q56, 59, 60, 64, 65 Tonnage sent to Landfill by Other Routes
40	Q58 Rejected to Landfill
41	Q11, 14 Tonnage Collected For Recycling or Reuse
42	Q10, 11, 12, 16, 17, 18, 33, 34 Tonnage Collected For Recycling or Reuse
43	Q7 Number of Households receiving a collection of at least one recyclable
44	Q7 Number of Households receiving a collection of at least two recyclable
45	Q18 non-household Recycling (skips and other waste)
46	Q18 non-household Parks and Grounds Waste Collected
47	Q69 Household To Energy Recovery
48	Q69 Non-Household To Energy Recovery
101	Household Residual Waste Factor For BVPI 82a (Q69hh/Q69 total if available else Q23 hh/Q23 total)
102	Bvpi82a WCA numerator total for WDA
103	Q10, 12, 16, 17, 33, 34 Collected For Recycling (excl rubble) plus Q18 HH grouped by WDA for WCA
104	Bvpi82b WCA numerator total for WDA
105	Q19 Tonnes Rejected For Energy Recovery (Advanced Thermal Treatment or Incineration With Energy Recovery)
106	Bvpi82c HH Recycling Rejects For Energy Recovery grouped by WDA for WCA
107	Q19 Tonnes Rejected to Landfill
108	Bvpi82d HH Recycling Rejects to Landfill grouped by WDA for WCA
109	Bvpi87 WCA Collected For Recycling or Reuse
110	Household Residual Waste Factor For BVPI 82c (Q69hh to Energy Recovery/Q69 total to Energy Recovery if available else Q23 hh/Q23 total)
111	Household Residual Waste Factor For BVPI 82d (Q69hh to Landfill/Q69 total to Landfill if available else Q23 hh/Q23 total)

BEST VALUE PERFORMANCE INDICATORS - WDA Annex D

THIS INFORMATION IS PROVIDED FOR GUIDANCE ONLY – VALIDATION OF THE QUARTER MAY LEAD TO INFORMATION HAVING TO BE CHANGED.

ANNUAL BEST VALUE PERFORMANCE INDICATORS CALCULATED USING INFORMATION ENTERED INTO WASTEDATAFLOW WILL BE SUPPLIED TO THE AUDIT COMMISSION BY DEFRA.

2005-06 audited BVPI figures have been provided by the Audit Commission

82a – Percentage of household waste arisings which have been sent for recycling

	2005/06	Q1 2006/07	Q2 2006/07	Q3 2006/07	Q4 2006/07	Total For 2006/07
Household dry recycling		14,913.84	16,658.65	15,089.45	17,757.05	64,418.98 tonnes
Total household waste		81,258.87	82,465.47	62,441.79	72,310.97	298,477.10 tonnes
Dry recycling rate	18.64%	18.35%	20.20%	24.17%	24.56%	21.58% per cent

82b – Percentage of household waste sent for composting or anaerobic digestion

	2005/06	Q1 2006/07	Q2 2006/07	Q3 2006/07	Q4 2006/07	Total For 2006/07
Household Composting		9,008.05	8,011.24	7,134.74	2,926.52	27,080.55 tonnes
Total household waste		81,258.87	82,465.47	62,441.79	72,310.97	298,477.10 tonnes
Composting rate	9.96%	11.09%	9.71%	11.43%	4.05%	9.07% per cent

82c – Percentage of household waste used for energy recovery

	2005/06	Q1 2006/07	Q2 2006/07	Q3 2006/07	Q4 2006/07	Total For 2006/07
Used for Energy Recovery		11.70	12.36	14.26	12.58	50.90 tonnes
Total household waste		81,258.87	82,465.47	62,441.79	72,310.97	298,477.10 tonnes
Energy recovery rate	0.00%	0.01%	0.01%	0.02%	0.02%	0.02% per cent

