

AGENDA ITEM NO.12.

To: PLANNING AND ENVIRONMENT COMMITTEE		Subject: National Waste Strategy: Scotland Glasgow and Clyde Valley Waste Strategy Area Group – Publication of final draft Area Waste Plan.
From: DIRECTOR OF PLANNING AND ENVIRONMENT		
Date: 20 th March 2002	Ref: RD	

1. Purpose of Report/Introduction

- 1.1 Delivery of the National Waste Strategy: Scotland is dependent on the formulation of an Area Waste Plan (AWP) for each of the 11 Waste Strategy Areas, into which Scotland is divided. North Lanarkshire Council is a member of the Glasgow and Clyde Valley Waste Strategy Area Group.
- 1.2 This report briefly outlines the content of the Glasgow and Clyde Valley Area Waste Plan (AWP) (an executive summary of which is attached as an Appendix). Members may view the full Glasgow and Clyde Valley draft AWP, which is contained within the Local Government Library.
- 1.3 In order to meet the timetable approved by the Scottish Executive for publication of the Glasgow and Clyde Valley AWP, the Scottish Environment Protection Agency are requesting constructive feedback and approval of the draft AWP, which was formulated using determined guidance and taking into account feedback received from consultation on the Issues Paper, to allow publication by Spring 2002.

2. Background

- 2.1 Waste must increasingly be managed as part of an integrated process that entails a shift from the current culture of waste disposal to one of resource management that will make a significant contribution towards promoting a more sustainable infrastructure and economy in Scotland.
- 2.2 The National Waste Strategy: Scotland was published by the Scottish Environment Protection Agency in December 1999. It provides a framework within which Scotland can reduce the amount of waste produced and approaches waste management in a more sustainable manner. It laid down a strategy by which Scotland could meet its obligations under the terms of the EU Landfill Directive.
- 2.3 The Directive lays down certain requirements including a progressive reduction in landfilling of Biodegradable Municipal Solid Waste (BMW) which decomposes and produces pollutants when landfilled.
- 2.4 From the baseline of 1995, the amount of BMW permitted to be landfilled will be (assuming a four year derogation is applied):
 - 75% of 1995 levels by 2010
 - 50% of 1995 levels by 2013
 - 35% of 1995 levels by 2020

3. Proposals/Considerations

- 3.1 Delivery of the National Waste Strategy is dependent on the formulation of the AWP which focuses on the Best Practical Environmental Option (BPEO) to achieve the target dates set down in the Landfill Directive.
- 3.2 At this stage the AWP concentrates mainly on meeting the 2010 targets although it has been recognised that a range of additional and appropriate waste recovery technologies may require to be integrated into the framework to enable the landfill diversion targets of 2013 and 2020 to be met.
- 3.3 The main components of the BPEO, which will have to be employed to meet the 2010 diversion targets, are:
- **Waste Minimisation**
 - **Traditional and source segregated waste**
 - **Clean Materials Recovery Facility**
 - **Mixed Waste Processing Facility**
 - **Compost Facilities**
 - **Landfill Sites**
- 3.4 It is recognised that the diversion of such quantities of waste from landfill will require the use of both existing facilities and a number of new facilities. It is further recognised that the best way to proceed is through partnership working to achieve economies of scale as far as practicable. The draft AWP gives an estimate of the type and number of facilities that may be required to meet the relevant objectives.

4. Corporate Considerations

- 4.1 The recommendations to the committee are consistent with policy.
- 4.2 It is difficult to give accurate costs for implementing the BPEO and therefore only an indication of the likely capital and revenue costs, for the Glasgow and Clyde Valley Area, are given within the AWP. The actual costs will ultimately be determined by a range of factors such as market forces, existing and new management contract agreements, size and location of facilities, sources of funding, landfill tax, transport and labour costs, new legislative requirements etc.
- 4.3 Estimated average costs in the Glasgow and Clyde Valley area to achieve the 2010 targets are highlighted within the draft AWP.
- 4.4 The estimated cost of implementing the BPEO identified in the AWP is far in excess of current local authority waste management budget expenditure. The Scottish Executive has set up the Strategic Waste Fund, which is worth £50 million over three years, to assist with the implementation of the Area Waste Plans. It is clear however that this will be insufficient to implement each element of the plan.
- 4.5 There is an expectation that much of the required infrastructure will be brought forward by the private waste management industry. In order to achieve this, the private sector will have to be confident that they can re-coup this investment through waste management contracts with local authorities.
- 4.6 One of the main aims of the AWP is to try and establish what facilities will be necessary and the quantities of waste, which will require to be processed to provide private sector financiers with the confidence to invest. It is anticipated that Public Private Partnerships will play an important role in financing the implementation of the BPEO. Other likely funding mechanisms are landfill tax credits, new opportunities fund, European Partnership fund and Enterprise Network funding.

