

# **NORTH WEST REGION WASTE MANAGEMENT GROUP**



## **DRAFT MODIFICATIONS TO THE WASTE MANAGEMENT PLAN MEASURES TO MANAGE MUNICIPAL WASTE**

### **ANALYSIS OF WRITTEN CONSULTATION REPSONSES**

**JUNE 2006**

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## 1.0 INTRODUCTION

This report provides a summary and analysis of the written responses received to the consultation process outlining the proposed modifications to the North West Region Waste Management Group (NWRWGM) Draft Waste Management Plan (2006). The report is structured as follows:

- An introduction to the consultation process
- The structure of the consultation paper
- Overview of responses
- Analysis of responses
- Conclusions

Following this public consultation, the draft plan for the North West Region will be finalised. The main purpose of the plan is to set out the main requirements necessary for the North West Region to provide the necessary framework required in order to meet their statutory obligations.

## 2.0 THE CONSULTATION PROCESS

The consultation process commenced on 20<sup>th</sup> March 2006 and closed on 30<sup>th</sup> April 2006. During this period, consultees were invited to submit comments, either by letter or by email, on a paper detailing the proposed modifications to the management of municipal waste within the North West Region.

The Consultation was advertised throughout the North West Region using press advertisements within each District Council catchment area and the document was posted on the North West Region website as well as being made available in local Council offices and in libraries. In addition to this, a public meeting regarding the Consultation was held in each of the District Council areas. An independent analysis of the responses from public meetings was undertaken by Holywell Consulting, and a copy of the report is presented in Annex B.

### 3.0 THE STRUCTURE OF THE CONSULTATION PAPER

The consultation paper was set out in three parts, as summarised in Box 1 below.

#### **PART 1: BACKGROUND AND CONTEXT**

This section provides an introduction to the Waste Management Plan and the need for its subsequent review, including the objectives of the review

#### **PART 2: KEY MEASURES FOR THE MANAGEMENT OF MUNICIPAL WASTE**

**WASTE PREVENTION** emphasises the need to take actions to limit and then reduce the future growth in waste that has to be collected and treated with the aim being to encourage householders to increase resource efficiency.

**RECYCLING AND COMPOSTING** emphasises the need for all waste producers to improve the recovery of materials from the municipal waste stream.

**ENERGY RECOVERY AND TREATMENT OF RESIDUAL WASTES** introduces a number of options for sustainable management of residual wastes to meet the NILAS targets and hence avoid fines under the Regulations.

#### **PART 3: SYNERGIES BETWEEN MUNICIPAL AND COMMERCIAL AND INDUSTRIAL WASTE**

This section provides a brief overview of the potential for commercial and industrial waste to be managed in synergy with municipal waste.

The consultees were invited to submit their views on the questions posed within Part 2 of the Consultation Document along with any general views on the review of the Waste Management Plan.

### 4.0 OVERVIEW OF RESPONSES

A total of 25 responses were received during the consultation period. These responses were made up of the following stakeholder groups:

- Members of the Public: 23 responses (17 web based and 6 letter based)
- Business: 2 responses:
  - Northland Capital Limited and Viridian Power and Energy Limited (joint response)
  - National Farmers Union Mutual

All respondents supplied comments directly relating to the questions posed within the consultation document in addition to more general comments on the consultation document, the consultation process and waste management in general.

## 5.0 ANALYSIS OF THE CONSULTATION RESPONSES

The following section provides an analysis of the responses received during the consultation process. The section has been divided into the following sections:

1. Waste Prevention
2. Recycling and Composting
3. Treatment of Residual Waste and Energy Recovery
4. Synergies between Municipal Waste and Commercial and Industrial Waste
5. Concluding Comments.

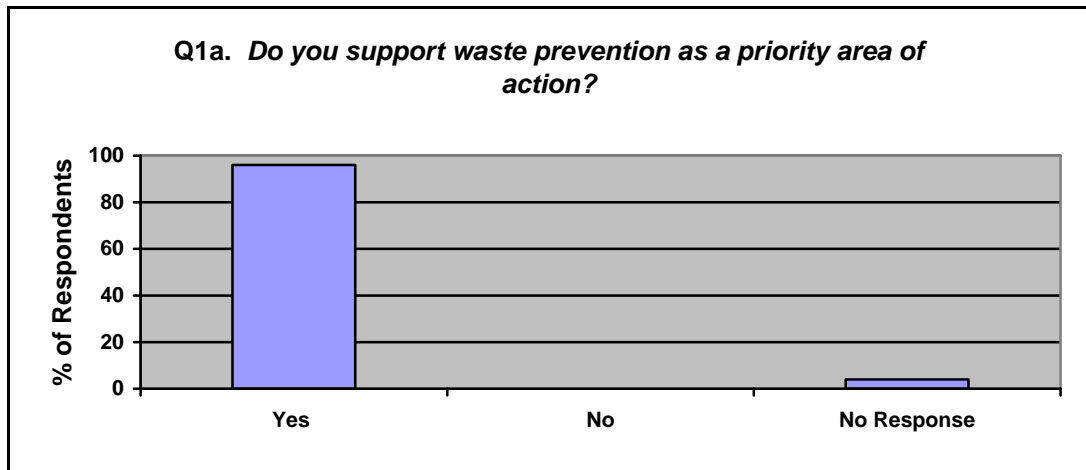
Each of the sections document the answers provided for the questions posed within the consultation document as well as including general comments relevant to the section. The questions posed within the consultation document have been included within each of the sections. It should be noted that this analysis document has been designed to give an overall view of the responses received as part of the consultation process and does not seek to exactly replicate each of the responses received.

5.1 WASTE PREVENTION

**Question 1a**

***Do you support waste prevention as a priority area for action in the review of the Plan?***

The results of this question are shown in the graph below. 96% of respondents supported waste prevention as a priority action area and 4% of consultees gave no response to the question.



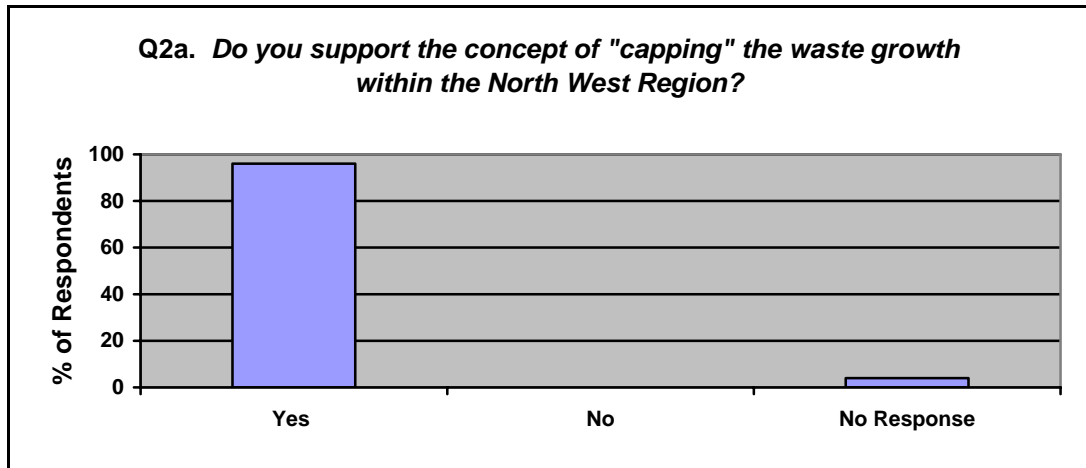
The additional following comments were also given in response to question 1a:

Comment
<ul style="list-style-type: none"> <li>▪ Businesses should do more to prevent waste generation. A tax or levy should be imposed on any business that continues to over package goods.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Councils could be more proactive in raising awareness, educating and publicising about waste prevention measures and initiatives.</li> </ul>

**Question 2a**

***Do you support the concept of “capping” the waste growth within the North West Region?***

96% of respondents supported the concept of “capping” waste growth within the North West Region and 4% of consultees gave no response to the question. The results are shown in the graph below.