82d – Percentage of household waste that is landfilled

	2005/06	Q1 2006/07	Q2 2006/07	Q3 2006/07	Q4 2006/07	Total For 2006/07
Landfilled		57,242.93	6.18	40,245.98	51,537.13	149,032.22 tonnes
Total household waste		81,258.87	82,465.47	62,441.79	72,310.97	298,477.10 tonnes
Landfill rate	70.33%	70.45%	0.01%	64.45%	71.27%	49.93% per cent

84a – Household Waste Collection (kilograms per head)

	2005/06	Q1 2006/07	Q2 2006/07	Q3 2006/07	Q4 2006/07	Total For 2006/07
Waste Collected		81,258.87	82,465.47	62,441.79	72,310.97	298,477.10 tonnes

Population		517,300	517,300	517,300	517,300	517,300 heads
Waste Collection Per Head	569.0	157.1	159.4	120.7	139.8	577.0 Kg / head

84b – Household Waste Collection % Change on Previous Year

(Note that the total for 2006/7 is based on quarterly data supplied to date, therefore 2006/7 is not directly comparable to the previous year until data for a

	2005/06	Total For 2006/07	%Change
Waste Collected		298,477.10	1.80%
Population		517,300	0.39%
Waste Collection Per Head	569.00	576.99	1.40%

87 – Cost of municipal waste disposal per tonne

(Note that the total for 2006/7 is based on quarterly data supplied to date, therefore 2006/7 is not directly comparable to the previous year until data for a

	2005/06	Total For 2006/07
Cost of Waste Disposal		##### £
Total Municipal Waste		327,108.33 tonnes
Cost Per Household	53.66	73,416.04 £ / tonne

Il four quarters are submitted.)

Il four quarters are submitted.)

BV82a – Percentage of household waste arisings which have been sent for recycling

See 'C-Variables' tab for a definition of each data item

Numerator : Household dry recycling

	C4	C5	C6	C7	C10	C11	C12	C13	C14	C15
Q1	0.00	0.00	0.00	0.00	0.00	0.00	3,977.40	0.00	0.00	0.00
Q2	0.00	0.00	0.00	0.00	0.00	0.00	3,778.60	0.00	0.00	0.00
Q3	0.00	0.00	0.00	0.00	0.00	0.00	3,581.62	0.00	0.00	0.00
Q4	0.00	0.00	0.00	0.00	0.00	0.00	5,603.54	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	16,941.16	0.00	0.00	0.00

Denominator : Total Household Waste (also Numerator for BVPI84a)

	C17	C22	C103	BVPI
Q1	57,318.00	9,159.40	14,781.47	81,258.87
Q2	57,773.00	8,520.60	16,171.87	82,465.47
Q3	40,193.38	6,062.62	16,185.79	62,441.79
Q4	51,603.62	6,185.54	14,521.81	72,310.97
Total	206,888.00	29,928.16	61,660.94	298,477.10

BVPI numerator = C12 + C13 - C6 * (C12 - C13) / (C12 - C13 + C4 - C5) - C7 * (C14 - C15) / (C14 - C15 + C10 - C11) + C16 * C101 + C102

BVPI Denominator = C17 + C22 + C103

C16	C101	C102	BVPI
0.00	0.92	10,936.44	14,913.84
0.00	0.00	12,880.05	16,658.65
0.00	0.91	11,507.83	15,089.45
0.00	0.82	12,153.51	17,757.05
0.00	-	47,477.82	64,418.98

BV82b – Percentage of household waste sent for composting or anaerobic digestion

See 'C-Variables' tab for a definition of each data item

Numerator : Household Composting

	C25	C26	C28	C29	C30	C104	BVPI
Q1	0.00	0.00	5,182.00	0.00	0.00	3,826.05	9,008.05
Q2	0.00	0.00	4,742.00	0.00	0.00	3,269.24	8,011.24
Q3	0.00	0.00	2,481.00	0.00	0.00	4,653.74	7,134.74
Q4	0.00	0.00	582.00	0.00	0.00	2,344.52	2,926.52
Total	0.00	0.00	12,987.00	0.00	0.00	14,093.55	27,080.55