4.7 A waste management project team has recently been established within the Planning and Environment Department. The team are currently drafting an outline waste management strategy for North Lanarkshire, having regard to the Draft Glasgow and Clyde Valley Area Waste Plan. An inter-departmental waste management strategy group oversees the work of the team.

5. **Recommendation**

5.1 It is recommended that approval is given to the Director of Planning and Environment to advise the Scottish Environmental Protection Agency that North Lanarkshire Council approves the Draft Area Waste Plan to allow it to proceed to the 3 month public consultation process.

5.2 Bring forward a further report to advise on the outcome of the public consultation process.

Contact for further information: Robert Docherty - 01236 812659.



GLASGOW AND CLYDE VALLEY DRAFT AREA WASTE PLAN VERSION 4 EXECUTIVE SUMMARY ISSUED 28 February 2002

Prepared by SEPA in partnership with

- East Dunbartonshire Council
- West Dunbartonshire Council
- Glasgow City Council
- Inverclyde Council
- North Lanarkshire Council
- South Lanarkshire Council
- East Renfrewshire Council
- Renfrewshire Council
- Scottish Enterprise - Dunbartonshire
- Scottish Enterprise - Lanarkshire
- Scottish Enterprise - Renfrewshire
- The Scottish Environmental Services Association

Executive Summary

Delivery of the National Waste Strategy is dependent on the formulation of an Area Waste Plan for each of the 11 Waste Strategy Areas. Together, they will provide a coherent and integrated strategy for dealing with Scotland's waste in the long term. SEPA has facilitated the formation and interaction of each of the Waste Strategy Area Groups (WSAG) which have brought these plans into being, to address the issues of waste management at a local level.

The Glasgow & Clyde Valley WSAG has prepared this draft plan for consultation, following nationally determined guidance¹. The process has been a consultative and consensual one, with aspirations to embrace the opinions of all stakeholders - local people, businesses and organisations. The content of the draft AWP has been specifically informed from feedback received to the public consultation Issues Paper on options for the future management of the areas waste. (A copy of the report of consultation can be obtained from SEPA on request). Additionally, all criteria have been given equal importance in assessment of the waste management options. These criteria are - environmental, economic, social and financial.

Whilst all waste streams are considered in the Area Waste Plan, this draft Plan focuses on Municipal Solid Waste (MSW). Other wastes, such as industrial and special waste, are not considered in detail due to a lack of comprehensive data on these wastes. Further work will be required to develop waste management options for these wastes, once quantification and analyses have been completed. SEPA has initiated a number of priority waste stream projects and now has a formal Data Strategy to gather and analyse the data required.

The concept and methodology of choosing the Best Practicable Environmental Option (BPEO) for waste management has been introduced in the process.² This has recommended a flexible framework to manage waste until 2020. In order to deliver the BPEO a staged approach is necessary, primarily because of the timescale involved and the changes which will take place in technology and legislation during this period.

One of the issues, which must be considered, is the Landfill Directive, which requires an incremental diversion of biodegradable municipal solid waste from landfill. The target years set in the directive are 2006, 2009 and 2016. However, the UK is likely to take a 4 year derogation on these targets making them 2010, 2013 and 2020. This first Plan focuses primarily on 2010, the first target year, and outlines the BPEO in some detail. However, the situation beyond 2010 is also addressed, albeit in more general terms, in recognition of the fact that a short term solution to 2010 only would probably result in the failure to meet future Directive targets.