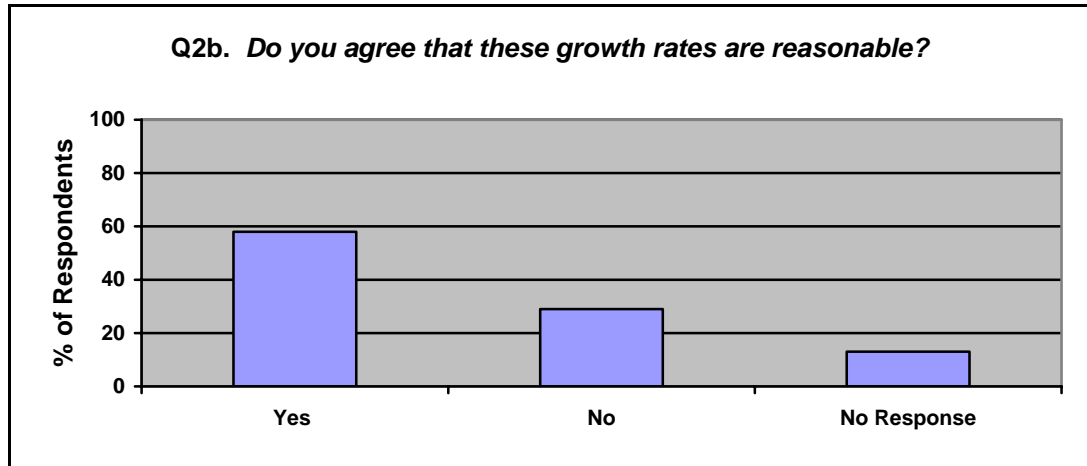
The following additional comments were received for this question 2a:

Comment
<ul style="list-style-type: none"> <li>▪ Limited effort is being made by both individuals and Councils to reduce, reuse and recycle waste.</li> </ul>
<ul style="list-style-type: none"> <li>▪ More active education and awareness programmes are needed to encourage greater participation in waste prevention.</li> </ul>
<ul style="list-style-type: none"> <li>▪ All possible recycling and reduction routes should be explored and the landfilling of waste should be a last resort as it is not sustainable in the long-term.</li> </ul>
<ul style="list-style-type: none"> <li>▪ By introducing a financial incentive to reduce waste, individual efforts to reduce waste could be rewarded.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Specific waste streams need to be given individual consideration. For example, in an agricultural business some wastes are unavoidable, therefore attention must be given to these specific circumstances.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The principle for capping is sensible, however not all the emphasis should be placed on the consumer/householder. Both retailers and manufacturers should also ensure that surplus packaging is kept to a minimum.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Councils should be promoting the concept of commercial and industrial waste reduction and working closely with local businesses to reduce the amount of packaging waste produced annually.</li> </ul>
<ul style="list-style-type: none"> <li>▪ A tax should be imposed on all plastic and paper generated by supermarkets to reduce the amount of waste generated by supermarkets and their suppliers.</li> </ul>

**Question 2b**

***Do you agree that these growth rates are reasonable?***

The responses to this question are presented below.



The majority (58%) of respondents agreed with the growth rates suggested within the consultation document. 29% of respondents disagreed with the suggested growth rates and thought that the Plan should aim to for an overall reduction in the waste growth rates (zero waste) and not an increase. This approach to sustainable waste management will encourage new levels of innovation and efficiency in the North West. 13% of the consultees gave no response to this question.

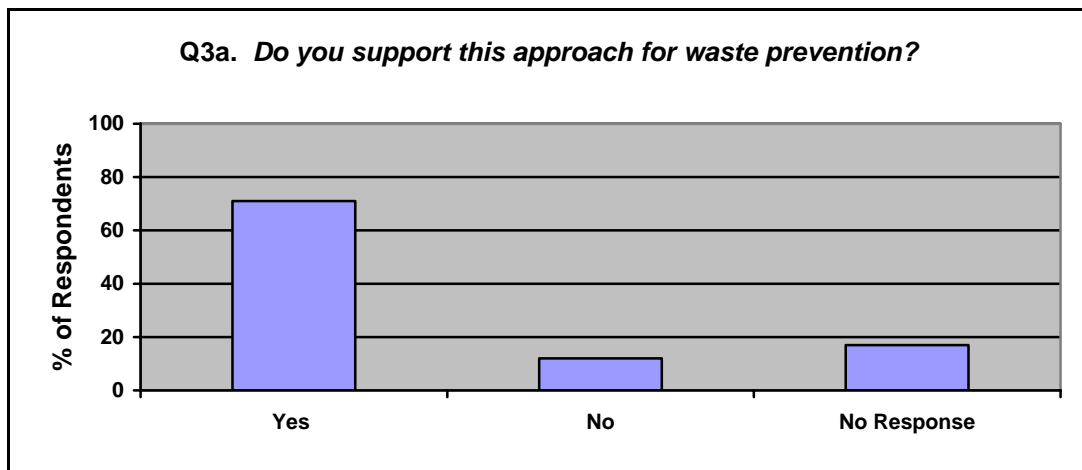
The following additional comments were received for this question:

Comment
<ul style="list-style-type: none"> <li>▪ The Plan should aim for no increase in waste growth. If other Countries and areas can achieve a reduction in waste growth the North West Region can follow suit. A more aggressive waste growth capping strategy should be introduced.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Reduce waste growth rates by educating householders to minimise their waste The Councils should be more proactive in raising awareness and educating householders to reduce the amount of waste produced.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Introducing fines or penalties if people do not do reduce the amount of waste disposed of in the residual refuse bin.</li> </ul>
<ul style="list-style-type: none"> <li>▪ In order to achieve zero waste growth, an additional charge in rates or a decrease in rates depending on the quantity of waste disposed should be considered. Bin collections should be reduced and a quota for the amount of waste households are allowed to send to landfill should be introduced.</li> </ul>

**Question 3a**

***Do you support this approach for waste prevention?***

The results to the answers received for this question are outlined in the graph below.



71% of respondents supported the approach for waste prevention. 12% of respondents did not support the concepts and the remaining 17% of consultees gave no response to this question. One respondent thought the waste prevention measures were unfairly generalised and that various household types should be given consideration, for example, singles, students, families with young children and mature couples with grown up families. Another respondent thought that more should be done to educate both businesses and householders and that Councils should take a stronger approach rather than “*encouraging, promoting and enhancing*”. The respondent suggests the introduction of a rates increase proportionate to the amount of waste produced by householders and businesses, or other incentives to encourage waste reduction such as a Pay As You Throw Scheme.

The following additional comments were received for this question:

Comment
<ul style="list-style-type: none"> <li>▪ In agreement with the waste prevention approach as long as the Councils would not be limited to these measures.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The waste prevention approach must be supported by Central Government grants.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Provide each household with strong cloth bags for carrying goods in place of plastic bags.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Provide more practical examples of waste prevention.</li> </ul>

**Question 3b**

***Are there any other specific actions which could be undertaken by Councils to encourage waste prevention at the household level?***

**Respondents**

A number of specific actions were suggested by the consultees and these are outlined further below. There was however a degree of confusion in this section as to the differences between waste prevention and recycling.