Denominator : Total Household Waste

See BVPI82a detail

$$\text{BVPI Numerator} = \text{C28} - \text{C29} - \text{C30} * (\text{C28} - \text{C29}) / (\text{C28} - \text{C29} + \text{C25} - \text{C26}) + \text{C104}$$

BV82c – Percentage of household waste sent for energy recovery

See 'C-Variables' tab for a definition of each data item

Numerator : Household waste sent for energy recovery

	C4	C5	C6	C10	C11	C12	C13	C14	C15	C29	C30
Q1	0.00	0.00	0.00	0.00	0.00	3,977.40	0.00	0.00	0.00	0.00	0.00
Q2	0.00	0.00	0.00	0.00	0.00	3,778.60	0.00	0.00	0.00	0.00	0.00
Q3	0.00	0.00	0.00	0.00	0.00	3,581.62	0.00	0.00	0.00	0.00	0.00
Q4	0.00	0.00	0.00	0.00	0.00	5,603.54	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	16,941.16	0.00	0.00	0.00	0.00	0.00

Denominator : Total Household Waste

See BVPI82a detail

$$\text{BVPI Numerator} = (\text{C31} - \text{C32} + \text{C33} - \text{C34} + \text{C35}) * \text{C110} + \text{C105} * (\text{C12} - \text{C13}) / (\text{C12} - \text{C13} + \text{C4} - \text{C5}) + (\text{C29} + \text{C13}) * \text{C105} / (\text{C37} + \text{C30} + \text{C6}) + \text{C38} * (\text{C14} - \text{C15}) / (\text{C14} - \text{C15} + \text{C10} - \text{C11}) + \text{C106}$$

C31	C32	C33	C34	C35	C37	C38	C105	C106	C110	BVPI
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.70	0.92	11.70
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.36	0.92	12.36
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.26	0.91	14.26
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.58	0.82	12.58
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.90	-	50.90

BV82d – Percentage of household waste landfilled

See 'C-Variables' tab for a definition of each data item

Numerator : Household waste landfilled

	C4	C5	C6	C10	C11	C12	C13	C14	C15	C29	C30
Q1	0.00	0.00	0.00	0.00	0.00	3,977.40	0.00	0.00	0.00	0.00	0.00
Q2	0.00	0.00	0.00	0.00	0.00	3,778.60	0.00	0.00	0.00	0.00	0.00
Q3	0.00	0.00	0.00	0.00	0.00	3,581.62	0.00	0.00	0.00	0.00	0.00
Q4	0.00	0.00	0.00	0.00	0.00	5,603.54	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	16,941.16	0.00	0.00	0.00	0.00	0.00

Denominator : Total Household Waste

See BVPI82a detail

$$\text{BVPI Numerator} = (C36 + C39) * C111 + C107 * (C12 - C13) / (C12 - C13 + C4 - C5) + C107 * (C29 + C13) / (C37 + C30 + C6) + C40 * (C14 - C15) / (C14$$

57696.659

C36	C37	C39	C40	C107	C108	C111	BVPI	
62,012.00	0.00	0.00	0.00	0.00	5.85	0.92	57,242.93	0.9230
62,744.25	0.00	0.00	0.00	0.00	6.18	0.00	6.18	0.9195
44,044.28	0.00	0.00	0.00	0.00	7.13	0.91	40,245.98	0.9108
62,651.47	0.00	0.00	0.00	0.00	6.29	0.82	51,537.13	0.8225
231,452.00	0.00	0.00	0.00	0.00	25.45	-	149,032.22	

I - C15 + C10 - C11) + C108

BV87 – Cost of municipal waste disposal per tonne

See 'C-Variables' tab for a definition of each data item

Numerator : Net Cost of Waste Disposal

See Summary sheet

Denominator : Total Municipal Waste

	C17	C18	C41	C109	BVPI	
Q1	57,318.00	4,779.00	9,159.40	14,791.95	86,048.35	0.92
Q2	57,773.00	5,061.00	8,520.60	16,453.68	87,808.28	0.92
Q3	40,193.38	3,935.28	7,061.62	16,334.65	67,524.93	0.91
Q4	51,603.62	11,138.47	8,435.69	14,548.99	85,726.77	0.82
Total	206,888.00	24,913.75	33,177.31	62,129.27	327,108.33	

