

PART 2
PRESENT POSITION

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5. PROGRESS ON THE OBJECTIVES OF 2000 PLAN

The following sections provide a summary of the actions detailed in the Waste Plan of 2000 and assesses the progress made on meeting the objectives of that plan. Items in italics are quotes directly from the Waste Plan of 2000.

5.1 SHORT TERM OBJECTIVE (1 - 3 YEARS)

5.1.1 Protecting Landfill Void Capacity

Action 1

Donegal County Council will take action through the following steps in order to protect and extend the existing void capacity until 2005.

- *Install treatment plant in Drumabodan by end of June, 2000;*

A Puraflow treatment system has been installed at Drumabodan landfill site. Leachate collected around the boundary of the facility is pumped to this treatment system prior to discharge. This system will be maintained at the facility as part of the restoration and aftercare at the site.

- *End the agreement to take waste from County Sligo on 1st September 2000;*

Ballynacarrick no longer accepts waste from Co Sligo. Waste is only accepted from permitted waste collectors within the County.

- *Increase landfill gate fees to compensate for the loss of revenue from County Sligo and to reflect the true costs of operation and site closure, in line with the "Polluters Pays Principle";*

The current charge per tonne at Ballynacarrick Landfill is €137.50 including the landfill levy. This cost reflects the overall need for waste related services offered by the council.

- *Review all licence applications with the EPA to establish if the life of our existing landfills can be extended to 2005, as follows:- Muckish, Glenalla, Balbane & Ballynacarrick .*

Only Ballynacarrick and Balbane were licensed by the EPA to continue to accept waste. The other remaining landfill sites (4 in total) in the county were licensed for restoration. Currently there is only one operational landfill site within the County (Ballynacarrick). A waste licence review was undertaken for this site in 2003 for an extension to the facility which was granted in December 2004.

5.1.2 Establish Accurate Data Base

Action 1

Donegal County Council will, in order to obtain accurate waste data, implement a rolling programme of weighing waste inputs to Council landfill sites through the use of a portable weighbridge with the intention of upgrading to permanent weighbridges as new facilities are established.

There has been some improvement in the collection of waste data within the county through the installation of weighbridges at landfill facilities and through the waste collection and waste facility permitting.

However some waste streams still require extrapolation from sources such as the Central Statistics office and EPA Guidance for waste generation as per head of capital.

Action 2

Donegal County Council will carry out a programme of waste compositional analysis to provide baseline waste compositional data to inform the design and development of waste management systems to meet statutory targets. Priority to be given to urban areas to facilitate the establishment of trial recycling schemes. Waste compositional analysis to include assessment of Household Hazardous Waste component.

No waste compositional analysis/studies have been undertaken in the County since 2000. This will be undertaken in 2006.

5.1.3 Providing Replacement Capacity

Action 1

Donegal County Council will need to act now to provide landfill capacity to replace our existing landfills. County Donegal is rapidly running out of landfill capacity and therefore it is essential that Donegal County Council provides new landfill sites to take current and future waste arisings, irrespective of any other waste management infrastructure being set up.

Landfill capacity has been developed at Ballynacarrick Landfill in the south of the County and based on the projected waste tonnages to landfill over the life of this plan, Ballynacarrick should have sufficient capacity up to the start of 2011.

Action 2

Donegal County Council will carry out a detailed site selection study to identify the most suitable locations for landfill facilities within the County. It is envisaged that the study would seek to identify between 2 and 4 local landfill facilities.

A site selection study for landfills in Donegal was prepared by Donegal County Council and it identified 2 sites in the County. The extension to the site at Ballynacarrick in south Donegal is now operational. Meenaboll was chosen as the second site and an EIS and Waste Licence application was submitted to the relevant Statutory Authorities. A waste licence for the Meenaboll site has been granted by the EPA. A decision to refuse approval of the application for Meenaboll was issued by An Bord Pleanála in January 2006.

5.1.4 Historical Landfill Site

Action 1

Donegal County Council will compile a 'Section 26 Register' based on the methodology outlined in the proposed National Hazardous Waste Management Plan. The process will include a preliminary risk assessment and categorisation by priority.

A Section 26 Register has not been compiled to date for the County. The Minister of the Environment has issued a policy guidance pursuant to section 60 of the Waste Management Act, 1996 (as amended) in which the local authorities are reminded that section 22 of the Waste Management Act requires them to carry out, inter alia, an inventory and risk assessment of all non-licensed closed landfills where disposal or recovery activities have taken place. Local authorities are directed to ensure that this requirement is met in the current review of their Waste Management Plans.

5.2 MEDIUM TERM OBJECTIVE (3 - 7 YEARS)

Legislative and Policy Targets to be met: Recycling of at least 50% of C&D waste by 2003.

The 2004 annual environmental returns state that C&D waste recovery for 2004 was approximately 4,000 tonnes representing a recycling figure of 86%, based on total waste collected by permitted contractors. However this may be an over estimate as there was only a small number of permitted contractors operating in the County, who submitted annual environmental reports.

5.2.1 Participation in Regional Groups

Action 1

Donegal County Council will continue to explore the opportunities presented by involvement in a wider Regional Grouping, including the potential for achieving economies of scale, the development of centralised composting, materials recycling facilities (excluding thermal treatments) and sustainable waste management options.

Donegal County Council are members of the North West Region Waste Management Group, which comprises seven councils from the North West of Northern Ireland and Donegal. The Group procured services for the collection and processing of mixed dry recyclables. This service is currently not being utilised by Donegal Collectors, however this situation will continue to be reviewed.

Action 2

Donegal County Council will pursue a "Parallel Track" approach in conjunction with its involvement in a wider Regional Grouping and will take whatever "stand-alone" actions it deems necessary to promote sustainable waste management practices and enable compliance with policy and legislative targets.

As above.

Action 3

Donegal County Council will seek clarification on the proposed Transfrontier Shipment Regulations on the potential for derogation for the cross-border transfer of waste for disposal.

The transportation of waste across border for disposal is forbidden and waste collection and disposal is now been controlled under the Draft Waste Management (Permit) Regulations, 2005 and the Draft Waste Management (Collection Permit) Regulations, 2005.

5.2.2 Review of Plan Based on Analyses of Data Collected

Action 1

Donegal County Council will review the Waste Management Plan 5 years after the adoption of the Plan, in the light of further information generated as a result of the actions taken in the intervening period.

As previously stated there has been some improvement in the collection of waste data within the County through the installation of weighbridges at landfill facilities and through the waste collection and waste facility permitting. However some waste streams still require extrapolation from sources such as the Central Statistics Office and EPA Guidance for waste generation per head of capital.

5.2.3 Control of Refuse Collection

Action 1

Donegal County Council will ensure that the current collection arrangements are built upon, in order to provide the Council with the appropriate mechanisms to ensure compliance with policy and legislative targets.

Waste collection within the County is now privatised and controlled by Waste Permitting Regulations. The commencement of the introduction of kerbside collection has been rolled out as part of condition of the review of waste collection permits, however it remains a significant impediment that waste collected cannot be directed to specific types of facilities.

5.2.4 Leadership and Guidance

Action 1

Donegal County Council will review its existing purchasing policy with a view to developing a Green Purchasing Policy focusing on stimulating markets for recycled materials.

A Green Purchasing Policy within the council was successfully launched focusing on stimulating markets for recycled materials. All paper purchases are now either from sustainable forests or recycled products. All photocopiers and printers within the print room now have a double sided printing option which is set on default.

Action 2

Donegal County Council will carry out an internal Waste Characterisation Study to provide baseline data for the Internal Waste Reduction Strategy.

A waste characterisation study will be undertaken during the course of the 2006-2010 plan. Discussions have been ongoing as to how the study shall be carried out.

Action 3

Donegal County Council will adopt an Internal Waste Reduction Strategy with a target of reducing internal waste arisings by 15% within 5 years.

Great progress has been made on the Internal Waste Reduction Strategy. Following the introduction of a number of measures, waste going to landfill from Lifford Council Offices alone was reduced by 50%. The same measures were introduced to the regional public service centres as they developed. These measures include the widespread introduction of paper recycling bins and the introduction of reusable envelopes for internal mail. In-house recycling training seminars were held for staff. Many public service centres now have compost bins also.

Action 4

Donegal County Council will build on the current Environmental Education Programme by appointing a permanent Environmental Education Officer to provide guidance and information to householders and local businesses.

A position for a Waste Awareness Officer was created in 2002 and the role includes targeting communities, businesses and schools with a view to raising awareness and further educating on sustainable waste management practices. The Council continues to support and promote the Green-Schools Programme. Ninety six schools in Donegal are registered with the Green Schools programme and are actively working towards becoming a Green School. Thirty two schools have been awarded green flags to date and it is estimated that ten schools will be awarded the flag in 2006. Donegal County Council also supported the development of a waste guide by Eco UNESCO for distribution to all schools.

Other initiatives include

- The Green Piece News page published quarterly in 5 local newspapers, provides important information to the public on waste matters.
- Waste awareness advertising campaign: throughout the year a number of advertising campaigns are targeted at householders, community groups, businesses and industry.
- Community recycling schemes, agricultural battery collection days and spectacle collection facilities in participating optometry outlets.
- Waste Management Presentations to FAS Training Schemes and Worklink Training Centres.

– **Christmas Campaigns**

– Christmas Tree & Cards Recycling

– Promote Waste Prevention and Re-use (Recycling excess waste produced at Christmas, Green Christmas Campaign).

- **Summer Campaign:**
- Anti Litter Campaigns.
- Anti Backyard Burning Campaigns.

- **Recycling:**
- Promotion of new Bring Sites and duty of care for the public when using the sites.
- Home Composting Units (Sale Days & demonstrations).
- New Recycling Centres

Action 5

Donegal County Council will appoint a Recycling and Waste Reduction Officer with responsibility for implementing the waste prevention and recycling elements of the Waste Plan.