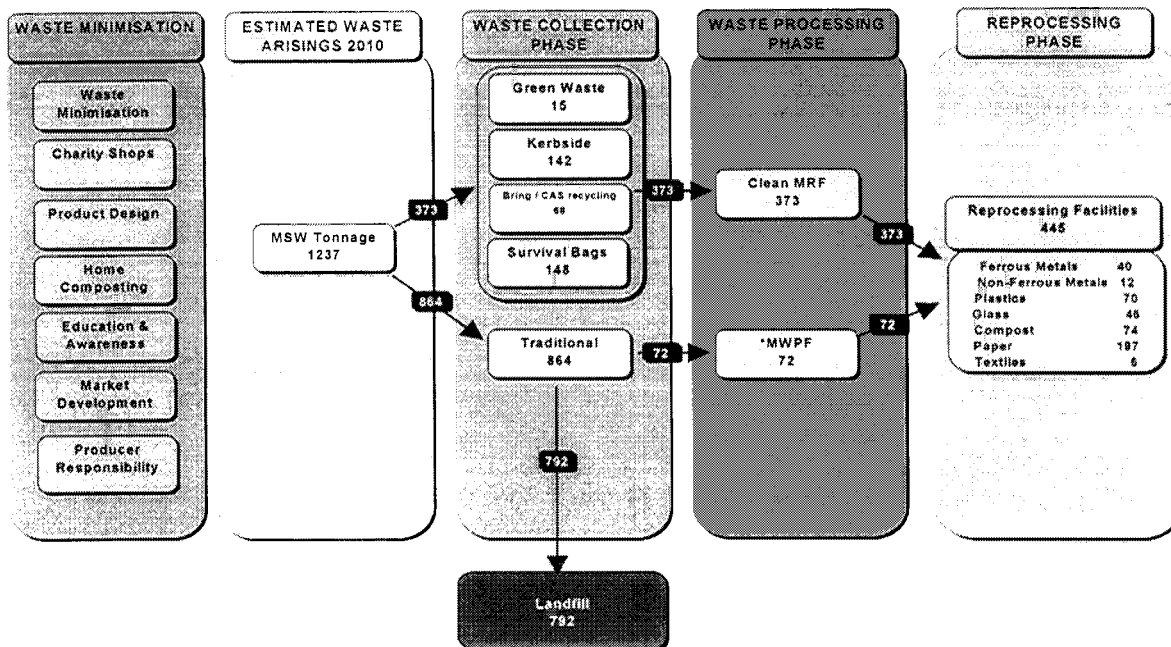
Description of BPEO

The following schematic outlines the framework to be used to meet the objective for the diversion of MSW from landfill for the Glasgow and Clyde valley Area. This BPEO was developed by the waste strategy area group over a period of eighteen months of workshops, option appraisal and feedback from a public consultation Issues Paper.

1 AWP Guide

2 BPEO Guide

SCHEMATIC OF WASTE MANAGEMENT OPTION FOR MSW 2010



The main components of the framework are as follows -

- **Waste Minimisation:** waste reduction is central to any sustainable option. Waste minimisation at source prevents the wastage of raw materials and the consequent environmental and financial burdens. Failure to arrest the predicted growth of waste will lead to an **additional** financial burden for Local Authorities, which is estimated at £16 million per annum by 2010 (at current costs). Success in waste minimisation will rely significantly on awareness and education initiatives referred to in the Action points noted in this AWP.
- **Traditional & source segregated waste collection, also incorporating "Survival bags",** with waste being transported to Materials Recovery Facilities.
- **Clean Materials Recovery Facility,** where the waste is sorted for sending to reprocessors for recycling.
- **Mixed Waste Processing Facility,** where the waste is pre-treated, then sorted for recycling, composting or for use as a refuse derived fuel (RDF).
- **Compost Facilities,** where source segregated biodegradable wastes, plus the input from MWPFs are treated to stabilise the biodegradable fraction.
- **Landfill Sites,** for direct disposal of mixed wastes and for residue from the above facilities.

Other appropriate waste recovery technologies may require to be integrated into this framework after 2010 to enable the diversion targets to 2013 and 2020 to be successfully achieved. These technologies include processes such as thermal treatment, anaerobic digestion, autoclaving, and other emerging waste treatment technologies. These technologies will be assessed for suitability by the WSAG and a decision taken by 2006.