BVPI Denominator = C17 + C18 + C41 + C109

WCA C-Variable breakdown by WCA

See 'C-Variables' tab for a definition of each data item

C102

	North Cornwall District Council	Caradon District Council	Penwith District Council	Carrick District Council	Restormel Borough Council	Kerrier District Council
Q1	2,032.43	1,687.00	1,625.16	2,348.13	1,403.02	1,840.70
Q2	2,230.57	1,749.04	1,822.54	2,597.08	2,495.90	1,984.92
Q3	2,026.41	1,685.93	1,568.12	2,429.20	1,962.71	1,835.45
Q4	2,439.87	2,002.72	1,351.29	2,589.19	1,836.59	1,933.86
Total	8,729.28	7,124.69	6,367.11	9,963.59	7,698.22	7,594.93

C103

	North Cornwall District Council	Caradon District Council	Penwith District Council	Carrick District Council	Restormel Borough Council	Kerrier District Council
Q1	2,538.28	2,409.72	2,444.03	3,478.93	1,464.85	2,445.66
Q2	2,564.25	2,331.26	2,509.70	3,577.87	2,547.23	2,641.56
Q3	3,079.71	2,165.01	2,178.34	3,009.20	2,232.43	3,521.09
Q4	3,303.71	2,358.56	1,531.18	3,266.89	1,866.62	2,194.86
Total	11,485.95	9,264.55	8,663.25	13,332.88	8,111.13	10,803.17

C104

	North Cornwall District Council	Caradon District Council	Penwith District Council	Carrick District Council	Restormel Borough Council	Kerrier District Council
Q1	505.85	722.72	817.44	1,130.80	44.28	604.96
Q2	333.68	582.22	683.12	980.79	32.79	656.64
Q3	1,053.30	479.08	607.39	580.00	248.33	1,685.64
Q4	863.84	355.84	174.98	677.70	11.16	261.00
Total	2,756.67	2,139.86	2,282.93	3,369.29	336.56	3,208.24

C106

	North Cornwall District Council	Caradon District Council	Penwith District Council	Carrick District Council	Restormel Borough Council	Kerrier District Council
Q1	0.00	0.00	0.00	0.00	11.70	0.00
Q2	0.00	0.00	0.00	0.00	12.36	0.00
Q3	0.00	0.00	0.00	0.00	14.26	0.00
Q4	0.00	0.00	0.00	0.00	12.58	0.00
Total	0.00	0.00	0.00	0.00	50.90	0.00

C108

	North Cornwall District Council	Caradon District Council	Penwith District Council	Carrick District Council	Restormel Borough Council	Kerrier District Council
Q1	0.00	0.00	0.00	0.00	5.85	0.00
Q2	0.00	0.00	0.00	0.00	6.18	0.00
Q3	0.00	0.00	0.00	0.00	7.13	0.00

Q4	0.00	0.00	0.00	0.00	6.29	0.00
Total	0.00	0.00	0.00	0.00	25.45	0.00

C109

	North Cornwall District Council	Caradon District Council	Penwith District Council	Carrick District Council	Restormel Borough Council	Kerrier District Council
Q1	2,538.28	2,409.72	2,454.51	3,478.93	1,464.85	2,445.66
Q2	2,564.25	2,331.26	2,522.19	3,817.69	2,547.23	2,671.06
Q3	3,079.71	2,165.01	2,191.15	3,145.25	2,232.43	3,521.09
Q4	3,303.71	2,358.56	1,558.36	3,266.89	1,866.62	2,194.86
Total	11,485.95	9,264.55	8,726.21	13,708.76	8,111.13	10,832.67