A position for a Recycling Officer was created in 2002 to implement recycling facilities within the County. There are currently 57 bring banks within the County and two operational Civic Amenity Sites in Carndonagh and Stranorlar (operational since December 2005). In addition to the existing Civic Amenity Sites, locations for further Civic Amenity Sites have been identified by Donegal County Council and these are at various stages of development as summarised below:

Laghey	-	Construction due to begin early May 2006
Letterkenny	-	Detailed Design completed.
Milford	-	Allocated Funding from DoEHLG
Dungloe	-	Allocated Funding from DoEHLG

Action 6

Donegal County Council will appoint a Waste Regulation Officer to monitor and enforce compliance with waste management legislation, including inter alia, the Packaging Regulations, the forthcoming collection regulations and fly-tipping.

A post for a Waste Regulation Office was created in 2002 with an Assistant Waste Regulation Officer being appointed in 2005. These officers perform a regulatory role through the issuing of waste permits and waste collection permits.

Action 7

Donegal County Council will ensure that the Council's currently operational landfills are licensed and will carry out works as part of an operational/closure programme to ensure that the sites do not pose a threat to the environment of Donegal.

Donegal County Council has undertaken extensive infrastructural works at Ballynacarrick landfill site such as the installation of gas extraction system, leachate extraction system and interim restoration works in order to comply with the Waste Licence. Restoration works have also been completed on two closed landfill sites (Muckish and Glenalla Landfill Sites) with further works on the remaining three closed landfills planned for future years.

5.2.5 Waste Prevention and Recycling

Action 1

Donegal County Council will undertake a programme supplying subsidised home composters to households, with a target of supplying 50% of households with gardens with home composters by 2005. In 2001, 5000 subsidised composters will be supplied to householders at a cost of £10.00 per household. Pilot projects have already taken place on Tory Island, Arranmore Island, and in the Gaeltacht Area.

Donegal County Council has subsidised the provision of some 6,000 home composting bins throughout the County to date. Sale days and demonstrations are held as part of the Waste Awareness Advertising campaign.

Action 2

Donegal County Council will expand the range of materials collected through the recycling point and civic amenity site network to include green wastes, in addition to dry recyclables. The green wastes to be “centrally” composted, and made available to householders for use as an organic fertiliser. The programme of centralised composting is currently being initiated in Letterkenny and will be expanded over the next five years if successful.

Green waste is not collected for recycling at the current Civic Amenity Sites. Facilities are proposed for the collection of green waste at future Civic Amenity Sites.

Action 3

Donegal County Council will undertake further research and consultation in order to implement a system for the collection and management of those Priority Waste Streams for which there is currently a lack of data, or any other waste streams identified as part of the plan preparation process as requiring consideration.

Donegal County Council have provided once off collections for household hazardous wastes through the ChemCar™ and through facilities at Carndonagh Civic Amenity Site (Batteries, Paints, Fluorescent bulbs, WEEE). Donegal County Council also provide collection facilities for small

batteries and fluorescent bulbs in all of the public service centres. Donegal County Council are also implementing the WEEE Regulations to promote the collection of WEEE at retail outlets and civic amenity sites. The transposition of the EU Directive on End of Life Vehicles will also be implemented by the local authority. Currently abandoned ELV's are collected by the council.

Action 4

Donegal County Council will undertake trial kerbside collection schemes in urban areas of Donegal to determine the optimum system for kerbside recycling.

A number of kerbside collections commenced in 2004. This has continued to expand in 2005 with the issuing of new waste collection permits by Donegal County Council.

Action 5

Donegal County Council will expand the number of civic amenity sites and recycling points within Donegal in order to ensure coverage of 80% of the population within 5 years. Initially civic amenity sites will be developed adjacent to all large towns and bring sites will continue to be extended to all areas.

There are currently 57 bring bank centres throughout the County and additional sites are being sourced. At these centres the council provides bring banks for beverage cans, brown/green/clear glass and textiles. Recycling services to include paper, card and plastics have been introduced to selected sites throughout the County.

Donegal County Council has two Civic Amenity Sites in operation in Carndonagh and Stranorlar. These sites offer recycling outlets for metals, electrical goods, wooden goods, batteries, waste oil, fridges, glass, cans and textiles.

In addition to the two existing Civic Amenity Sites, locations for four further Civic Amenity Sites have been identified by Donegal County Council and these are at various stages of development as summarised below:

Laghey	-	Construction due to begin early May 2006
Letterkenny	-	Detailed Design completed.
Milford	-	Allocated Funding from DoEHLG
Dungloe	-	Allocated Funding from DoEHLG

As part of this Plan it is now proposed to provide Civic Amenity sites at Buncrana and at a location in the South West of the County.

Action 6

Donegal County Council will liaise with fluorescent tube recycling companies to provide guidance on the separate collection of fluorescent tubes. Donegal County Council will endeavour to provide collection facilities at all of its recycling points and civic amenity sites for fluorescent tubes. The first of the new civic amenity points will be in Letterkenny, expanding to other areas of Donegal.

The Civic Amenity Sites will provide facilities for the collection of fluorescent tubes. A collection facility for fluorescent tubes is available in-house at each public service centre.

Action 7

Donegal County Council will carry out a comprehensive study to assess the feasibility of establishing a Materials Recovery Facility (MRF) to process recyclable materials from kerbside collection and commercial sources in the context of "stand-alone" and wider Regional options.

A study was carried out to assess the feasibility of establishing a Materials Recovery Facility (MRF). However as Donegal County Council were not in a position to direct waste to the facility due the kerbside collections being operated by the private sector, there was insufficient security of tonnages in Donegal County Council providing such a facility. Small scale MRF's have been developed by the individual waste collectors.

Action 8

Donegal County Council will develop a 3-bin kerbside recycling system based on the source separation of materials by householders. The system will collect dry recyclables and compostable waste for processing at a materials recovery facility (MRF) and centralised composting facilities.

Waste collections within the County are privatised. Some kerbside collections commenced in 2004. 2005 saw the introduction of a more widespread kerbside collection for household dry recyclables (2nd Bin) through the waste permitting process. Further kerbside collection services will be rolled out in 2006 extending to all areas served by waste collectors as a condition of the waste collection permits issued by Donegal County Council. An extensive information and awareness campaign will commence to maximise public participation in these collections.

Donegal County Council has subsidised the provision of some 6,000 home composting bins throughout the County. The roll out of kerbside collection for biodegradable waste (3rd Bin) will commence in 2006.

Action 9

Donegal County Council will ensure the provision of collection facilities for source-separated wastes from commercial and other non-domestic sources such as supermarkets, hotels and institutions.

Companies can choose to become members of Repak or be self regulating through the Local Authority. There are now 107 members of Repak in Donegal, an increase of 88% since the 2000 Waste Management Plan. Repak figures on packaging waste are confidential between the Member Company and Repak. There are no self-regulating companies with Donegal County Council.

Action 10

Donegal County Council will undertake to provide facilities for the collection of household hazardous waste at all civic amenity sites. Donegal County Council will highlight the impacts of hazardous wastes, and in particular household hazardous wastes, as part of its Waste Awareness Campaign and in line with the policies set out in the proposed National Hazardous Waste Management Plan.

Carndonagh and Stranorlar Civic Amenity Sites currently deal with certain streams of household hazardous waste. Currently the Chemcar is hired to deal with household hazardous waste in areas without a Civic Amenity facility.

Battery recycling bins were located at six Super Value Supermarkets in Donegal. These are now located in the Public Service Centres.

5.2.6 Development of infrastructure

Action 1

Donegal County Council will develop a Transfer Station Network where landfill sites are closed and not replaced by new facilities. The facilities will be designed to allow for the development of facilities such as bulking, sorting, recycling and composting of wastes.

A number of small scale privately operated transfer stations have been permitted within the County by Donegal County Council for the transfer of household waste.

Action 2

Donegal County Council will support and facilitate the recycling of Construction and Demolition (C&D) waste through a programme of education, guidance, regulation and information gathering.

Waste permits for the use of C&D waste as infill are now being issued. To date, Donegal County Council have issued 11 waste collection permits (7 of which were issued to Donegal based companies) and 14 waste permits for C&D waste, all of which were issued to Donegal based companies.

Site inspections are now being carried out to ensure compliance with the waste permits and enforcement of the permit conditions is ongoing through the Waste Regulation Officers.

5.3 LONG TERM OBJECTIVES (7 - 15 YEARS)

Legislative and Policy Targets to be met during the Phase

- *Diversion of 50% of overall household waste away from landfill*
- *A minimum 65% reduction in biodegradable wastes consigned to landfill*
- *Development of waste recover facilities employing environmentally beneficial technologies, as an alternative to landfill*
- *Recycling of 35% municipal waste*
- *Recycling at least 50% C&D waste within five year period, with a progressive increase to at least 85% by 2013*

The current recycling rate for household MSW waste is 16%. Donegal Country Council continues to work towards Legislative and Policy Targets.

5.3.1 Development and Operation of an Integrated Waste Management Infrastructure

Action 1

Donegal County Council will develop within a 7-10 year period, an integrated waste management infrastructure capable of reducing reliance on landfill and complying with the legislative and policy targets in accordance with the new Waste Management Plan adopted by the council.

The following infrastructure developments have been undertaken or are planned

Table 5.1 Implementation of recycling and waste management infrastructure within Donegal

Infrastructure	Infrastructure Requirements Identified	Infrastructure Delivered By 2005
Recycling Points	80% coverage	57 in place, providing coverage to all significant centres of population within the County
Civic Amenity Sites Provide facilities for the collection of household hazardous waste.	80% coverage	2 in operation. 1 due for construction, 1 at design stage and two others have recently received funding. Certain hazardous wastes will be collected at Civic Amenity Site. Chemcar service provided, dates and location advertised in local press.
Materials Recovery Facility		Procurement of facilities being advanced in association with the NWRWVG
Waste Transfer Stations		A number of small scale transfer stations have been permitted within the County by Donegal County Council for private waste collectors for the transfer of household waste.
Green Waste Composting	50% of households with gardens to be supplied with home composters	6000 subsidised composters distributed.
Biological Treatment		Two private sector facilities have been permitted.
Thermal Treatment	None	None
Landfill Sites	2 – 4 regional facilities	1 no. landfill currently in operation in the Region. Extensive infrastructure has been installed on this site as per waste license requirements.
Kerbside Collections		Kerbside collection has commenced in 2005 as part of waste permitting regulations.