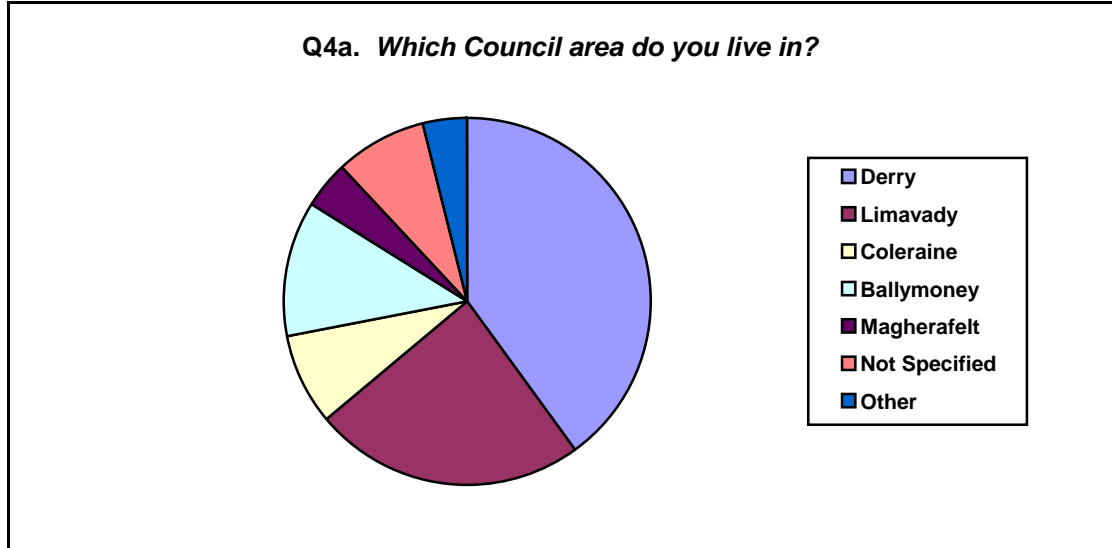
- Further education and awareness raising initiatives should be introduced.
- The respondent has suggested that more leaflets should be distributed and more information sessions should be held throughout the North West Region. The publicity in local newspapers, nurseries, school and youth clubs should be increased. Householders should be provided with regular updates on recycling in the neighbourhood and information on how well various neighbouring areas perform. Competitions and clean-up dates should be held to further increase publicity.
- Neighbourhood or citizen involvement should be increased by recruiting "Waste Volunteers" that could assist the Recycling Officers. Waste Volunteers could work in the local estates and neighbourhoods carrying out education sessions in the local homes, streets or community centres.
- Incentive schemes that can either reward good practice or punish those not participating in waste prevention and recycling initiatives through fines should be considered.
- Waste should be reduced at source, i.e. manufacturers, processors and retailers. Supermarkets should be encouraged to cut down on the amount of packaging around products.
- Habitual offenders should be punished with fines for not complying with the regime of separating waste.
- Kerbside recycling collections with clear information on what can/cannot be recycled should be introduced.
- An increase or decrease in rates proportionate to the amount of waste produced should be considered.
- A recycling collection for glass should be introduced.
- Recycling should be made easier.
- More responsibility should be placed on retail outlets, fast food restaurants and public houses for preventing waste. Rates should be increased for those businesses who produce excessive waste.
- Larger paper recycling facilities should be introduced into schools and government offices.

5.2 RECYCLING AND COMPOSTING

**Question 4a**

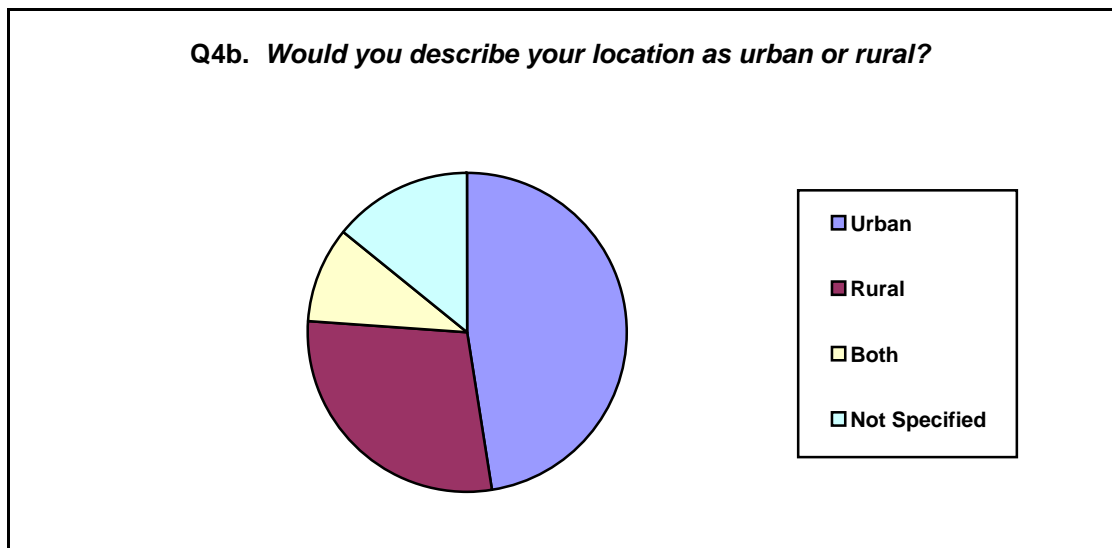
***Which Council area do you live in?***

The graph below shows the geographical spread of the consultees.



**Question 4b**

***Would you describe your location as urban or rural?***



**Question 4c**

*In terms of using facilities do you currently have access to:*

1. ***Recyclables bin*** ***Yes/No***
2. ***Compostables bin*** ***Yes/No***
3. ***A local bring bank*** ***Yes/No***

Access to Receptacles	Yes %	No %
Recyclables bin	100	0
Compostables bin	35	65
Local bring bank	74	26

**Question 4d**

*Are there any additional measures which you would like the Councils to implement to increase the amount of materials you recover?*

A number of additional measures were suggested. These included:

**Materials Collected**

- Glass should be collected from the kerbside.
- The addition of more recycling containers glass. This could include household containers in which to store glass.
- Councils should provide more facilities for plastic recycling.
- Councils should provide the facilities to recycle Tetrapaks and batteries.
- Grass and hedge clippings are problematic to recycle.

**Education and Awareness**

- Public awareness should be raised.
- More information should be provided to householders on recycling.
- Councils should be more proactive and encourage people to recycle.
- Councils should issue information on waste oil, batteries and paints so that householders can recycle them safely.

**Collection Frequency**

- Weekly collections of residual waste and recyclable waste are more sensible as this allows people to dispose of essential waste and gives them more freedom to recycle.
- One residual waste collection every fortnight is not sufficient.

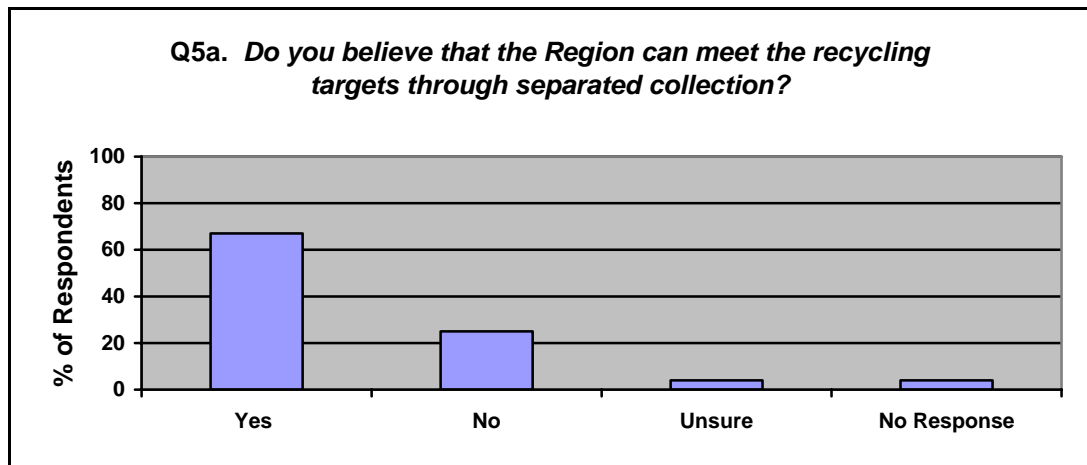
- Recycling every fortnight is a health hazard, which will increase when the weather becomes warmer in the summer.