The Biodegradable content of Municipal Waste (BMW) sent to landfill is estimated by subtracting recycled and reused biodegradable waste from Municipal Solid Waste Arising (MSW) after taking into account the biodegradable ratio of biodegradable waste in a typical black bin. This is done by taking the total tonnage of MSW produced in the WDA and multiplying this by 0.68 (the deemed biodegradable percentage). This result is the total amount of BMW for which the WDA is responsible. From this figure, the total tonnage of any separately collected and diverted paper, card, green waste, food waste, vegetable oil and wood is subtracted. Half the tonnage of any furniture and textiles is also subtracted. This result is the tonnage of biodegradable waste in the residual waste. If all of this is landfilled, this is the tonnage of BMW landfilled.

To arrive at the biodegradable percentage of the residual waste the BMW landfilled is divided by the total residual waste tonnage and multiplied by 100. If any residual waste is not landfilled then the tonnage of residual waste is multiplied by the biodegradable residual proportion and this figure is then subtracted from the tonnage of BMW landfilled. If any residual waste is landfilled after treatment, the amount of biodegradable waste in this output is added to any other waste landfilled.¹

$$\text{BMW} = \text{MSW} \times 68\% - \{100\% \text{ biodegradable (paper, cardboard, green waste)} - 50\% \text{ (textiles and furniture)} - 0\% \text{ (cans, plastics and glass)}\} + \{\text{recycling rejects} - \text{anything that is incinerated}\} - \text{MBT} \{\text{the amount will depend on the extent it is pre-sorted before treatment}\}$$

Examples:**Sample 1**

100k tonnes MSW
40kt of green waste,
20kt of glass
30kt of concrete

Sample 2

100k tonnes MSW of which
10kt paper waste
20kt green waste
10kt glass

Scenario 1 - Everything is landfilled**Sample 1**

= 100k x 68% = 68k LATS allowances used

¹ The figure for BMW landfilled will only be an estimated. A validated and reconciled figure requires the agreement of the Environment Agency.

Sample 2

= 100k x 68% = 68k LATS allowances used

Scenario 2 - Recycling Glass

Separate glass collection which removes glass from household waste stream.

Sample 1

100kt MSW minus 20kt glass (0% BMW) = 80kt MSW of which
 $100k \times 68\% - (20k \times 0\%) = 68k \text{ t BMW} = 68k \text{ LATS allowances used}$

Sample 2

100kt MSW minus 10kt glass (0% BMW) = 90kt MSW of which
 $100k \times 68\% - (10k \times 0\%) = 68k \text{ t BMW} = 68k \text{ LATS allowances used}$

Separate glass collection has no impact on the number of LATS allowances needed. You still have the same amount of BMW. BUT you need more LATS allowances per tonne of MSW landfilled. The Landfill Directive uses BMW to landfill as its performance measure, not MSW to landfill. By removing glass from the residual waste stream to landfill an authority reduces the amount of landfill but not the amount of biodegradable waste to landfill.

$68/90 > 68/100$

Scenario 3 - Recycling Paper

Sample 1

= 100k x 68% = 68k LATS allowances used

Sample 2

100kt MSW minus 10kt paper (100% BMW) = 90kt MSW of which
 $100k \times 68\% - (10 \times 100\%) = 58k \text{ BMW} = 58k \text{ LATS allowances used}$

The authority needs fewer allowances, equal to the amount of BMW taken out of the residual system. Scenarios 1 to 3 give no overall increase in MSW arisings.

Scenario 4 (a) - Garden Waste Collection allows authority to divert green waste, not leading to additional Green Waste arisings

Sample 1

$100k \times 68\% - (40k \times 100\%) = 28k \text{ LATS allowances}$

Sample 2

$100k \times 68\% - (20k \times 100\%) = 48k \text{ LATS allowances}$

Scenarios 1 to 4(a) give no overall increase in MSW arisings.

Scenario 4 (b) - Garden Waste Collection leads to additional Green Waste arisings

The introduction of a green waste collection leads to **5,000 tonnes additional arisings** (ie, that would have stayed in people's gardens) all of which is 100% biodegradable and none of which goes to landfill.