Action 2

Donegal County Council will continue to promote sustainable Waste Management Policies in respect of reduction, reuse, recycling and composting, and will continue to operate a safe and secure Waste Management Infrastructure, directly or through its agents, in order to meet the requirements of the County and to meet government and EU statutory provisions.

Donegal County Council has undertaken extensive infrastructural works at Ballynacarrick landfill site such as the installation of gas extraction system, leachate extraction system and interim restoration works in order to comply with the Waste Licence. Restoration works has also been completed on two closed landfill sites (Muckish and Glenalla Landfill Sites) with further works on the remaining three closed landfills planned for future years.

Two private organic waste facilities are now in operation in the County. Envirogrind Ltd operate a composting centre in Pettigo and Marine Harvest Ireland operate a facility in Fanad to treat fish wastes from their fish farm. There are proposals for the development of a further four facilities for both aerobic and anaerobic digestion facilities in Donegal. The possibility of a Cross Border Project for anaerobic digestion was investigated between Muff Community Development Co-Op and the Culmore Area Forum.

The following Policy for the recovering costs of recycling have been adopted by the Council

- The County Council should develop, in partnership with the private sector operators, and integrated recycling infrastructure, as well as practices, procedures, and controls, in order to maximise reuse, and recycling of waste, consistent with objectives of its Waste Management Plan
- Investment in recycling and recharging systems will be targeted in such a way as to optimise the contribution of the various elements of the recycling infrastructure, viz., home composting, bring banks, kerbside collection, civic amenity sites.
- Maximum use will be made of grant aid, and in so far as local charges are required to meet costs, the charging systems will respect the “polluter-pays-principle” and “pay-by-use policy” as adopted by the EU and national programme.

6 COMMUNITY BASED WASTE MANAGEMENT

6.1 INTRODUCTION

Community based waste management programmes will be an important tool in delivering waste management in Donegal, particularly in rural areas or areas not served by waste collection services.

Community groups, sporting organisations, educational institutions and local businesses working together on small scale projects could ensure effective waste management at a local level and at the same time promote community awareness and social inclusion.

There has been some progress towards community waste management programmes both through the private sector and in partnership with the local authority. The following is a synopsis of the projects which have been undertaken to date.

6.1.1 Waste Awareness

The Waste Awareness Officer delivers waste management talks to community groups such as ICA Guilds, Women's Networks and environmental committees. Parish Council's are a useful network that are very well supported and attended by the local community. The Waste Awareness Officer has given a number of waste management presentations to a number of Parish Councils.

Waste Management Workshops have and will continue to be held with youth groups and youth leaders. Through the Local Agenda 21 Environmental Partnership Fund Donegal County Council has supported the production of a waste guide aimed at teachers and youth leaders etc. This resource will help teachers and leaders alike to deliver waste workshops in their own classes or groups. These guides will be forwarded to all youth groups and schools in the County.

Youth groups will also have the opportunity of having the Waste Awareness Officer give a talk to their groups, while also encouraging involvement in the Race Against Waste 360 degrees. This programme is aimed at Youth Clubs and Sports Clubs making a change to the way they deal with waste in the club. This will have an impact on the behaviour of children and teenagers during their involvement in extra curricular activities along with education at school and reducing, reusing and recycling at home.

6.1.2 Tidy Town Competition

The Tidy Town network is a long serving well established ambassador for the environment. The Race Against Waste campaign have tapped into this network and in 2004 a Race Against Waste module was introduced to the competition on a pilot basis. As the pilot was a success with over 100 towns

entering this part of the competition this module has now become part of the formal criteria of the National Tidy Towns Competition. Letterkenny and Malin were highly commended in the 2004 competition.

6.1.3 Agricultural Programmes

A trial on the collection of waste agricultural batteries was run through Livestock Marts and Co-ops under direction from Donegal County Council as part of a national campaign. Milford Livestock Mart was selected for the trial and proved very successful collecting 3,262 kgs of waste agricultural batteries. It is hoped to provide this service on an ongoing basis in the future. A battery collection facility is operating permanently at the Arranmore Co-Op.

Advice and support is provided to the Agricultural sector on an ongoing basis, providing advice on issues such as recycling, farm plastics and backyard burning. The Waste Awareness Officer has also been involved in delivering waste management talks as part of the R.E.P.S training organised by Teagasc. It is intended to formalise this practice and become an important part of the training days.

6.1.4 Collection of spectacles

Vision Aid Overseas is a charity based organisation which provides collection boxes for unwanted spectacles. Donegal County Council have contacted nine opticians in the county to raise awareness of this recycling initiative and too encourage them to facilitate this collection service. The initiative has been taken up by approximately 90% of the outlets contacted.

6.1.5 Charity Shops/Second Hand Shops

There are a number of charity shops across the County such as St. Vincent de Paul which provide outlets for resale and reuse of second hand textiles, some furniture and household goods. Volunteers usually operate the shops, thus supporting community involvement, preventing waste and encouraging reuse and recycling.

6.1.6 Recycling Schemes

Donegal County Council have engaged with community groups to provide recycling initiatives. A recycling scheme has been initiated in the Ballyraine Training Centre on waste segregation and recycling for the centre and neighbouring centres in the area. The Council has also been involved in back to work schemes, whereby the running of local bottle bank facilities in Letterkenny have been supported by those in sheltered positions. This not only allows efficient running of the sites, but also creates awareness and promotes community based work initiatives.

6.1.7 Cross Border Initiatives

The Waste Awareness Officer has established links with The Source in Derry. The Source collects waste materials such as fabrics, buttons, plastic, card, foam etc from industry and makes these materials available to organisations concerned with children's creative play and arts. A number of schools, youth groups and community groups in Donegal are members of The Source, therefore they can avail of as much materials as they want to use in Arts and Crafts. The Source also provides workshops for teachers and group leaders on how to make creations from waste. Cross Border competitions have been organised with The Source and schools in Donegal.

6.1.8 Alternative Technologies

Showcase wood burners have been installed in Glenties and Inishowen with a view to encourage others. These provide an alternative fuel to oil.

6.2 PROPOSED COMMUNITY BASED MANAGEMENT PROGRAMMES

There are a number of proposals relating to waste management currently being developed through community groups in the county.

6.2.1 Development of Waste Collection Facilities

An initiative has been undertaken by Donegal County Development Board (C.D.B.) through the Gaeltacht Forum to develop a strategy for community groups to become involved in recycling projects in their local areas. Research was undertaken to examine the possibilities of community and voluntary groups in the Donegal Gaeltacht becoming involved in recycling initiatives in their own localities in conjunction with the Local Authority.

The study (**Exploring the possibilities for the community and voluntary sector in the Donegal Gaeltacht completed in 2005**) has shown that there is significant potential in the sector and the community throughout the Gaeltacht have a need and active interest in participating in this in a range of ways. Some possible projects identified are as follows:

- In Ghaoth Dobhair it would be intended to develop a "one stop shop" collection system for people in the areas with no refuse collection while at the same time developing a collection point for waste household electrics in the area.
- On Tory Island it would be intended to develop a waste management system, which would see the compacting of paper and cardboard, and the crushing of glass for use in drainage and bases for the redevelopment of the roads on the island.

- In Glencolmcille a complete waste separation system for the area is being discussed and ideas on its development are taking place to establish best practice for this system.
- In Radharc na Mara housing estate in Downings a complete waste separation system with composting being available is being developed. It is intended to initiate this project as planning permission will not be required during the pilot stage of the project.
- In Kilcar, the parish council are in the process of identifying a suitable site for a pilot project and the development of a waste management system for the parish.
- In the Day Care Centre in Fanad a wood chip heating system is being devised to reduce the cost of heating for the Day Care Centre and the Sheltered Housing on the site using as much waste wood as is possible in the process.

The report recommended the following:

- Donegal County Development Board (CDB) would examine through the Environmental Sectoral Forum the proposals contained in this report and recommend they be developed to include community involvement in recycling initiatives.
- Donegal County Council employ an officer with the intention of assisting community and development groups in the county to organise and develop a community recycling initiatives in their own localities.
- Donegal County Council to assist community groups with the planning, licensing and insurance applications issues that will arise in the future.
- Donegal CDB and Forum Pobail na Gaeltachta, in conjunction with other relevant agencies, would investigate the funding issues with regard to local recycling initiatives
- Donegal CDB would examine how the pilot projects could be sustained in the long term and become models of best practice in the community recycling initiative. Donegal is well place to develop community-recycling initiatives and to get all of the funding agencies involved in their development.
- Fóram na Gaeltachta to assess the development of the pilot projects and inform the County Forum and the Gaeltacht Communities of their establishment and development.

Progress in this area as per the report are as follows:

- In Gweedore the Co-op is in the process of making a planning application to Donegal County Council. Discussions have taken place between the Co-op and relevant organisations with regard to site establishment and the funding requirements for the development of a community recycling facility in Gweedore.
- On Tory, the Co-op has made contact with the relevant people in Donegal County Council with regard to site identification and transfer of same to the Co-op for the planning and licence application.

- Roinn na Gaeltachta has been approached in an informal basis with regard to funding for this initiative. The initial request has been seen in a favourable light and could lead to a full application for funding being processed and forwarded to the Department.
- In Glencolmcille, the introduction of the 5-year plan for the area has introduced the concept of waste management and the Parish Council, in conjunction with Donegal County Council will complete site identification and the necessary permissions will be requested on completion of this task. The Parish Council are in the process of organising a field trip to view other recycling centres on the Arran Islands and in Clifden in Galway and this will lead to the establishment of the plan for the Glencolmcille area in the future.
- In Radharc na Mara housing estate in Downings no planning application will be required as there will be 5 or less jumbo bins used in the pilot stage of the project. The committee will begin the process of developing the system for the housing estate in the early part of September on a six month trial period in conjunction with Rosguill Waste Collectors. The project will establish how much waste from the household waste stream can be re-directed away from landfill.
- In Kilcar, site identification has been completed and the Parish Council hope to be in a position to complete a waste collection point for household goods e.g. furniture/electrics etc as soon as possible, with planning and licence application to take place soon. Discussions are at an early stage with regard to the site but it is hoped to complete these as soon as possible and bring the project to a starting point within a 3-month time frame. Discussions with regard to funding have not been discussed at this stage but it is hoped that Údarás na Gaeltachta, Roinn na Gaeltachta and/or Donegal County Council will be in a position to assist with this.
- The energy requirements for the Fanad Day Care Centre are being established at the moment and on completion the results will allow for the necessary instillation to be established and the project brought to a funding level. It is hoped funding would be available from the Department of the Environment, Heritage and Local Government to assist with the development of this project.