#### Facility Provision

- There should be more localised Bring Bank Facilities.
- The choice of waste management routes available in many rural areas is patchy and waste management solutions may be limited by the cost effectiveness and logistics of collection and transport. Councils could make special provision for agricultural business and increase material recovery in the form of “special bins” could be provided for agricultural businesses which Councils could collect several times a year.
- Brown bins should be extended to all householders.
- Home composters should be available within all District Council areas.
- Bring banks are not accessible to non car users. A “mobile” bring site could be provided on a regular basis. This would allow householders to bring such materials to a specific location on publicised days for collection.
- Blue bin collections should collect additional types of recyclable waste.
- Councils are slow to respond to new ideas and developments regarding recycling.

#### Question 5a

***Do you believe that the North West Region can meet the recycling targets outlined above through separated collection?***



As can be seen from the graph, 67% of respondents believe that the North West cannot meet the recycling targets. Respondents believe that the following is needed in order that the target recycling rates will be achieved:

- Further waste management and recycling infrastructure is required.
- Waste should be prevented from coming into the North West Region from Donegal.

- Staff employed at Civic Amenity Sites should be more effective at getting the public to place waste in the correct skips.
- An initial investment to improve rural waste management infrastructures.
- Additional recyclable materials should be collected as there is at present a limit to what can be recycled.

One respondent was unsure as to whether these targets could be met as they believed there is at present insufficient evidence to support this. They recognised that the targets will be challenging and that given current performance, there is a risk that the targets will not be met. The respondent states that the critical issue is the level of flexibility within the Plan to ensure that the North West Region is kept below the landfill levels.

Another respondent believes that the introduction of charges to householders would help to ensure that the recycling rates are achieved.

#### **Question 6a**

***Do you already purchase any products which contain recycled products such as:***

<b><i>Paper</i></b>	<b><i>Yes/No</i></b>
<b><i>Glass</i></b>	<b><i>Yes/No</i></b>
<b><i>Waste derived compost</i></b>	<b><i>Yes/No</i></b>
<b><i>Other</i></b>	<b><i>(Please specify)</i></b>

Respondents are purchasing products containing the following recycled materials:

Product	Yes %	No %
Paper	96	4
Glass	56	44
Waste derived compost	44	56
Other	81	19
Other	Clothes	

**Question 6b**

*If not, do have concerns over:*

<b>Cost</b>	<b>Yes/No</b>
<b>Quality</b>	<b>Yes/No</b>
<b>Availability</b>	<b>Yes/No</b>
<b>Other</b>	<b>(Please specify)</b>

The following concerns were documented by the respondents:

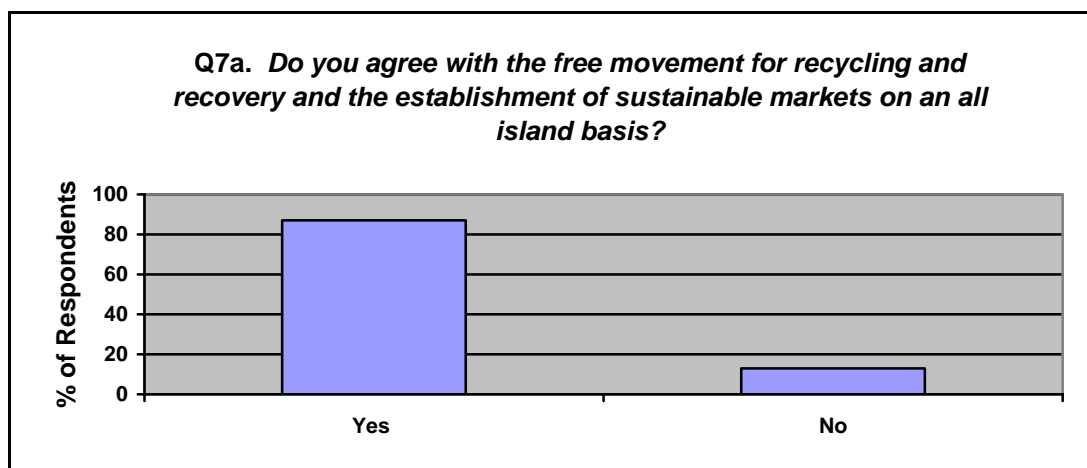
Concern	Yes %	No %
Cost	71	29
Quality	42	58
Availability	79	21
Other	There are very few recycled products available	

Other comments received for this questions included:

- Sustainable fuels should be promoted.
- Money back bottle schemes should be introduced.
- Shops and offices should provide waste segregation facilities.
- Increased education and awareness is needed to encourage people to purchase recycled products.

**Question 7a**

***Do you agree with the free movement for recycling and recovery and the establishment of sustainable markets on an all island basis?***



As can be seen from the graph, the majority of respondents (87%) do support the cross border movement of waste for recycling and recovery. 13% of respondents did not support the concept and supplied the following reasons for this disagreement:

- A ban on cross border movement of waste would reduce the volume of HGV's on the roads.

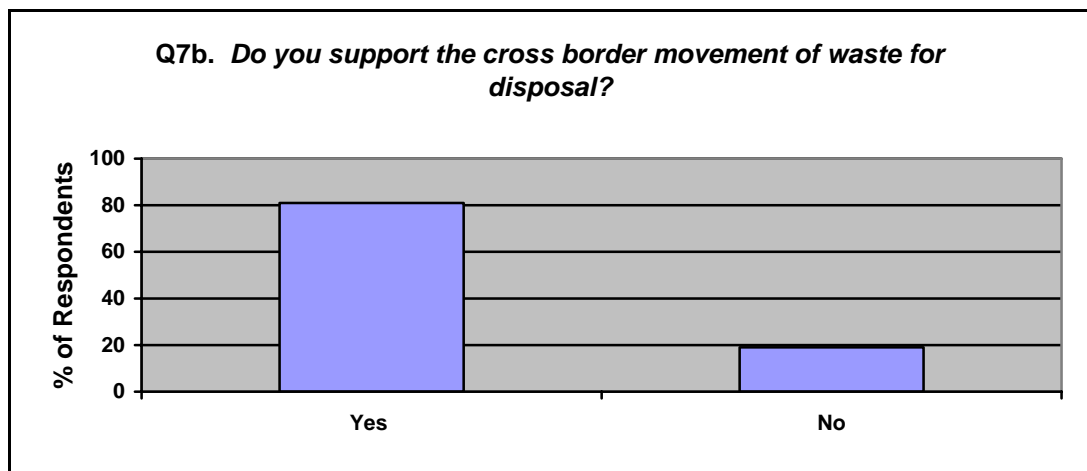
One respondent would potentially support the cross border movement of waste for recycling and recovery purposes dependant on the types of materials being transported. For example, they would not agree with the cross border movement of hazardous waste.

One respondent has stated that market forces should be left to determine the cost effectiveness of selling recycled and recovered material.

**Question 7b**

***Do you support the cross border movement of waste for disposal at appropriate licensed facilities where the provision is provided for within the plan?***

The responses to this question are outlined in the graph below:



As can be seen from the graph, 81% of those consultees who responded to this question supported this initiative, with only 19% of respondents in disagreement. The respondents in disagreement held the view that each region should address waste disposal at a local level.

One respondent thought that the caveat of transportation of residual waste after recycling and recovery should be kept to a minimum.

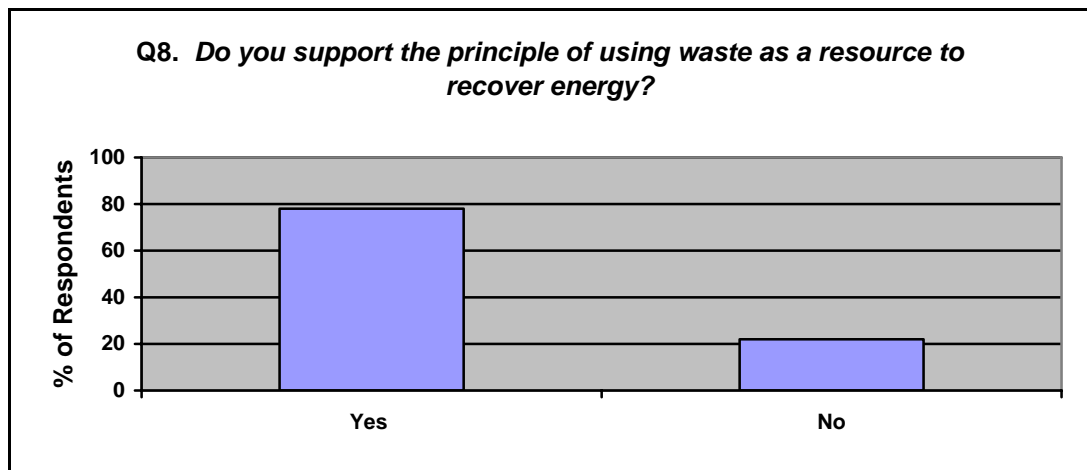
Two responses were ambiguous; one respondent stating that they would not support cross border movement of waste for disposal at licensed facilities due to the “location of sites”, the other respondent mentioning that there should not be an incinerator within the North West Region.