Sample 1

$$105k \times 68\% - (45 \times 100\%) = 26.4k \text{ LATS allowances used}$$

Sample 2

$$105k \times 68\% - (25 \times 100\%) = 46.4k \text{ LATS allowances used}$$

So the increase associated with the institution of a green waste collection leads to a LATS benefit where additional waste arises. **The WDA needs 32% fewer allowances per tonne of additional waste arising.**

Scenario 5 (a) - Business Waste Collection leads to additional Waste arisings

Business waste collection leads to **5,000 tonnes additional arisings** that are landfilled

Sample 1

Everything is landfilled = $105k \times 68\% = 71.4k$ LATS allowances used.

Sample 2

Everything is landfilled = $105k \times 68\% = 71.4k$ LATS allowances used.

For every additional tonne of waste arising the authority needs 0.68 of LATS allowances.

Scenario 5 (b)- Business Waste Collection leads to additional Waste arisings that are recycled paper

Business waste collection leads to **5,000 tonnes additional arisings** that are source separated and recycled paper so that none goes to landfill.

Sample 1

$$105k \times 68\% - (5 \times 100\%) = 66.4kt \text{ BMW} = 66.4k \text{ LATS allowances used}$$

105kt MSW of which

(68+ 5kt = 73 BMW, but not counted as 73/105 biodegradable)

(32kt non-BMW, but not counted as 32/105 non-biodegradable)

(68/100 < 73/105 and 32/100 > 32/105)

105kt MSW of which

71,400 tonnes BMW (68% of 105,000 tonnes)

33,600 tonnes non-BMW

If we then subtract to 5,000 tonnes of paper waste that is recycled

105-5= 100kt MSW of which

$$71.4-5= 66.4kt \text{ BMW}$$

$$33.6\text{kt non- BMW}$$

$$105\text{k} \times 68\% - (5 \times 100\%) = 66.4\text{k LATS allowances used}$$

$$(71.4 - 5) = 66.4 < 68,$$

$$68 - 66.4 = 1.6$$

$$1.6/5\text{kt} = 32\% \text{ fewer LATS allowances are needed.}$$

So if everything else stays the same, a 5kt increase in biodegradable business waste collected and recycled leads to a reduction of 1,600 allowances needed to landfill whatever BMW the LA is landfilling.

Sample 2

The authority is already recycling 10kt of paper so they now recycle 15kt

$$105\text{kt MSW minus } 15\text{kt paper (100\% BMW)} = 85\text{kt MSW of which}$$

$$105\text{k} \times 68\% - (15 \times 100\%) = 56.4\text{kt BMW} = 56.4\text{k LATS allowances used}$$

In both samples the WDA needs 32% fewer allowances per tonne of additional waste arising.

Scenario 5 (c) - Business Waste Collection leads to additional Waste arisings that are recycled glass

Business waste collection leads to **5,000 tonnes additional** arisings that are source separated and recycled glass so that none goes to landfill.

Sample 1

The authority is already recycling 20kt of glass so they now recycle 25kt

$$105\text{kt MSW minus } 25\text{kt glass (0\% BMW)} = 80\text{kt MSW of which}$$

$$105\text{k} \times 68\% - (25\text{k} \times 0\%) = 71.4\text{k t BMW} = 71.4\text{k LATS allowances used}$$

Sample 2

The authority is already recycling 10kt of glass so they now recycle 15kt

$$105\text{kt MSW minus } 15\text{kt glass (0\% BMW)} = 95\text{kt MSW of which}$$

$$105\text{k} \times 68\% - (15\text{k} \times 0\%) = 71.4\text{k t BMW} = 71.4\text{k LATS allowances used}$$

In both samples

$$(71.4\text{kt} - 0) = 71.4 > 68,$$

$$71.4 - 68 = 3.4$$

$$3.4/5 = 68\%$$

In both samples the authority needs 68% more LATS allowances per tonne of additional waste arising, to landfill same amount.