Donegal County Council are working with Tory Island Co-op regarding the introduction of a waste compactor and glass crusher on the island to promote reuse of recycled material. An awareness campaign is also being carried out on Aranmore regarding illegal dumping and correct waste management practices. It is also hoped to learn from other island communities, where successful waste management initiatives have been introduced.

6.2.2 Alternative Energy Technologies

A number of alternative energy projects have been proposed and are currently undergoing cost analysis. These are mainly based on wood to energy projects and include installation of the technologies in a secondary school, day care centre, public service centre and development of a CHP plant in Donegal.

6.3 FUTURE COMMUNITY WASTE MANAGEMENT

Voluntary and community groups can play an important role in delivering good waste management in the community. There are a number of different schemes in which community groups can work with the Local Authorities (in particular Waste Awareness Officer) and other national bodies (e.g. An Taisce, Duchas,) to improve waste management in their local environment. These groups can also apply for funding for such programmes. Schemes include:

- Tidy Towns Competition
- Adopt a Bring Bank Scheme
- Spring Clean Month
- Clean up Collection Campaigns
- Christmas Tree Recycling Campaign
- Local Agenda 21 Environmental Partnership Fund
- Leader Funding

Other options for improving waste management at a local level include involving local sporting organisations and religious institutions, particularly in terms of waste collection in rural areas, whereby a local organisation could provide a facility for the collection of waste. The Local Authority should engage with these organisations in order to determine if a facility could be provided. This may require deregulation from government, however this is matter which the Council would support and would also further promote waste awareness and community involvement.

The development of a waste collection system based on group water schemes should also be investigated. Group schemes are often found in rural areas, outside of the scope of the urban mains system. Since waste collection services in rural areas are limited, the development of a waste collection group scheme may be a method of providing such a service. This could involve the development of a central waste collection facility, operated and managed by the community, whereby a waste collector will collect the waste on a specified day.

7. CURRENT WASTE GENERATION

7.1 INTRODUCTION

The waste quantities in the 2000 plan were based on the best available data from 1998. Since then the reporting mechanisms for waste data have improved. However there remains a lack of consistency in the data.

Since the 2000 waste management plan, waste generation in Donegal has increased. These quantities are based on annual environmental reports from waste collectors and licensed facilities, namely Ballynacarrick landfill site, and Local Authority (EPA) National Waste Database (NWD) Returns 2004. Table 7.1 lists the main waste categories and corresponding quantities in Donegal for 2004.

Table 7.1 Quantities of Waste Generated in Donegal in 2004

Waste Type	Quantity (tonnes)	Source of data
Household Waste Collected	21,204	NWD 2004(Figure Corrected)
Household waste Delivered to CA Sites/Chemcar	402	NWD 2004
Household waste Delivered to Bring Banks	3,643	NWD 2004
Estimated Uncollected Household Waste	19,967	NWD 2004 (Figure Corrected)
Commercial Waste (Disposed and Recovered)	30,084	NWD 2004 (Figure Corrected)
Street Cleanings	1,013	NWD 2004
Industrial Waste	109,617	LA AERs
Waste Water Treatment Sludges	8,936	NWD 2004
Water Treatment Sludge	821.25	tDS, Local Authority
Tyres	92	NWD 2004
Contaminated soil	No Data	NWD 2004
Construction and demolition waste	140,785	Estimate based on NCDWC information
Mining & Quarrying Waste	No data	
Hazardous Waste*	1,488	NWD 2004, C1Forms
Hazardous Healthcare Waste	292	NWD 2004, C1Forms
Spent Mushroom Compost	6,750	Estimated on information provided by Teagasc
Agricultural Wastes	1,062,038 (wet weight) 95,929 (dry solids)	Estimated on information provided from Teagasc, EPA NWD 2001, CSO Agricultural Data. Figure includes Spent Mushroom Compost and Farm Films.
Ash/Incineration Residue	Not applicable	

* Includes hazardous healthcare waste

7.2 MIXED MUNICIPAL WASTE

Municipal waste is defined as: waste from households, and other waste that, because of its nature or composition, is similar to waste from households. It therefore includes waste from households, commercial premises, offices, institutions, and some of the waste generated on industrial premises, such as from canteens. In the Republic of Ireland municipal waste is reported on this basis, and therefore includes waste from a range of sources.

Municipal waste, and particularly its biodegradable fraction, is a key indicator of waste management performance given its relationship to landfill diversion targets under the Landfill Directive (1999/31/EC).

Table 7.2 shows quantity and categories of Mixed Municipal waste arising in Donegal in 2004. The mixed municipal waste consists of material collected from commercial premises and households.

Table 7.2 Mixed Municipal Waste Arising in Donegal in 2004.

Waste Source	Tonnage Breakdown	Tonnage
Household Waste		
Household Waste Collected	21,204	
Household Waste Recycled(CA Site Bring Banks, Chemcar)	4,045	
Household Waste Uncollected	19,967	
Home Compost	1,200	
Total Household Waste		46,416
Commercial Waste		
Commercial Waste Collected	14,617	
Commercial waste Recovered	15,467	
Total Commercial Waste		30,084
Litter and Street Sweepings		1,013
TOTAL MUNICIPAL WASTE		77,513

Source: EPA Data Base Returns 2004, corrected

7.3 HOUSEHOLD WASTE

Approximately 21,204 tonnes of non-hazardous household waste was collected through kerbside in Donegal during 2004, representing a kerbside collection service of 48% of households. All collected household waste was disposed of at Landfill. 1,200 tonnes of waste is estimated to have been composted in the county. 4,045 tonnes of household waste was recovered at Civic Amenity Sites (CAS) and Bring Banks and comprised of paper, card, glass, plastics, textiles, aluminium & steel cans. The quantity of household hazardous waste collected in the County was approximately 150 tonnes. This figure is derived from quantities of household hazardous waste collected at Bring Banks, CAS and the Chemcar. As shown in Table 7.3 hazardous household waste consists of paint, medicines, aerosols, pesticides, fluorescent lamps and batteries.

Table 7.3 Quantities of Household waste recovered at CAS and Bring Banks

Facility	Household Waste Quantity (tonnes)
Bring Bank	3,643
CAS	396
Chemcar	6
Total	4,045

Source: EPA Returns 2004

Using the EPA NWD calculation method, it is estimated that 23,115 households are not served by a collection service in Donegal, amounting to approximately 19,667 tonnes of waste not collected in the county. Donegal County Council recognise that whilst a high proportion of households in the county do not avail of a collection service, it should be recognised that some of these households dispose or recycle their waste at civic amenity sites or go directly to the landfill. In addition, particularly in rural areas, there may be sharing of waste collection services by neighbours to reduce charges. It is therefore likely that the actual quantities being disposed of illegally, backyard burning etc is less than that indicated by the above figures. There is no evidence to suggest that waste is being transported across the border to Northern Ireland or other counties. Further studies are required to determine the accurate situation.

7.4 COMMERCIAL WASTE

Table 7.4 shows the quantities and disposal methods for commercial waste generated in Donegal according to the 2004 NWD. Commercial non-hazardous waste is comprised of dry mixed recyclables, cardboard, wood packaging, paper, plastics, MSW, organic fines, tyres, metals and glass. As the table indicates, approximately 50% of this waste stream was landfilled. Material for recovery is generally exported to Northern Ireland or the UK. Commercial hazardous waste consisted of dry

cleaning materials, photo developing materials, used oil filters, used acid lead, solid oily waste and aluminium cans.

Table 7.4 Collected Commercial Waste in Donegal in 2004

	Collected	Recovered	Total
Commercial Waste	14,617	15,467	30,084
Hazardous Commercial Waste*		679	679

*Included in total commercial waste figure, Source: EPA Returns 2004 Corrected

These figures represent a 275% increase in commercial waste arising and this should be viewed with caution as it is likely that a large volume of industrial waste is being reported as commercial.

7.5 SLUDGES

Sludge waste in Donegal is mainly derived from agriculture, fishing industry, water and wastewater treatment activities. Approximately 8,937 tonnes of waste water sludge were disposed of in 2004 according to the data provided in the NWD 2004 returns.

7.6 LITTER AND STREET SWEEPINGS

Figures for the NWD 2004 show that 1,013 tonnes of litter and street cleaning residue was collected in 2004. This material was disposed at the landfill in Ballynacarrick. This figure also includes illegally dumped waste removed by the Donegal County Council Mobile Litter Unit.

7.7 MINING AND QUARRYING

There are no waste data for mining or quarrying operations in Donegal.

7.8 INDUSTRIAL WASTE

Industrial waste includes waste produced or arising from manufacturing or industrial activities or processes. An estimated 109,617 tonnes of non-hazardous and hazardous waste was collected in Donegal according to the 2004 AERs from private waste collectors permitted by Donegal County Council. Industrial non-hazardous waste comprises of cloths, metals, waste oil, pallets, textiles, and aluminium. A large percentage of the non-hazardous waste arising from two sources concerned with the metal collection. Non-hazardous industrial waste is either recovered or disposed abroad. Hazardous industrial waste is also generated from one major source associated with liquid waste oil. Other wastes include toxic liquids, used oil filters, lead batteries, NiCad batteries, WEEE, lead wastes, organic and inorganic solids. Hazardous waste collected is recovered in Northern Ireland or exported

to mainland Europe. Industrial waste arisings are not required under annual EPA data base reporting. Two major industries have closed in County since 2004.

7.9 AGRICULTURAL WASTE

Table 7.5 lists the estimated agricultural waste arisings in Donegal in 2004. This is based on figures from EPA National Waste Database 2001, 2003, Teagasc and the CSO. Agricultural waste mainly consists of agricultural sludges (manure & slurry), farm plastics and spent mushroom compost.