Required Facilities

During the option development stage of AWP preparation it was necessary to indicate how specific waste arisings would be diverted from landfill. The diversion of large quantities of waste requires both the use of existing infrastructure and a requirement for new facilities. The need for new facilities was also an important element in the calculation of costs in delivering the BPEO. The list of waste management facilities below is **indicative only, as contractual arrangements between local authorities and the waste management industry may require fewer larger, or more smaller scale facilities to achieve the same diversion targets.**

The list below provides an **indication** of facilities required to implement the AWP BPEO. This list of **indicative** facilities was arrived at through use of economic data on the capital costs for specific types of waste management infrastructure. This data, used to provide estimated costs for the AWP, allowed an **estimate** of the number of facilities required to deal with the tonnage's identified for each treatment method.

- 4 Waste Processing Facilities;
- 2 Material Recovery Facilities;
- 4 Indoor Windrow Composters.

Note: This list excludes the need for possible additional transfer stations and reprocessors. The list also excludes the need for expansion of the current network of bring sites across the WSA and the need for continued landfill capacity within the WSA. As noted above, other appropriate waste recovery technologies, both current and emerging, will be

assessed by the WSAG and a decision taken by 2006. Dependant upon need, this may result in additional treatment facilities being required in the area by 2013.

As the Options emerge for management of other waste streams, the capacity of these facilities may need to be varied.

Diversion of Waste from Landfill

Despite the target dates for diversion of MSW from landfill being staged from 2010 to 2020, the overall scale of the task ahead should not be underestimated. Within the next 18 years it is hoped that we can move from current reliance on 96% landfill disposal, to only 25% of waste going to landfill by 2020. In tonnage terms this represents approximately 650,000 tonnes of biodegradable waste being diverted from landfill across the waste strategy area by 2020.

The following tables and charts outline the objectives of the BPEO with respect to waste diversion for the target years 2010, 2013 and 2020. The proportion of waste diverted to each treatment method is also outlined, as are the diversion targets for each target year.

Summary Table

Year	Estimated Target (Tonnes)	Estimate Achievement (tonnes)
2010	300,000	351,000
2013	470,000	485,000
2020	609,600	650,000

Objective 2010

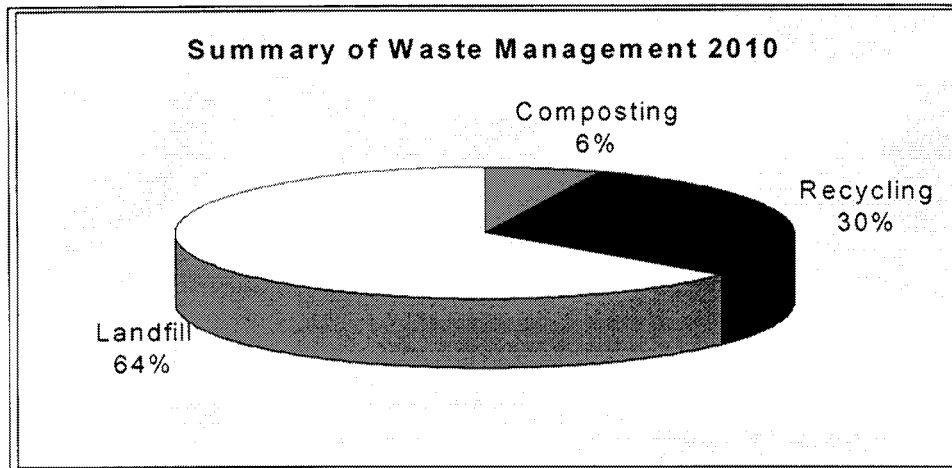
Projected MSW Arisings - 1,237,000 tonnes per annum (2% growth per annum from 1998)

Waste Treatment Methods

- Composting: *increased from 0.2% (1998) to 6%* = 74,220 tonnes
- Recycling: *increased from 3.8% (1998) to 30%* = 371,100 tonnes
- Landfill: *decreased from 96% (1998) to 64%* = 791,680 tonnes

Diversion of Biodegradable MSW from Landfill

- Estimated Target = 300,000 tonnes
- Estimate Achievement = 351,000 tonnes (of the total 445,320 tonnes MSW diverted)



Note (1): All tonnages are indicative and apply across the waste strategy area. They are intended as a guide rather than rigid targets. Individual Local Authorities may have a different mix of treatments to achieve the overall diversions.