**5.3 TREATMENT OF RESIDUAL WASTE AND ENERGY RECOVERY**

**Question 8**

***Do you support the principle of using waste as a resource to recover energy?***

The consultee responses to question 8 are displayed in the graph below. Of these, 78% signalled support for the principle of using waste as a resource to recover energy, while 22% disagreed.



The majority of those who disagreed, did so on the basis that they considered that energy would be produced from a mass burn incineration process, and were concerned over potential environmental and health impacts of mass burn incineration. These respondents stated categorically that they were against incineration. It should however be noted that the process of mass burn incineration is not proposed as part of the plan for the North West Region.

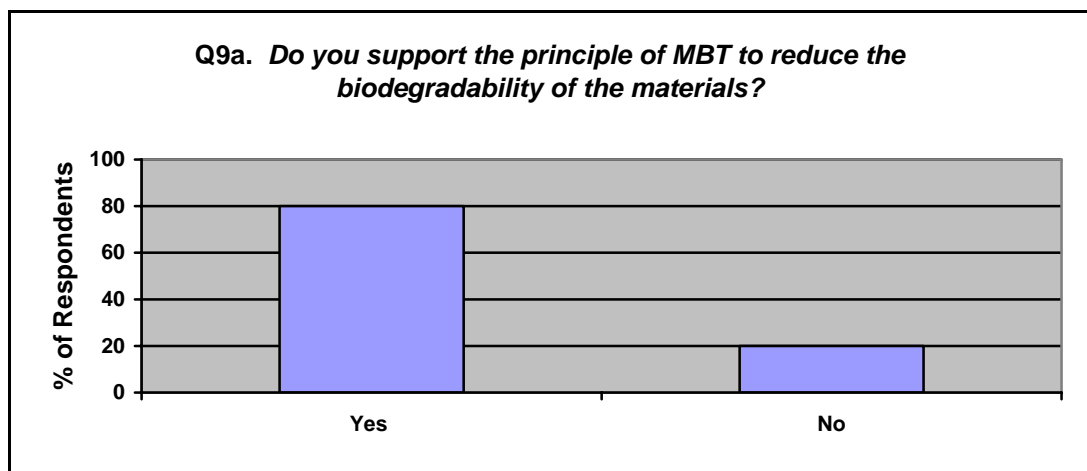
The additional following comments were also given in response to question 8:

Comment
<ul style="list-style-type: none"> <li>▪ It is vital that ongoing monitoring and assessment is carried out to allay the public’s fears about air/soil/water pollution from any effluent/emissions from the facility.</li> </ul>
<ul style="list-style-type: none"> <li>▪ It is estimated that between 5% and 10% of NI’s total electricity demand could be met by energy from waste. There is also scope to provide heat in the vicinity of the plant.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Energy recovery should not be use to disguise “incineration”.</li> </ul>

**Question 9a**

***Do you support the principle of using Mechanical Biological Treatment (MBT) for treating waste in order to reduce the biodegradability of the materials?***

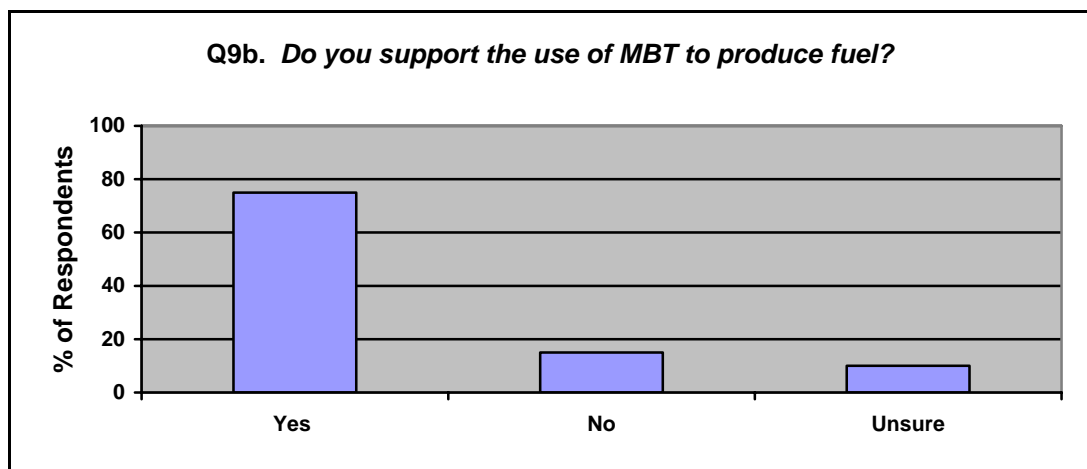
As can be seen from the graph, 80% of the respondents supported the principle of using MBT. 20% of respondents disagreed with the principle whilst one respondent was did not fully understand the MBT technology and did not comment as a result. Those that disagreed did so on the basis that MBT achieves little volume reduction and its outputs will require further processing, some at considerable cost. One respondent is opposed to the introduction of MBT on the grounds that they believed that mixing waste materials to convert them to fuel was dangerous and could not be well controlled.



**Question 9b**

***Do you support the use of MBT to produce fuel?***

The responses to this question are shown in the graph below:



The majority of respondents (75%) supported the concept of using MBT to produce a fuel, although one respondent wished to see more research into this and thought more investigations were required to mitigate against any potential environmental and health hazards. Of those who did not support the concept (15%), the majority rejected it on the basis that the process would involve mass burn incineration and this produced concerns over dioxins and subsequent health effects. One respondent had reservations about the merits of MBT in the waste treatment process as they believed that it was only an interim stage in the treatment process. The respondent also states that it is unlikely that there will be sufficient demand for the compost produced from the process and that all the likelihood is that the compost would be sent to landfill. 5% of the respondents were unsure and did not comment as a result.

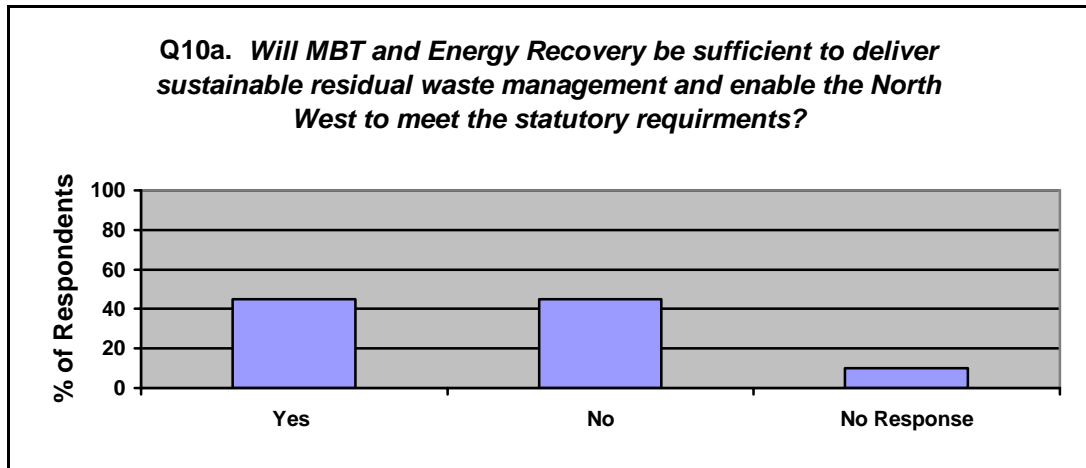
The following additional comments were recorded for this question:

Comment
<ul style="list-style-type: none"><li>Any Refuse Derived Fuel (RDF) produced should be suitable for use by an Energy from Waste (EfW) plant. However a similar outcome could have been achieved by putting all the grey bin waste through a less expensive MRF process followed by shredding at the front end of an EfW plant. This approach will capture more energy from the overall waste stream than can be achieved by separating and composting the biodegradable fraction and converting the residual stream to RDF.</li></ul>

**Question 10a**

***Do you believe that the proposed mix of facilities, in the form of Mechanical Biological Treatment (MBT) and Energy Recovery, will be sufficient to deliver sustainable waste management of residual wastes and enable North West to meet their statutory requirements?***

As can be seen from the graph there is mixed opinion as to whether the proposed mix of facilities will be sufficient.