The Waste Management (Farm Plastics) Regulations 2001 sets out the policy on farm films. Manufacturers and imports of farm plastics must arrange for environmentally acceptable ways of collecting & disposing of used plastic film. The Irish Farm Film Producers Group (IFFPG) set up by the government in 1997 operates a collection scheme to recover farm plastics. In 2005, the budget targets were exceeded in September and therefore farm collections were suspended.

Table 7.5 Estimated Agricultural Waste Arisings in Donegal in 2004

Waste Category	Waste generation ¹	%
	Tonnes wet weight	
Cattle manure and slurry ²	679,656	64
Soiled water (Dairy only)		
Pig slurry	297,120	28
Silage effluent	36,825	3
Poultry litter	1,908	0.2
Sheep manure ³	39,780	4
Spent mushroom compost ⁴	6,750	0.6
Farm Films	250	0.02
Total	1,062,038	100

¹ It is estimated that 55 million tonnes are deposited on the land by grazing animals.

² During the period of 20 weeks when the cattle are housed.

³ Ewes (2 years and over) only housed for 6 weeks, all other sheep kept outdoors all year round.

⁴ Assuming that spent mushroom compost contains 45% dry solids by weight

Source: EPA
NWD 2001, CSO 2002, Teagasc

7.10 HAZARDOUS WASTE

7.10.1 Waste Arising In Donegal

Table 7.6 estimates the total waste arising from hazardous waste generated in Donegal for 2004. These figures are based on EPA estimations and expected population growth of 1.16%. Approximately 1,488 tonnes of hazardous waste was transported out of the county during 2004 based

on C1 consignments. This includes healthcare waste, asbestos, waste oils, WEEE, waste paint materials and waste pharmaceutical products from the commercial and industrial sector.

Table 7.6 Hazardous Waste Generated in Donegal

Year	2002	2003	2004	2005
Population*	137,575	139,171	140,785	142,418
Waste Quantity (Tonnes)**	247.6	250.5	253.4	256.4

*CSO

** Based on 1.8kg per person (EPA, 2001)

7.11 PRIORITY WASTE STREAMS

An EU Resolution in 1990 set out to establish programmes to deal with particular types of waste. The programme on Priority Waste Streams was set up to deal with the following types of waste:

- Tyres
- PCBs
- Waste Oils
- Batteries
- Construction and demolition waste (C&D)
- Healthcare waste
- Packaging and packaging waste
- End of Life Vehicles (ELOVs)
- Electrical & Electronic Waste (WEEE)

7.12 TYRES

Table 7.7 estimates the waste arisings of end of life tyres in Donegal. Actual figures for tyres from Ballynacarrick landfill site Annual Environmental Report totals show that the quantity of end of life tyres was 92 tonnes. However, it is thought that this may be an underestimate as it does not include waste tyres used for other purposes. Under the ELVs Directive, there is now greater requirement to dispose of waste tyres appropriately. The Department of the Environment Heritage and Local Government along with the Irish Tyre Industry Association are currently working on the development of a Producer Responsibility Initiative for waste tyres. Such a scheme may involve increased responsibility to regulate and enforce the scheme and legislation on the part of the Local Authority. In 2005, the Minister directed the Local Authorities to carry out on site inspections of tyre outlets as part of their enforcement plans.

Table 7.7 Estimates of Tyre Waste Arisings in Donegal for 2004

Year*	2004
Population**	140,785
Scrap Tyre***	1,674

* CSO Census 1996 & 2002

**Population increase between 1996-2002 was 5.8%

*** Assuming that all imported tyres are replacement for existing tyres.
Annual Population increase: 1.16%

Table 7.8 Tyre Waste Generated in Donegal 2004

	Landfilled	Recovered	Total
Tyres	61	32	93

Source: EPA Returns 2004

7.13 POLYCHLORINATED BIPHENYLS (PCBs)

PCBs are highly toxic man-made substances that are extremely resistant to biological degradation. PCBs are also subject to provisions in the Management plan for PCBs and in the National Hazardous Waste Management Plan. PCBs were mainly used in electrical equipment. The use of PCBs is now banned, however, waste arisings of PCBs results from decommissioning and decontamination.

All holders of PCBs greater than 5 litres are required by law to notify the EPA of their holdings by 1st September each year.

All known PCB containing equipment have been eliminated from all public and semi state authorities. Although there still may be small amounts in old equipment no data is available for PCBs arising in Donegal.

7.14 WASTE OILS

Waste oils are any mineral based lubrication or industrial oils which have become unfit for the use for which they were originally intended, in particular used combustion engine oils and gearbox oils, as well as mineral lubricating oils, oils for turbines and hydraulic oils (Council Directive 75/439/EEC).

Table 7.09 shows the estimated waste oil arisings for Donegal, being approximately 862 tonnes for 2004.

Table 7.09 Estimated Waste Oil Arisings for Donegal in 2004

	Eire	Donegal
Year	2001	2004
Population*	3,917,203	140,785
Waste Oil Produced (tonnes)***	23,997	862

* CSO Census 1996 & 2002

**Population increase between 1996-2002 was 5.8%

** Estimated at 6.13Kg per person from the EPA National Waste Database 2001

Table 7.10 shows the quantities of waste oil collected in Donegal, totalling 525 tonnes for 2004. Cooking oil collected by Frylite for oil-refining/recycling was the major source of collected oil. The other oils collected resulted from commercial and industrial processes, the majority of which was collected by Atlas Environmental for recovery in Northern Ireland.

Table 7.10 Waste Oils collected in Donegal in 2004

Oil Type	Quantity (tonnes)
Waste Mineral Oil CAS	9
Waste Mineral Oil Commercial	169
Cooking/Vegetable Oils	347
Total	525

Source: EPA Returns 2004

7.15 BATTERIES

Table 7.11 shows a breakdown of batteries collected in Ireland.

Table 7.11 Batteries Collected in Ireland 2001

	Reported	Unreported	Total
Lead Acid Batteries	7,479	7,146	14,625
Small Batteries	120	2,303	2,423
Total Waste Batteries	7,599	9,449	17,048

Source: EPA NWD 2001

Table 7.12 shows the estimated amount of battery waste produced as per EPA NWD 2001.

Table 7.12 Estimated Battery Arisings in Donegal in 2004

	Eire	Donegal
Year	2001	2004
Population	3,917,203	140,785
Battery Waste Produced (tonnes)*	17,048	613

*Battery Waste per Capita = 4.352Kg

Source: EPA NWD 2001

Table 7.13 shows the quantity of battery waste collected in Donegal for 2004 derived from NWD AERs. Batteries are collected at the Civic Amenity Site, by the Chemcar and in various commercial outlets around the County. Waste collectors also collect batteries from industrial activities.

Table 7.13 Batteries collected in Donegal in 2004

Sector	Type	Quantity (tonnes)
Commercial	small batteries	0.2
Commercial	lead acid batteries	60
CAS	small batteries	1
CAS	lead acid batteries	16
Total		77

Source: EPA Returns 2004

7.16 HEALTHCARE WASTE

Healthcare waste arisings result from hospitals, dental practices, clinics, veterinary practices etc. Healthcare waste is both non-hazardous and hazardous. The non-hazardous material consists of packaging waste, kitchen waste etc. The hazardous component of healthcare waste consists of biological, infectious, chemical and toxic wastes. Healthcare hazardous wastes collected in Donegal in 2004 amounted to 292 tonnes. Individual clinics, surgeries, hospitals etc are responsible for organising collection of healthcare waste, which is carried out by specialist private contractors. There are twelve contractors permitted to remove healthcare waste from Donegal.

7.17 CONSTRUCTION AND DEMOLITION (C&D) WASTE

Table 7.14 shows the quantities of the various C&D wastes collected in Donegal. The National Construction and Demolition Waste Council estimates the total C&D waste generated for Irish demolition waste as one tonne per citizen (about 3.65 million tonnes) each year. This would equate to 140,785 tonnes for County Donegal. C&D Waste collected in County Donegal totalled 4,603 tonnes, derived from the AERs. There is a large discrepancy in these figures and the estimate of 140,785 tonnes would appear to be very high. Further investigation into the C&D waste generation in the County will be carried out by Donegal County Council over the period of this Plan. The number of contractors now being permitted under the Waste Collection & Permit Regulations has been increasing recently and this should also make the recording of C&D waste more accurate in the future.

To date, Donegal County Council have issued 11 Waste Collection Permits and 14 Waste Permits since the permitting regulations came into force. Of these, 7 waste collection permits were issued to Donegal based companies and all the waste permits were for C&D sites in the County. These seven sites will accept C&D waste from the industry.

It is possible that much of the C&D waste generated onsite is probably reused on site or at other sites, and therefore contractors are not classifying it as a waste material. However the EPA Report, The Nature and Extent of Unauthorised Waste Activity in Ireland, 2005 reported that management of C&D waste remains a problem with the occurrence of small - scale unauthorised waste sites which are difficult to regulate.

Table 7.14 C&D waste collected in Donegal 2004

Construction and Demolition Waste	Collected	Recovered	Disposed
Soil and stones	3,350	3,350	
Wood	147	147	
Rubble	0	0	
Metal	506	506	
Mixed C&D waste	600		600
TOTAL	4,603	4,003	600

Source: EPA Returns 2004

7.18 PACKAGING WASTE

Waste arising estimates for packaging waste in Donegal are 29,565 tonnes, representing 3.5% of the total packaging waste in the County. Packaging waste is collected by permitted contractors in the County from the commercial, industrial and domestic sectors. The majority of the waste has been from the commercial sector. Household packaging waste may also be classified under mixed municipal waste.

7.19 END OF LIFE VEHICLES (ELV)

ELVs were collected from commercial premises, council yards and private owners. Figures for 2004 from the permitted waste collectors suggest that 104 tonnes of scrap metal was derived directly from ELV. However, this figure may be underestimated as ELV metal may have been included in other categories when annual environmental reports were submitted to Donegal County Council.

Illegally dumped ELV are managed and removed by the Environment Section and Roads Section of County Donegal in some circumstances.