Objective 2013

Projected MSW Arisings - 1,274,000 tonnes per annum (1% growth per annum from 2010)

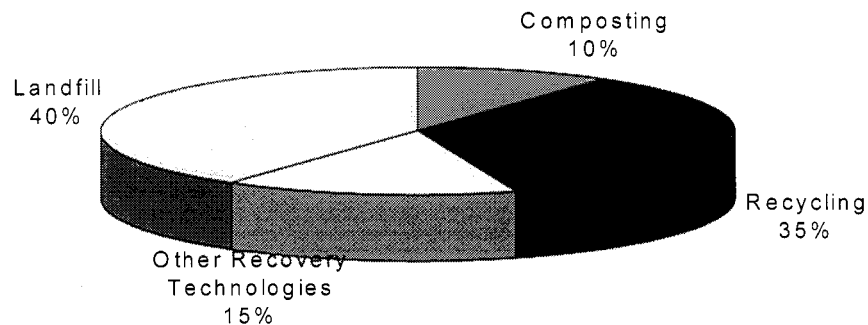
Waste Treatment Methods

- Composting: *increased from 6% (2010) to 10% =* 127,400 tonnes
- Recycling: *increased from 30% (2010) to 35% =* 445,900 tonnes
- Other Recovery Technologies : *15%, increased from 0% (2010) =* 191,100 tonnes
- Landfill: *decrease from 64% (2010) to 40 % =* 509,600 tonnes

Diversion of Biodegradable MSW

- Estimated Target = 470,000 tonnes
- Estimate Achievement = 484,664 tonnes (of the total 764,400 tonnes MSW diverted)

Summary of Waste Management 2013



Note (1): All tonnages are indicative and apply across the waste strategy area. They are intended as a guide rather than rigid targets. Individual Local Authorities may have a different mix of treatments to achieve the overall diversions.

Note (2): If required, other appropriate waste recovery technologies will be utilised after 2010 to enable the 2013 and 2020 diversion targets to be successfully met. These technologies include processes such as thermal treatment, anaerobic digestion, autoclaving, and other emerging waste treatment technologies. These technologies will be assessed for suitability by the WSAG and a decision taken by 2006. It should be noted that should recycling and composting activities surpass the percentages shown above, the need for additional technologies will be decreased accordingly. However, should monitoring of the plan indicate that recycling and composting rates will not be sufficient to meet diversion targets, then other appropriate waste recovery technologies will have to be used to meet the shortfall.

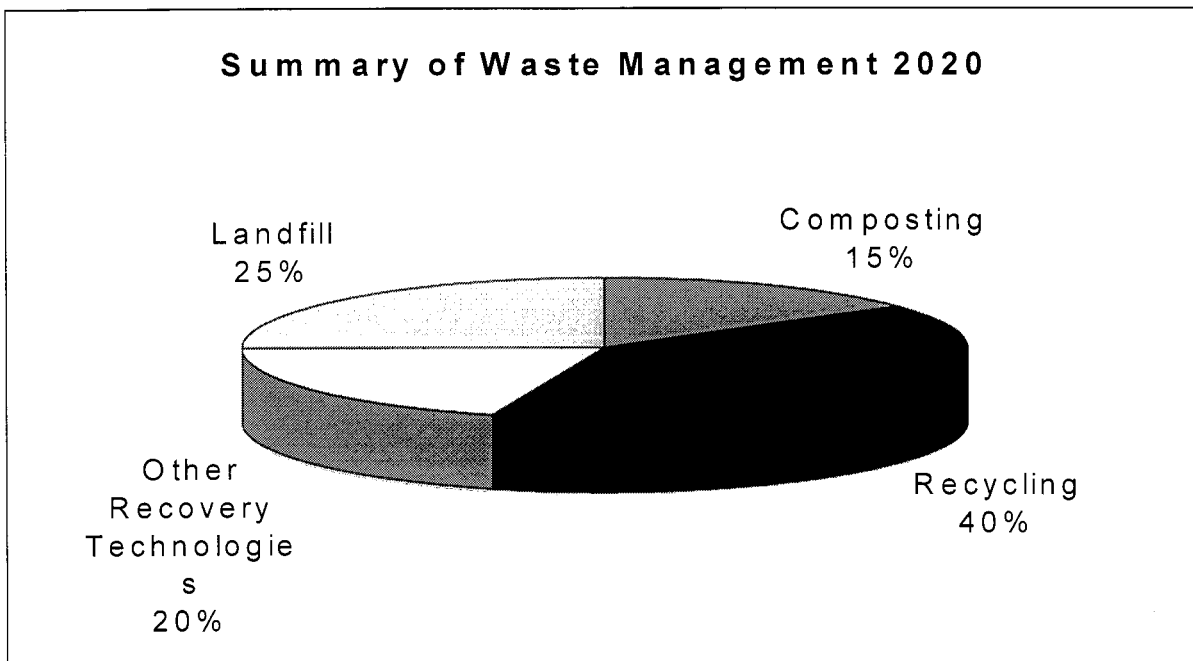
Projected MSW Arisings - 1,366,000 tonnes per annum (1% growth per annum from 2013)