Scenarios 4b, 5a and 5b lead to additional waste arisings. This changes the amount of allowances needed to landfill the same amount of waste. For example, in Scenario 5b, if everything else stays the same, a 5kt increase in non-biodegradable business waste collected and recycled leads to an increase of 3,400 allowances needed to landfill whatever BMW the LA is landfilling for an amount of waste that has not changed.

Summary of scenarios

SCENARIO	EFFECT	LATS IMPLICATION
New household glass collection, no additional tonnage (X tonnes, 100% inert)	X moves from residual to separate stream	Need same amount of allowances. Remaining MSW has same amount of BMW as before
New household paper collection no additional tonnage (X tonnes, 100% biodegradable)	X moves from residual to separate stream	Need X fewer allowances. Remaining MSW has X less BMW than before
New garden waste collection, some additional tonnage ($Z=X+Y$ tonnes, 100% biodegradable)	X moves from residual to separate stream and Y additionally arises	Need $X + (Y*0.32)$ fewer allowances. This acts as an incentive for garden waste collection.
Increased unsorted business waste collection, all additional tonnage (X tonnes)	X additionally arises in residual stream	Need $X*0.68$ more allowances. This acts as a disincentive for unsorted business waste collection.
New business paper/food waste collection, competing with private sector, all additional tonnage ($Z=X+Y$ tonnes, 100% biodegradable)	X moves from residual to separate streams and Y additionally arises	Need $X + (Y*0.32)$ fewer allowances. This acts as an incentive for sorted business waste collection of BMW, or where waste is more than 68% biodegradable.
New glass and paper collection, no additional tonnage (X tonnes, 100% non-biodegradable and Y tonnes 100% biodegradable)	X + Y move from residual to separate streams	Need Y fewer allowances. Remaining MSW has Y less BMW than before.

Annex F

WRAP Response to Comments on Home Composting Proposals

There are a number of elements to the calculation of the diversion due to home composting and it will be necessary to devise practical arrangements for the scheme which minimise the administrative overheads both for local authorities and for the regulatory authorities. The key elements of WRAP's proposal are:

- Demonstration that individual home compost programmes meet the standard required*
- Verification of the number of qualifying home compost bins in each authority and the calculation of the diversion attributable to them*
- On a one-off basis establishment of a baseline figure of qualifying bins pre-dating the introduction of the scheme.*

Each of these can be significantly simplified by working through accredited schemes such as the one operated by WRAP and currently used by more than 80% of English authorities and 100% of authorities in Scotland. A limited number of schemes not only limits the work required by the regulatory authorities but offers significant cost efficiencies. Accredited schemes would be responsible for providing certified annual calculations of diversion for their members. WRAP already collects the necessary data. Authorities which choose not join a scheme would be provided with a simple web based calculation tool in order to provide a figure for use in WDF which would be subject to audit in the normal way.

Establishing a baseline of qualifying bins which pre-date the introduction of the scheme could require some effort from the local authority depending on the quality of their records, but they would obviously have the option of leaving some or all of their earlier bins out of the calculation if they did not want to commit the resources to establish the figures.

- WRAP response

Glossary of Terms

BMW	Biodegradable Municipal Waste
CARC	Civic Amenity Recycling Centre
CIPFA	Chartered Institute of Public Finance and Accountancy
EA	Environment Agency
EU	European Union
EPA	Environmental Protection Act 1990
GOs	Government Offices in the English regions
LA	Local Authority
MBC	Mass Balance Calculation
M-BEAM	Mass Balance Estimator and Allowance Manager
MBT	Mechanical Biological Treatment
MRF	Materials Recycling Facility
MSW	Municipal Solid Waste
two-tier	areas where there are separate authorities for the collection and disposal of waste
UA	Unitary Authority
WCA	Waste Collection Authority (District or Borough Council)
WDA	Waste Disposal Authority
WDF	WasteDataFlow
WEEE	Waste Electronic and Electrical Equipment
WET Act	Waste Emissions Trading Act 2003
WIN	Waste Information Network