7.20 WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

Figures for quantities of WEEE waste collected for the 2004 year end are given in Table 7.15. These figures are derived from collections at the CAS in Carndonagh.

Table 7.15 WEEE Collection Rates in 2004

Material	Quantity (tonnage)
Fridges	47
Other WEEE	72
Total	119

Source: EPA Returns 2004

Since the introduction of the WEEE Regulations in August 2005, there has been a proactive approach to the collection of WEEE. During the first three months (Aug/Sept/Oct) 24 tonnes of WEEE was collected from Carndonagh CAS and 34 tonnes of WEEE was collected from five retailers, giving a total collection of 58 tonnes of WEEE during this period.

References

EPA (2001). *National Waste Database Report*. EPA Ireland.

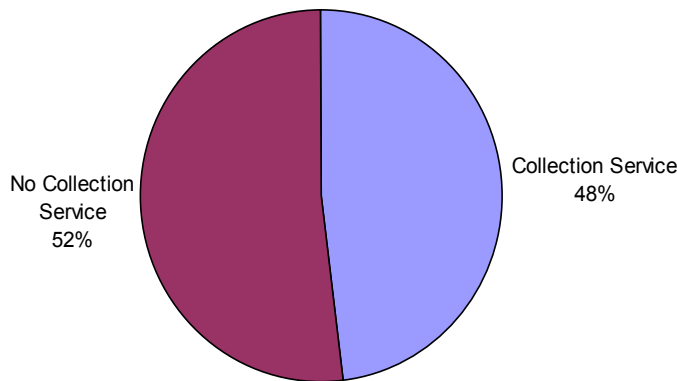
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8 WASTE COLLECTION

8.1 HOUSEHOLD WASTE

Household waste collection is currently provided to approximately 21,598 households in Donegal. The collection service is entirely privatised. Figure 8.1 illustrates the estimated percentage of these households provided with a collection service and provides an indication of the potential scale of environmentally unfriendly household waste disposal.

Figure 8.1 Percentage of Households served with a collection service (EPA Database Returns 2004, Corrected).



8.1.1 Private Waste Collection Services

In Donegal, 48% of households are provided with a collection service by private waste collectors. Householders are provided with a wheelie bin for waste disposal. It should be noted that not all households in the County have access to a collection service, particularly in more rural areas of the County. Considering the fact that a significant number of households are without a collection service, it seems likely that the projected future quantities of municipal waste are an underestimate. As a consequence of this, the capacity requirements should be robust and flexible in order to deal with potential extra tonnages.

Private waste collectors are required to hold waste collection permits issued by the Local Authority and must submit Annual Environmental Reports (AERs) to the Local Authority at the end of each year. All waste collected must be disposed of at a licensed landfill facility. Waste is collected by wheelie bin or bag. A current list of permitted waste collectors is available from the Donegal County Council web site.

Since January 2005 waste collectors in every local authority area have been required to offer a weight or volume-based waste collection service to households. This pay-by-use system is designed to encourage recycling and to reduce the costs of those who reduce, reuse and recycle their waste. Options under the pay-by-use waste charge system include:

1. Pay by weight – wheelie bins are weighed at the collection point by the waste operator with the householder billed for the amount of refuse collected or under an annual fee.
2. Pay by tag – wheelie bins, when full and ready for collection, are tagged with pre-purchased tags by the householder. Waste collectors then service the tagged bins.
3. Pay by bag – refuse bags are tagged with pre-purchased tags by the householder. Waste collectors then service accordingly.

Pre paid tags can be purchased in the public service centres and participating outlets. Charges vary depending on the waste collector and how much waste you leave out for collection.

8.1.2 Mixed Dry Recyclables Household Kerbside Collection

The collection of mixed dry recyclables by way of a kerbside collection is currently being rolled out in the County. Kerbside collection is initially being implemented in urban areas such as Letterkenny but will be extended to all areas served by waste collectors by early 2006. As with waste for disposal, household mixed dry recyclable kerbside collection is based on a weight or volume-based waste collection service to households. In Donegal, the waste collectors are charging as a regular waste customer under annual fee or pay by tag or pay by bag method. Collection of recycling bags is approximately €3.50 per recycling bag and is a lesser charge than regular waste.

8.1.3 Recycling Facilities

There is currently two civic amenity sites operating in the County in Carndonagh and Stranorlar. Two further sites at Laghey and Letterkenny are under construction or at the detailed design stage. Funding for two further sites at Milford and Dungloe has been received from the Department of Environment, Heritage and Local Government (Figure 8.2). The recycling facilities will offer opportunities for a wide range of recyclables to be accepted including glass, aluminium cans, steel cans, paper, textiles, fridges/freezers, other white goods, batteries, plastics, florescent tubes, etc. In addition a key component of the sites will be the facility to accept garden wastes. This may be combined with on site processing capabilities to reduce bulky garden wastes to a higher density prior to transfer to a composting facility.

The civic amenity site in Carndonagh is currently open six days per week and is manned by Local Authority staff. Materials accepted for recycling at the Civic Amenity Site in Carndonagh are given in

Table 8.1. The facility is free of charge for recyclable materials. Household waste can also be deposited at the site for a charge, refuse sacks (€5.50) and car & trailer (€84). Stranorlar Civic Amenity Site is open three days per week and is also manned by Local Authority Staff. Use of the facility is currently free of charge for all wastes, however a charge will be introduced in May 2006 of €5.00 per car and €15.00 per car & trailer and van. WEEE will remain free of charge. Materials accepted for recycling at the Civic Amenity Site in Stranorlar are given in Table 8.2.

Table 8.1 Materials collected for recycling at Carndonagh Civic Amenity Site

Materials Accepted at Carndonagh Civic Amenity Site				
Paper	Glass	WEEE	Aluminium Cans	Metals
Plastics	Fluorescent tubes	Waste Oils	Waste Paint	Furniture
Textiles	Books	Batteries	Cardboard	Bulky goods

Waste License No. 57-1

Table 8.2 Materials collected for recycling at Stranorlar Civic Amenity Site

Materials Accepted at Stranorlar Civic Amenity Site				
Paper	Glass	WEEE	Aluminium Cans	Metals
Plastics	Fluorescent tubes	Waste Oils	Waste Paint	
Textiles	Books	Batteries	Cardboard	

Registration Certification No.R794-2
WEEE Certificate of Registration

8.1.4 Bring Banks

The number of bring banks has increased in the county to 57 in the last five years. The bring banks facilitate the collection of glass, textiles aluminium and metal cans. There are 57 bring bank sites in the County, representing one bring bank per 2,413 of population. The national average is one per 2,315 of population (EPA, 2003). Based on a 5km radius, approximately 85% of the population is served by the bring bank. A summary of the bring bank location is shown in Table 8.3.

Table 8.3 Bring Bank Network

	Town	Glass	Cans	Textile
1	Annagry	√	√	√
2	Ardara	√	√	√
3	Arranmore Island	√	√	√
4	Ballintra	√	√	√
5	Ballyshannon	√	√	√
6	Brocagh	√	√	√
7	Buncrana	√	√	√
8	Bundoran	√	√	√
9	Burnfoot	√	√	
10	Burt	√	√	√
11	Burtonport	√	√	√
12	*Carndonagh	√	√	√
13	Carrick	√	√	√
14	Carrigart	√	√	√
15	Castlefin	√	√	√
16	Churchill	√	√	
17	Clonmany	√	√	√
18	Convoy	√	√	
19	Creeslough	√	√	√
20	Derrybeg	√	√	√
21	Donegal Town	√	√	√
22	Doochary	√	√	
23	Downings	√	√	√
24	Dunfanaghy	√	√	√
25	*Dungloe	√	√	√
26	Dunkineely	√	√	
27	Falcarragh	√	√	
28	Fintown	√	√	√
29	Glencolumbcille	√	√	
30	Glenswilly	√	√	
31	Glenties	√	√	√
32	Gortahork	√	√	√

	Town	Glass	Cans	Textile
33	Greencastle	√	√	√
34	Kerrykeel	√	√	
35	Killea	√	√	
36	*Killybegs	√	√	√
37	Kilmacrennan	√	√	√
38	Letterkenny	√	√	√
39	Letterkenny	√	√	√
40	Lettermacaward	√	√	√
41	Lifford	√	√	√
42	Malin	√	√	√
43	Manorcunningham	√	√	√
44	Milford	√	√	√
45	Moville	√	√	√
46	Muff	√	√	√
47	Newtowncunningham	√	√	√
48	Pettigo	√	√	
49	Portnoo	√	√	√
50	Portsalon	√	√	√
51	Quigleys Point	√	√	
52	Rathmullan	√	√	√
53	Ramelton	√	√	√
54	Raphoe	√	√	√
55	*Stranorlar	√	√	√
56	St Johnston	√	√	√
57	Killygordon			

* Locations also have paper and plastic recycling facilities.

8.1.5 Waste Charges

Since 1 January 2005 use related charges have been introduced to householders across the County through a volume based system. The development of direct user charges was founded in the government policy document 'Preventing and Recycling Waste: Delivering Change' 2002 and aims to encourage waste reduction and recycling.

In Donegal private waste collectors are operating a variety of systems ranging from pay by bag, pay by tag or pay by annual fee. In general waste collectors have the discretion to decide the precise form of system they use, provided that it respects the principle of use based charging. Enforcement of the

particular use related system is the responsibility of Donegal County Council who monitor and regulate collectors through the waste collection permit system.

In 2005, waste charges were based on an annual fixed costs or charged per waste bag (€5.00). Recycling bags have a reduced cost of €3.50 per bag.

8.2 COMMERCIAL WASTE

The private sector collect all industrial and commercial waste generated in Donegal. In 2004, 30,292 tonnes of waste was collected. Cardboard, newspaper and other paper made up the largest proportion of this waste stream.

8.3 INDUSTRIAL WASTE

Industrial waste includes waste produced or arising from manufacturing or industrial activities or processes. An estimated 109,617 tonnes of non-hazardous & hazardous waste was collected in Donegal according to the 2004 AERs from private waste collectors permitted by Donegal County Council. Industrial non-hazardous waste is comprises cloths, metals, waste oil, pallets, textiles, and aluminium. A large percentage of the non-hazardous waste arising from two sources concerned with the metal collection. Non-hazardous industrial waste is either recovered or disposed abroad. Hazardous industrial waste is also generated from one major source associated with liquid waste oil. Other wastes include toxic liquids, used oil filters, lead batteries, NiCad batteries, WEEE, lead wastes, organic and inorganic solids.