While 45% of consultees were in agreement with the proposal for MBT and Energy Recovery, 45% of consultees also disagreed, as they believed that the term energy recovery was used to describe incineration and that this was erroneous. A number of respondents also thought that waste reduction should be the top priority. One consultee thought the question was too technical and a “lay person” could not answer it.

One respondent thought that a mix of source separation, materials recovery, shredding, EfW and landfilling residues would achieve the targets in a more cost effective manner.

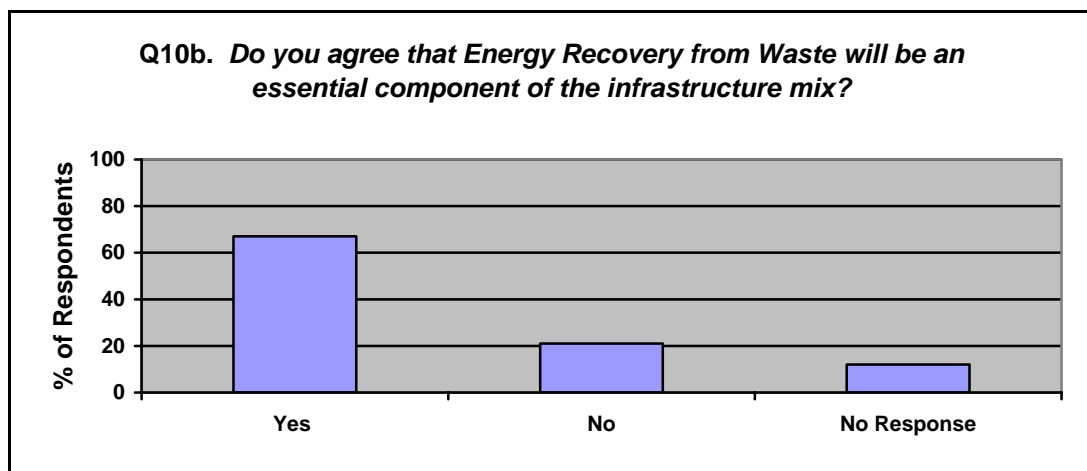
The additional following comments were also given in response to question 10a:

Comment
<ul style="list-style-type: none"> <li>▪ MBT and energy recovery could also take additional materials such as poultry litter, which could power buildings, and help the Government meet the energy targets.</li> </ul>
<ul style="list-style-type: none"> <li>▪ MBT and energy recovery does not provide any incentive to consumers to produce less waste.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Energy recovery does not give the householder any incentive to recycle.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Irrespective of the model chosen, the regulatory requirements will only be met by prompt decision making and considerable political will to make the necessary planning and procurement decisions.</li> </ul>

**Question 10b**

***Do you agree that Energy Recovery from Waste will be an essential component of the infrastructure mix?***

As can be seen from the graph below, the majority (67%) of respondents agreed that energy recovery will be an essential component of the infrastructure mix. Those who disagreed did so on the basis that they considered energy recovery would involve mass burn incineration and therefore were concerned over the dioxin release and subsequent health and environmental impacts.



The following additional comments were documented for this question:

Comment
<ul style="list-style-type: none"> <li>▪ Thermal treatment is the only option that takes out all the biodegradability of the final waste stream, therefore it has to form a major part of any plan for managing waste within the landfill limits</li> </ul>
<ul style="list-style-type: none"> <li>▪ The use of energy recovery to describe incineration is erroneous.</li> </ul>

**Question 10c**

***Are there any other technologies which you consider should be incorporated into the review of the Plan?***

There were a number of additional technologies suggested as part of the consultation process including:

- MBT but with the residual to landfill only
- Large scale biodegradable municipal waste composting
- Anaerobic Digestion

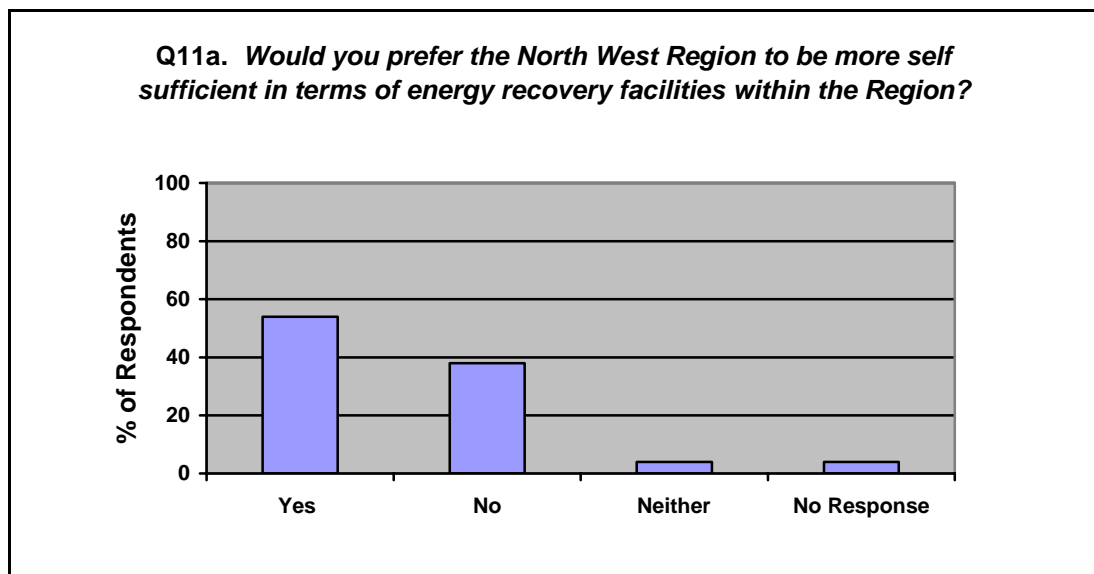
- Gasification
- Production of bio-diesel from waste cooking oil
- Household energy reduction which could contribute to overall waste reduction and sustainability
- Incorporating renewable energy technologies and household energy reduction

**Question 11a**

***Would you prefer the North West region to be more self sufficient in terms of provision of energy recovery facilities within the Region or would you have preference for these being developed as a single facility on a Northern Ireland scale?***

As can be seen from the graph below, the responses to this question generated a mix of opinions. A number of respondents were in favour with the development of regional facilities as they thought the facilities would provide additional employment in the area and would also reduce the environmental impacts of large shipments of waste by road.

Other respondents were of the opinion that the waste was produced in the North West Region and it should be treated and managed in the Region of origin.