Waste Treatment Methods

- Composting: *increased from 10% (2013) to 15% =* 204,900 tonnes
- Recycling: *increased from 35% (2013) to 40% =* 546,400 tonnes
- Other Recovery Technologies: *increased from 15% (2013) to 20% =* 273,200 tonnes
- Landfill: *decrease from 40% (2013) to 25% =* 341,500 tonnes

Diversion of Biodegradable MSW

- Estimated Target = 609,600 tonnes
- Estimate Achievement = 650,000 tonnes (of the total 1,024,500 tonnes MSW diverted)



Note (1): All tonnages are indicative and apply across the waste strategy area. They are intended as a guide rather than rigid targets. Individual Local Authorities may have a different mix of treatments to achieve the overall diversions.

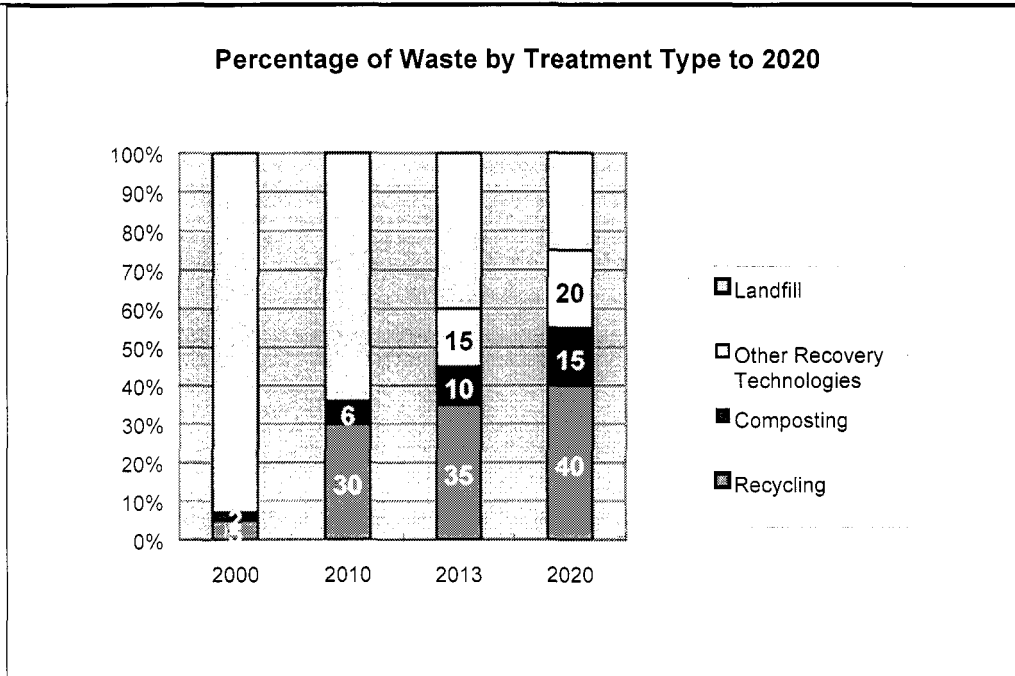
Note (2): As by 2013, other appropriate waste recovery technologies will be utilised after 2010 if required. These technologies include processes such as thermal treatment, anaerobic digestion, autoclaving, and other emerging waste treatment technologies. These technologies will be assessed for suitability by the WSAG and a decision taken by 2006. However, should recycling and composting activities surpass the percentages shown above, then the need for additional technologies will be decreased accordingly. However, should monitoring of the plan indicate that recycling and composting rates will not be sufficient to meet diversion targets, then other appropriate waste recovery technologies will have to be used to meet the shortfall.