8.4 CONSTRUCTION AND DEMOLITION WASTE

Construction and demolition waste comprises mainly bulky, inert materials such as bricks, concrete, tiles, glass, insulation, gypsum, plastics and metals. This waste is significant due to its high recycling potential. The National Waste Policy has the objective of recycling at least 50% of C&D waste within a five year period with a progressive increase to 85% over 15 years. The quantification of this waste stream is difficult at present as much of this waste is used as fill on marginal land or on new sites.

There are a number of private contractors and waste collectors who collect C&D waste in the county. Under the Waste Permit Regulations, contractors are now required to have waste collection permits in order to transport construction waste to and from construction sites. In 2004, 4,603 tonnes of C&D waste was collected in Donegal.

8.5 PRIORITY WASTES

There are no separate waste collection service for hazardous wastes (batteries, paints, waste oils) for householders. Householders are encouraged to use the facilities provided at civic amenity sites and

the Chemcar™ to dispose of hazardous wastes. Collection services for battery waste and ink cartridges are also provided in the public services centres in Lifford, Donegal Town, Letterkenny, Milford and Dungloe. Under the WEEE regulations, householders can now bring WEEE to retail outlets, when purchasing a new item, providing the old item is of a similar size or function to the new item. WEEE will also be accepted at the civic amenity sites free of charge. Also under the WEEE regulations, article 19 (c) each local authority “may designate any premise of a distributor, as a collection point, subject to the agreement of the distributor concerned and, where appropriate, an approved body.” One retailer in Donegal has requested to be listed as a designated collection site. However, this will subject to a permitting application and conditions.

Commercial and industrial hazardous waste is collected by specialist contractors, who usually reside outside the County. All hazardous material transported must be accompanied by a C1 Transfer form, which is issued by the Local Authority.

References

EPA (2004). *National Waste Database 2003 Interim Report*. EPA.Ireland

9. WASTE RECOVERY AND RECYCLING

Donegal County Council has expanded the waste recovery and recycling infrastructure in the County over the past 5 years with further expansion planned in the coming years. The expansions, in the form of Civic Amenity Sites, Bring Banks, permitting for the collection of mixed dry recyclables and organic wastes, will lead to the further increase of recycling and recovery in the household waste stream. However there remains a lack of development in treating key waste fractions such as biodegradable waste.

9.1 HOUSEHOLD RECYCLING RATE

Table 9.1 illustrates the recycling rate of household waste in Donegal. Recycled materials include those collected by the Chemcar, at Bring Banks and at the Civic Amenity Site in Carndonagh. It is estimated that approximately 1,200 tonnes of waste material was also composted by the use of home composting equipment sold by Donegal County Council, but this is not included in the figure for recycling. The recycling rate is calculated at 16.0% and is slightly below the national average of 19.0% as reported by the EPA in the National Waste Report 2004. The waste arisings given in Table 9.1 do not include uncollected waste. If uncollected waste was included in these calculations, the recycling rate would be lower, approximately 8.9 %.

Recycling is increasing but the number of private waste collectors and different recycling collection schemes and increasing charges is limiting household participation and waste recovery. At present there is only limited separate collection schemes of household biodegradable waste in the County. The ambitious targets set out in the EC Landfill Directive requires that this fraction of the household waste stream is recovered.

There is widespread support for recycling in the County as reported during the consultation process. However, the lack of recycling infrastructure at present and the lack of efficient services provided by waste collectors in the County are prohibiting recycling.

Table 9.1 Household Waste Recycling in 2004

Waste Source	Tonnage	
Collected at Bring Banks	3,643	
Collected at Civic Amenity Site	402	
<i>Total Recycled</i>		<i>4,045</i>
Kerbside Collected Waste	21,204	
<i>*Collected Household Waste</i>		<i>25,249</i>
Recycling Rate		16.0%

*Does not include uncollected waste or home composted waste
Source: EPA Returns 2004, updated.

9.2 COMMERCIAL WASTE

Recovery rates in the commercial sector have improved since the 2000 plan, partially due to new legislation and greater enforcement by the EPA and Local Authorities. In particular, the Packaging Regulations 2003 have had a significant impact on recovery rates. Table 9.2 summarises the recycling rate of commercial waste. The recovery rate for the commercial sector is estimated to be 51%. The bulk of recovered commercial material is comprised of cardboard, paper and newspaper. Table 9.3 illustrates the main materials recovered through commercial kerbside recycling in Donegal as reported in the EPA returns 2004. This data have been updated from information provided in National Waste Database Report 2004.

Table 9.2 Commercial Waste Recovery in 2004 (tonnes)

Waste Source	Tonnage
Mixed Commercial Waste	14,617
Commercial waste Recovered	15,467
Total Commercial Waste	30,084
Recovery Rate	51.0%

Source: EPA Returns 2004, updated.

Table 9.3 Materials recovered from Commercial Waste 2004 (tonnes)

Material	Quantity (tonnes)
Cardboard	1,686
Paper	6,678
Glass	47
Other metals	430
Plastic	439
Textiles	29
Wood	35
Small Batteries	0.1
Lead Acid Batteries	60
Waste Mineral Oil	169
Other Waste Oils	347
Lamps	2
Non Hazardous Other	5,445
Hazardous	101
Total	15,467

Source: EPA Returns 2004, updated.

9.3 MUNICIPAL WASTE

Municipal waste refers to household waste, commercial and other waste which because of its nature composition is similar to household waste. Table 9.4 illustrates the overall recovery rate for the County based on the 2004 figures. Total municipal waste arisings includes all collected and uncollected household waste, recycled household waste, all commercial waste, composting material and litter/street sweepings.

Table 9.4 Municipal Waste Recovery Rate 2004 (tonnes)

Waste Source	Tonnage	
Household Waste Recycled	4,045	
Commercial waste Recovered	15,467	
<i>Total Municipal Waste Recovered</i>		19,512
<i>Total Municipal Waste Arising</i>		77,513
Recovery Rate		25.2%

Source: EPA Returns 2004, updated.

9.4 CONSTRUCTION AND DEMOLITION WASTE

Construction and Demolition (C&D) waste has one of the highest potential recovery rates and national targets have been put in place by the industry to reach the full potential of this particular waste stream. There is now formalised reporting on C&D waste through the Waste Permit Regulations and annual environmental reporting mechanisms.

Draft Best Practice Guidelines on the preparation of Waste Management Plans for Construction and Demolition Projects have been produced by DEHLG. These provide guidance on the preparation of construction and demolition waste management plans and provide local authorities, engineers and developers with an agreed basis of the content of C&D was management plans.

Coinciding with these draft guidelines, the National Construction and Demolition Waste Council (NCDWC) launched their voluntary Construction Industry Initiative in October 2004. This initiative places responsibility on each participant in the construction industry to encourage best practice in waste management by promoting waste prevention, reduction and reuse of materials and recycling in order to achieve targets as set out by the Minister for Environment, Heritage and Local Government in the Policy Document 'Changing Our Ways' which has committed to a 50% recycling target by 2003 and a progressive increase to 85% by 2013.

The planning system therefore should support the design and construction of buildings to incorporate recovery and recycling.

Table 9.5 shows estimates for waste arising from C&D activities for 2004. These figures are based on estimates from the EPA and NCDWC. Table 9.6 shows the actual amount of C&D waste collected in the county from permitted contractors according to the annual environmental reports.

Table 9.5 C&D Estimated Waste Arisings in Donegal for 2004

Year	1996	2002	2004
Population*	130,233	137,575	140,785
Tonnes Per Capita Per Annum**	0.43	1	1
Tonnes Per Annum	56,000	137,575	140,785

*CSO Census 1996 & 2002

** EPA, 1996 - Estimated that 0.43 tonnes per capita per annum of C&D Waste arise in Ireland.

NCDWC - Estimates put the figure for Irish demolition waste as one tonne per citizen (about 3.65 million tonnes) each year.

Table 9.6 C&D Waste Recovery in 2004 (tonnes)

Waste Source	Tonnage
C&D Waste Collected	4,603.32
C&D Waste Recovered	4,003.09
Recovery Rate	86.9%

Source: EPA Returns 2004, updated.

In Donegal, eleven waste collection permits have been issued by the local authority for the collection of C&D waste. Fourteen waste permits for C&D waste have also been issued. A number of these permitted sites, have been specific sites for construction projects. There are seven permitted sites for construction and demolition waste in Donegal, which will accept C&D waste from anyone wishing to dispose of inert C&D waste. C&D waste previously accepted at landfill sites was used for recovery purposes such as daily cover, remediation and capping. This material must be uncontaminated inert C&D waste or soil.

The National Waste Report 2004 report that more than 11 million tonnes of construction and demolition waste was reported as collected by authorised waste collection permit holders. This reflects a trebling of the last national estimate of 3.6 million tonnes in 2001. A provisional recycling rate of 85% is estimated for 2004 in Ireland. However there are uncertainties in this dataset. An intensive auditing exercise is to be undertaken in 2006 by the EPA to establish the robustness of the data reported by construction and demolition waste contractors and facility operators.

10. WASTE DISPOSAL

The previous Waste Management Plan estimated that in 2000, based on the then current disposal rate of 38,000 tonnes per annum, the capacity remaining at the five landfills operational in Donegal, was approximately 136,000 tonnes, which equated to 3.2 years capacity. Since that time, four of the five sites have closed, with Ballynacarrick in Ballintra, south Donegal remaining as the only licensed operational landfill within the County accepting municipal wastes.

In providing the new landfill capacity, the Council committed to carrying out a detailed site selection study to identify the most suitable locations for landfill facilities within the county. It was envisaged that the study would seek to identify between 2 and 4 such facilities.

Donegal County Council undertook a Site Selection Study in accordance with the provisions set out in the Waste Management Plan. This Study identified two sites for future development, which are:

- Extension to the existing licensed Landfill at Ballynacarrick; and
- Development of a new Landfill at Meenaboll.