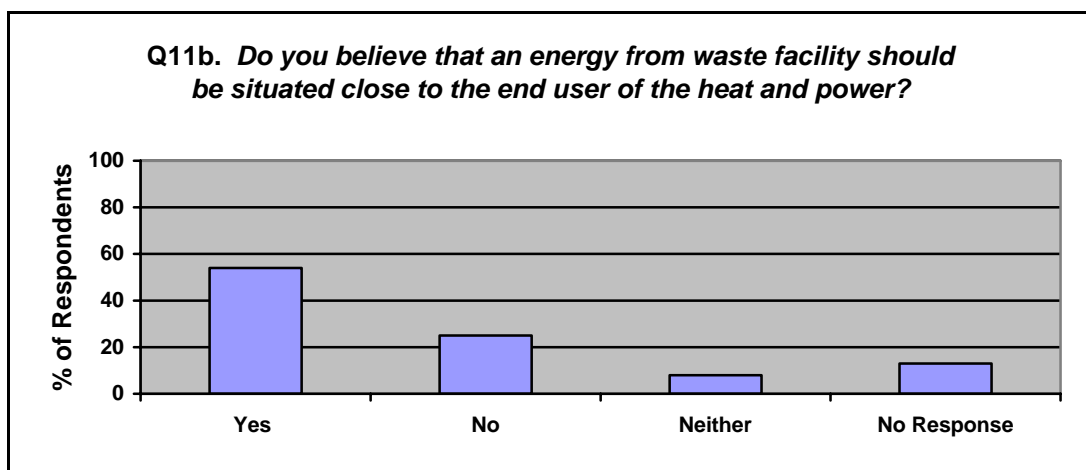
The following additional comments were recorded for this question:

Comment
<ul style="list-style-type: none"> <li>The electricity grid is weak in parts of the North West Region and requiring considerable investment for upgrade. This cost could be avoided if new embedded generation was introduced in problem areas. This could be done if the waste is harnessed as a fuel. The alternative is all waste in the North West Region is transported to a central facility, probably outside the North West Region. Detailed analysis would be required to establish the most cost effective solution.</li> </ul>
<ul style="list-style-type: none"> <li>It is wholly unjust for one area to impose its waste on another and the proximity principle should apply.</li> </ul>
<ul style="list-style-type: none"> <li>A central energy recovery facility in Northern Ireland would have economies of scale and be more efficient to run.</li> </ul>
<ul style="list-style-type: none"> <li>A balance must be struck between local and regional facilities, so as to minimise "waste miles".</li> </ul>

**Question 11b**

***The process of energy recovery will be most efficient if the user of that energy is in close proximity to the site where it is produced. Do you believe that this facility should be situated close to the end user of the heat and power, for example in proximity of facilities such as industrial users, universities or hospitals?***

The responses to this question are outlined in the graph below:



54% of the respondents agreed that any energy recovery facility should be located close to the end users. 12% of respondents disagreed on the grounds that this was a mass burn incinerator while another considered that more information was required before an informed choice could be made.

There were a number of additional comments provided for this question:

Comment
<ul style="list-style-type: none"> <li>▪ Against the location of a municipal waste incinerator in close proximity to a hospital.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The heat and power generated could be used by the MBT facility and beyond if it is sited close to a business park or near a residential area.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The energy value of residual waste will be greatly enhanced if the heat can be used as well and may attract the significant advantage of renewable obligation certificates for at least part of its output. However, this can only be achieved efficiently and economically if the energy from waste plant is located close to the heat user(s), and has a long term heat supply contract.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Energy from waste plants are most effective and accepted by the wider public when they are situated close to where power and heat is required.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Incineration is a flawed technology.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Not willing to pay additional rates to subsidise a waste incinerator.</li> </ul>

### **Question 12a**

***How important do you rate cost as a factor in assessing options for the development of these facilities?***

***Respondents were asked to rate costs on a scale of 1 to 5 where 1 is considered most important and 5 least important.***

### **Responses**

The following ratings were established in order of weighting:

- |    |           |                    |
|----|-----------|--------------------|
| 1. | Rating 3: | 29% of respondents |
| 2. | Rating 2: | 25% of respondents |
| 3. | Rating 4: | 12% of respondents |
| 4. | Rating 1: | 12% of respondents |
| 5. | Rating 5: | 4% of respondents  |

**Question 12b**

***How important do you rate self sufficiency as a factor in assessing options for the development of these facilities?***

***Respondents were asked to rate self sufficiency on a scale of 1 to 5 where 1 is considered most important and 5 least important.***

**Responses**

One respondent replied to say that these factors were impossible to quantify as the potential costs are environmental and health related and not financial. Of the remaining responses, the following ratings were established in order of weighting:

- |    |           |                    |
|----|-----------|--------------------|
| 1. | Rating 2: | 29% of respondents |
| 2. | Rating 3: | 25% of respondents |
| 3. | Rating 1: | 17% of respondents |
| 4. | Rating 5: | 12% of respondents |
| 5. | Rating 4: | 0%                 |

**Question 13**

***With regard to the management of municipal waste, are there any other aspects that you believe that North West should consider in the Review of their Waste Management Plan?***

The following responses were received directly for this question:

Comment
<ul style="list-style-type: none"> <li>▪ There should be a possible joint venture between the Commercial Sector and the North West Region Councils in the investment, structure and running of the MBT and EfW Plants.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The Consultation process should consider novel ideas for future waste management</li> </ul>
<ul style="list-style-type: none"> <li>▪ The North West Region should press each District Council to employ personnel to guard against “fly-tipping” and also should press for severe penalties for those caught.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The North West Region should take more account of the public’s opinions and concerns.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Recycling in the North West Region is under-resourced and not well developed. Councils should improve the recycling and composting services.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Householders should be charged for disposing of biodegradable organic material in their residual refuse bin.</li> </ul>

Comment
<ul style="list-style-type: none"> <li>▪ Excess packaging of food and hardware should be stopped. An education and awareness campaign should be targeting supermarkets to reduce excessive packaging.</li> </ul>

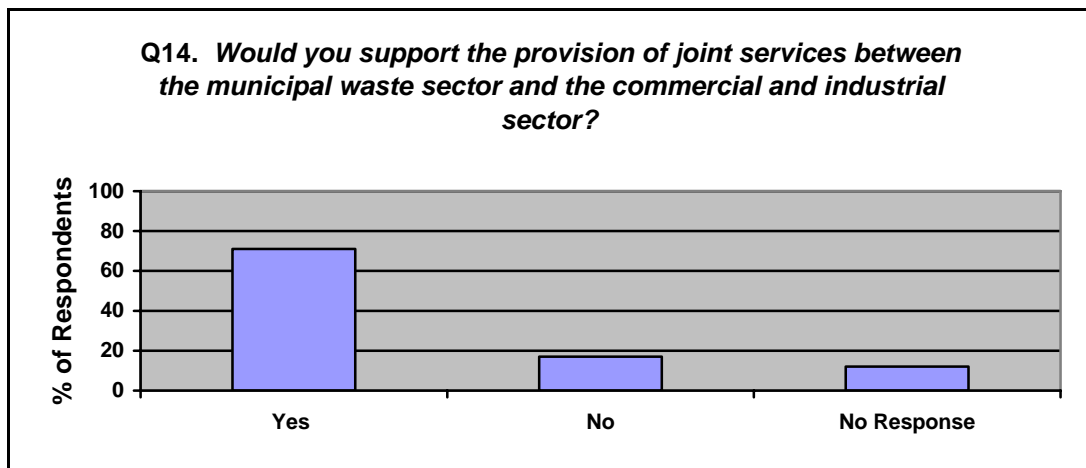
Any other general comments received in the form of letters, but not directly referring to this question, have been included within the responses to Question 15.

**5.4 SYNERGIES BETWEEN MUNICIPAL AND COMMERCIAL AND INDUSTRIAL WASTE**

**Question 14**

***Would you support the provision of joint services between the municipal waste sector and the commercial and industrial sector?***

The responses to this question are outlined in the graph below:



71% of consultees were in support of the provision of joint services between the municipal and commercial and industrial waste sectors. One respondent did not support the concept as they were unsure, on the grounds that in contractual terms, the level and composition of C&I waste is much less certain than that of MSW and so would expose any joint facilities to greater risk than one built purely for MSW. The respondents who did not support any potential joint services provided the following reasons:

- Industry must manage their waste. Only then when they manage their own waste, will they begin to produce less.
- Householders should not have to pay rates to contribute to profitable businesses and industries to manage their waste.