Indicators

To ensure that the objectives for 2010 will be achieved, the Waste Strategy Area Group will need to periodically review progress. An Annual Report will be produced to record and disseminate information on progress made and the Plan itself will be reviewed on a five yearly basis.

While the Waste Strategy Area Group was reluctant to impose fixed targets without a national framework to follow, it was acknowledged that monitoring and review is required, giving an indication of progress. This principle of monitoring and continuous improvement is central to good management.

The graph below gives an indication of the stages to be reached to ensure that the waste diversion objectives of the AWP are met on time. These are consistent with the charts shown on previous pages.



The Way Forward

The Plan outlines the framework required to move from the current practices of Waste Management to an integrated system, which will shift the emphasis towards Resource Management. The use of these resources should bring about economic, environmental and social benefits, through the elements of value recovery - recycling, composting and energy production. The magnitude of this change is very substantial. All sectors of industry and society will have to play a significant part, from waste reduction to the efficient operation of the waste management facilities. This framework provides guidelines within which change can be effected and progress can be monitored.

Next Steps

There are a number of important tasks to be taken forward following the publication of the Area Waste Plan for the Glasgow and Clyde Valley Area. These actions will assist the delivery of an integrated and sustainable waste management system:

- Clearly define the future role of the Waste Strategy Area Group;
- Monitor the implementation of the Area Waste Plan;
- Mandate and integrate the Area Waste Plan;
- Take forward specific actions from the Area Waste Plan.

The Issue of integration of the BPEOs of the eleven AWP's is an essential step to ensure that, collectively, the AWP's meet national landfill Diversion targets and that individual BPEO decisions, and the infrastructure needed to deliver them, do not undermine the actions proposed in other WSAs. SEPA WSACs are examining this issue in detail. As each BPEO decision is reached it will be assessed as to its effect upon other WSAs. The integration exercise will be undertaken to the following methodology;

- examining links and consideration of the impact of BPEO decisions in neighbouring WSAs
- assessing nationally significant development proposals arising or proposed in other WSAs
- application of the proximity test, regional self-sufficiency, import / export issues.

Future Role of Waste Strategy Area Group

The Waste Strategy Area Group and local Waste Producers and Waste Industry Fora will be maintained as the focal point for the development of the Area Waste Plan. The partnerships developed in these groups and associated fora provide a long term development resource and a way of developing expertise on a wide range of issues relating to the development of the National Waste Strategy: Scotland.

Waste Strategy Area Co-ordinators will provide ongoing facilitation and co-ordination to ensure that the range of national projects related to the National Waste Strategy are integrated into the Area Waste Plan. Waste Strategy Area Co-ordinators will also be responsible for co-ordinating the Waste Strategy Area Group and for reporting on the annual progress of Area Waste Plan development.

The WSAG will meet after publication of the AWP. Each member has a responsibility both individually and collectively to play their part in implementing the plan. Future tasks for the Group include:

- implementation of the AWP BPEO;
- implementation of actions in AWP;
- monitoring and review implementation of the AWP;
- monitoring and assist with preparation of bids to the Scottish Executives Strategic Waste Management Fund;
- monitor and provide guidance on development applications for significant waste management infrastructure;
- support the continuation of local fora to ensure future development of the AWP;
- implement outcomes of consultation on draft AWP; and
- formation of a parallel group, to address Commercial and Industrial wastes.

The WSAG must have both the expertise and authority to deliver on the agreed Actions. To ensure this is possible the following action must be investigated as a matter of priority;