## 5.5 ADDITIONAL COMMENTS

### Question 15

***Are there any other additional comments you consider should be taken into consideration in the review of the North West Region Waste Management Plan?***

There were a number of general comments made with respect to the review of the North West Region Waste Management Plan and the future management of waste within the North West Region. These were received both in direct response to Question 15, within the Consultation Document, and as letters sent in response to the consultation process. The comments received have been detailed below:

#### Consultation Document

- The draft modifications to the Plan are too heavily biased towards “waste management” (end of pipe solutions) as opposed to waste prevention and reduction.
- There is an absence of a policy on how the recycling and recovery targets are to be achieved.
- The Consultation process should involve agricultural and food processing wastes.
- The consultation process should have been longer, more widely publicised and included community groups.

#### General Waste Management in the North West Region

- The diversion of waste from landfill should be a primary objective within the review of the Plan.
- Appropriate taxation and social incentives are key to the necessary structural and behavioural changes required and should be introduced without delay.
- Recycling plants and composting facilities must not be allowed to become sources of pollution.
- There is a need for more consistent reporting of waste data in the Region.
- Wastes should be seen as a resource and treated accordingly.

#### Zero Waste Approach

- North West Region should strive towards the target of “zero” waste in order to encourage new levels of innovation and efficiency.
- Zero waste should combine community practices such as reuse, repair recycling, toxic removal and composting with industrial practices such as eliminating toxins and redesigning packaging and products for environmental and ecological demands.

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### Markets for Recycled Products

- It is recognised that the markets for recycled materials are not favourable and the value of any recycled products are low. There may be opportunities for the Councils to adapt their significant purchasing power to encourage the use of recycled materials and hence help the development of markets.
- A workable solution for market development could be to introduce a system of differentiated taxation, according to the environmental performance of products. A first step may be to apply reduced VAT rates on products carrying the European Eco-Label supplemented by the development and use of other environmental taxes and charges.

### Cross Border Waste Movements and Illegal Dumping

- The North West Region should participate in an All-Island Enforcement Network, extended to include the involvement of DOE and PSNI.
- More should be done to prosecute those involved in illegal dumping within the North West Region.
- Those who suspect members of the public of illegal dumping should receive rewards for reporting them.
- The system to track waste between NI and RoI should be fully operational and agreed on an all island basis.

### Landfill Facilities

- Existing landfills should be used for the residue left after recycling and recovery and new facilities should not be opened unless their need can be proven without a doubt and their location is acceptable to the host community.
- Smaller landfills, properly engineered and free from organic materials and used to deposit the relatively inert residue of MBT only, are much more acceptable alternatives to existing landfills.

### Residual Waste Treatment and Energy Recovery

- The proposed Strategy includes a large scale thermal treatment plant outside the region. It is unclear whether this is intended to be the physical transportation of waste across the province or through the trading of landfill allowances. If it is the former, this needs to be taken into consideration in the plan assessment. Trading landfill allowances will avoid this issue and still allow the province and the Region to achieve their landfill targets.
- Energy from waste (in the form of gasification) can compliment various Waste Management Strategies while facilitating efforts to meet landfill diversion targets and increase the proportion of recycling undertaken year on year.
- There are concerns that an energy from waste facility would displace a new build generation of fuel, such as renewable energy, making it a poor choice environmentally.

- Using the residual fraction from the MBT process as RDF is only acceptable in the short term until such times as recycling and composting facilities are fully operational.
- Long term waste management should include MBT with the small remaining fraction being landfilled.

In addition to the above comments, there are a number of concerns that energy recovery will involve incineration. In a number of the consultation responses, this is perceived as being a form of mass burn incineration and hence has generated a number of concerns relating to mass burn incineration. A summary of these responses has been recorded below:

- There are concerns over the quantity and health impacts of emissions from facilities as these cannot be independently monitored on a continual basis and may include carcinogens, dioxins, heavy metals, furans, sulphur and nitrous oxides which may be spread over large areas.
- There are concerns that incineration could heighten the threat of a terrorist attack.
- There are concerns over the toxicity of ash produced from the process and where this ash will be disposed, given the absence of hazardous waste landfill facilities in Northern Ireland.
- There are concerns that incineration would discourage the development of an efficient recycling system.

## 6.0 CONCLUSIONS

Although the responses were limited for this consultation process, respondents provided comprehensive and useful comments and suggestions regarding the future management of municipal waste within the North West Region.

In terms of waste prevention, there was broad support for the principles of waste prevention, including the capping of waste growth, with respondents recognising that all stakeholders have a role to play in this. Respondents believe that education and awareness initiatives should be undertaken throughout the region to ensure that all stakeholders, from individual households to businesses, adopt a change in attitude and strive to reduce the amount of waste they produce. It is however recognised that the Plan needs to maintain a level of flexibility in order to ensure that the amount of waste being landfilled within the North West Region is kept below the permissible limits in the event of waste growth rates being exceeded.

A number of specific actions have been suggested for helping to reduce waste within the North West Region. These have ranged from incentives and targets to fines for non-compliance and the introduction of Pay as You Through Schemes.

A number of stakeholders also believe that the waste prevention measures proposed within the Plan do not go far enough in terms of preventing waste and that the North West Region should consider a "Zero Waste" approach.

As with waste prevention, there was broad agreement with the measures suggested for recycling and composting with a number of additional measures being suggested to help facilitate an improvement in performance and ensure that the North West Region continues to move towards meeting recycling and recovery targets. Stakeholders believe that Councils should work towards ensuring that all householders within the Region are offered the same level of facilities and services and that these should be extended to facilitate the collection of a greater range of materials.

In terms of targets, respondents are split in their opinion regarding the ability of the North West Region to meet the recycling and recovery targets stated within the consultation document. The unsurity of this is on the basis that the achievement of these targets will be reliant on the full buy in from all stakeholders and will be dependant on the delivery of the full range of services and treatment facilities required for the recovery of waste. It should be noted however that there were a number of respondents who were of the opinion that the targets within the document did not go far enough and suggested that these should effectively be doubled.

In terms of the cross border movement of waste for recycling and recovery, the majority of respondents recorded support for the principle but considered that any benefits received from this should be maintained within the local community. There was general support for the movement of waste for disposal although a number of respondents considered that waste should be disposed close to the area in which it is produced. For both movements associated with recovery and disposal, respondents were concerned that this had the potential to increase illegal movements of waste and therefore rigorous supervision of cross border movements would be required.

In terms of the treatment of residual waste with energy recovery, there was general support for the principle of using MBT for treating wastes and the principle of using waste to produce energy. There is still however a lack of understanding of the process of MBT, with many of the stakeholders erroneously believing that the technology involved mass burn incineration. This led to concerns over the perceived health and environmental risks associated with emissions from traditional mass burn incinerators. Considering the fact that mass burn incineration has not been proposed as part of the plan modifications, it is therefore imperative that the revised plan includes an explanation of the technologies proposed and categorically states that mass burn incineration does not form part of these proposed technologies.

There was also general agreement that energy recovery will be an essential component of the infrastructure mix for the North West Region, although as with MBT, there was a presumption among a number of respondents that this meant mass burn incineration. Those who did support the concept however, generally concurred with the suggestion that the North West Region should have a number of smaller scale energy recovery facilities within the Region and these should be located close to the end users of the heat and power. This would not only allow maximum efficiency of the fuel source and minimal environmental impacts associated with transport but would also encourage a sense of community ownership and provide revenue in the form of employment to receiving communities.

In conclusion therefore, the consultation responses have been broadly supportive of the suggestions for the modification of the North West Region Waste Management Plan in terms of prioritising waste prevention followed by maximising, as far as practicable, recycling and composting. This should be followed by further treatment of the residual waste by MBT to remove any remaining recyclables, reduce the biodegradability and produce a resource in the form of energy. There is however the need for careful explanation of the processes involved in the treatment of wastes, to ensure all stakeholders are fully informed of the mechanisms of the process and also to allay public fears.