An application for the review of the Waste Management Licence for Ballynacarrick was submitted during 2003 and a Licence was granted for the site at the end of 2004. The site is licensed by the EPA and An Bord Pleanála approval has been granted for the disposal of 24,000 tonnes per annum.

A decision to refuse approval of the application for Meenaboll was issued by An Bord Pleanála in January 2006. However a waste licence for the Meenaboll site has been granted by the EPA.

Donegal County Council stated in the 2000 Waste Management Plan that it would aim to divert 50% of overall household waste away from landfill by 2015. In 2004, approximately 50% of total waste arisings were sent to landfill. However this figure does not include uncollected household waste.

10.1 QUANTITIES OF WASTE TO LANDFILL

Since 2000, controls have been put in place on the types of material acceptable at Ballynacarrick Landfill site. In addition a weighbridge was installed on the site during 2002 and this has assisted greatly with the recording of waste data for the site. Table 10.1 summarised the quantity of waste sent to Ballynacarrick Landfill in 2004.

Table 10.1 Quantities of Waste sent to Ballynacarrick Landfill Site 2004(tonnes)

Waste Type	EWC	Tonnages
Mixed Municipal Waste	20 03 01	34,653.92
Street Cleanings	20 03 03	1,005.84
Mixed Packaging Waste	15 01 06	1683.76
Ceramic Bricks Tiles	10 12 08	87.5
Biodegradable Waste	20 01 08	121.3
Biodegradable Waste	20 02 01	106.14
Construction and Demolition	17 01 07	68.18
Bulky waste	20 03 07	13.16
Soil and Stones	20 02 02	5.94
Total		37,745.74

*Annual Environmental Report, Ballynacarrick Landfill Site, 2004

10.1.1 Household Waste

Approximately 84% of household waste which was collected at kerbside was landfilled in 2004. The majority of the waste was landfilled at Ballynacarrick and a small amount (763 tonnes) was sent to a landfill site in Co. Monaghan. This figure is relatively high and somewhat beyond the national targets. However this figure does not include uncollected household waste, which is estimated at 19,967 tonnes.

10.1.2 Commercial Waste

Approximately 49% of commercial waste was landfilled in 2004 at Ballynacarrick Landfill site. The quantity of commercial waste in the County has increased since 2000. However, this may be due to improved reporting mechanisms since the previous plan was issued.

10.2 LANDFILLS IN OPERATION

At present Donegal County Council operate one Landfill site at Ballynacarrick. A waste licence review was undertaken for this site in 2003 for an extension which was granted in December 2004. The extension capacity is approximately 225,000m³ and was expected to accommodate 8.5 years of landfilling at the estimated rates of waste input. The remaining void capacity at Ballynacarrick landfill Site is approximately 150,000 tonnes.

Ballynacarrick Landfill site accepts household & commercial waste, industrial non-hazardous waste and construction and demolition waste.

10.3 LANDFILL GATE FEES

Municipal landfill charges are based on the tonnage of waste disposed. The charge at Ballynacarrick is €137.50 per tonne and €92 per car trailer/pick up van. A landfill levy is also in operation under the Waste Management (Landfill Levy) Regulations (2002). The landfill levy is issued by the government at a rate of €15 per tonne of waste disposed of in landfill. Revenue from the levy is directed to the Environmental Fund, which was set up by the Government to provide finance for environmental projects.

10.4 OTHER LANDFILL PROPOSALS

The 2000 plan stated that it was preferable to develop 2-4 regional landfills as opposed to one large landfill. A site selection exercise was undertaken by Donegal County Council to identify suitable sites. Two sites were selected, an extension to the existing facility at Ballynacarrick, filling of which has now commenced, and a site at Meenaboll, centrally located in the County.

A decision to refuse approval of the application for Meenaboll was issued by An Bord Pleanála in January 2006. The development of a new landfill such as that proposed at Meenaboll is a fundamental element of the plan. Such a proposal is being further considered and evaluated having regard, inter alia, to policy objectives otherwise contained in the county development plan and in the context of proper and sustainable development given the importance of such a site for waste management in the County. A waste licence for the Meenaboll site has been granted by the EPA. The option of further landfill development in Ballynacarrick is also being considered and evaluated.

Due to decreasing tonnages to landfills with the expansion of recycling and the need to meet landfill diversion targets, the economics of developing more than 1 landfill in the County is now considered impracticable. Hence it is now proposed that Donegal County Council will only develop 1 landfill for the County with an anticipated annual input of 25,000 tonnes. Construction work on developing this additional capacity will need to commence during 2010 to ensure landfill capacity remains in the County subsequent to the existing capacity at Ballynacarrick being filled.

10.5 CLOSED LANDFILLS

In 2005, the European Court of Justice issued a judgment on Ireland's Waste Management Record. The DoEHLG see the waste plans as being critical to show Ireland's intent to address the issues of illegal waste activities and old unauthorized and or closed landfill sites.

In accordance with section 22 of the Waste Management Act 1996, Local Authorities must prepare a register of all closed landfill sites within their area in order to determine if and what remedial measures are necessary. This register involves:

1. Identifying known old/illegal/closed landfills from 1977 (year that the Framework Directive was implemented).
2. Setting out proposed policy to tackle the issue.
3. Setting out the proposed risk assessment methodology to be used.
4. Setting out the timetable for implementation including preliminary screening, investigation, design and construction of remedial works recognising that this process will take a number of years.

There are five identified closed landfill sites in Donegal. A restoration and aftercare programme is currently being undertaken for these sites. Glenalla and Muckish Landfill Sites were restored in the summer of 2005. Restoration of Balbane and Churchtown Landfill sites will be undertaken in the coming years. Restoration works for Drumaboden Landfill site is scheduled to commence in mid 2006.

11. PACKAGING WASTE

11.1 INTRODUCTION

Packaging waste is defined as all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods.

Quantities of packaging waste have increased as economies have grown and levels of consumer spending have increased. It is therefore widely recognised that action is needed in order to reduce, recover and recycle packaging waste. This has resulted in policy measures being introduced at a European level, and transposed into national obligations, through legislation and the waste planning process, to encourage the recycling and recovery of packaging wastes.

11.2 LEGISLATIVE ENVIRONMENT

11.2.1 European Packaging Waste Directive

Packaging Waste is an important focus of EU Environmental and Waste Management Policy, where it is defined as a priority waste stream covered by EC Directive 94/62/EC on Packaging and Packaging Waste. The Directive aims at harmonising national packaging legislation with the twin objectives of preventing or reducing the environmental impacts associated with packaging and packaging wastes.

The EU Directive 94/62/EC on packaging and packaging waste, target of recovery rates of 25% or more for packaging by 30 June 2001 was achieved by Ireland. Future targets set by this directive include:

By December 2005

- 50% - 65% recovery of packaging waste by weight
- 25% recycling of packaging waste by weight
- 15% recycling of each packaging material

By December 2011

- 60% recovery of packaging waste by weight
- 55% recycling of packaging waste by weight
- 60% recycling by weight for glass
- 60% recycling by weight for paper and board
- 50% recycling by weight for metals
- 22.5% recycling by weight for plastics
- 15% recycling by weight for wood

Packaging waste recycling now stands at 56%, ahead of the 2005 target of 50% recycling. (EPA, 2005)

11.2.2 Waste Management Packaging Regulations, 1997 – 2003

The Waste Management (Packaging) Waste Regulations 2003, are focussed on ensuring that 50% of packaging waste is recovered by the end of 2005.

The Regulations place an onus on producers/suppliers of packaging waste from customers. Producers with a company turnover in excess of €1 Million and who place 25 tonnes or more of packaging waste onto the Irish Market each year are considered to be a 'Major Producer' and are bound by the requirements of the Regulations.

Specified categories according to the Regulations include glass, aluminium, steel, paper and fibreboard, plastics, wood and textiles or such other categories as may be specified by the Minister. A further amendment to the Packaging Regulations was issued by the Minister for the Environment in late 2004. The main changes were to increase the registration fees payable by self complying major producers to Local Authorities, and to advertise the take back facilities operated by self complying major producers. Local Authorities are responsible for enforcing the Regulations, the implementation of which is now overseen by the EPA.

11.3 PACKAGING WASTE ARISING AND MANAGEMENT

In the Republic of Ireland, packaging waste from households is managed through the recycling infrastructure including bring schemes, recycling centres and kerbside collections.

Commercial and Industrial packaging waste is managed by a combination of enforcement of Packaging Regulations by Local Authorities and provision of information to producers of packaging waste. An exemption from the obligations of Packaging Regulations is available to companies who are participating in a collective packaging-waste-recovery scheme operated by an approved body.

Table 11.1 shows current estimates of packaging waste arisings in the County. Using these estimates, Donegal produces approximately 3.5% of the total packaging waste in the country.

Table 11.1 Packaging Waste Arisings

Year	2001	2002	2003	2004
Population*	137,575	137,575	139,171	140785
Waste arising per person(tonnes)**	0.223	0.229	0.257	0.210
Total Waste Arisings Donegal	30,679	31,505	35,767	29,565
Recovery Rate	25%	33%	42%	56%
Recovery Amount in Donegal (tonnes)***	7,670	10,397	15,022	12,417

* CSO figures, estimate growth at 1.16%

**Waste arising/person from EPA NWD Indicators 2004, Appendix A

*** Rate given in EPA NWD Indicators 2004, Appendix A

11.3.1 Estimate of Packaging Waste Landfilled

The quantity of packaging waste sent to landfill can be deduced using EPA mixed residual household and commercial waste compositional data, as reported in the National Waste Report 2004. Table 11.2 outlines the packaging factors and the proportion of packaging waste, determined from these composition studies.

Table 11.2 Compositional if mixed residual household and commercial waste 2004

	Household (%) ¹	Commercial (%) ¹
Paper & Cardboard	5.7	3.7
Plastic	11.0	9.0
Textiles	0.0	0.0
Glass	3.6	1.6
Ferrous	1.3	0.8
Aluminium	0.6	0.6
Wood	0.0	0.3
Other metals	0.0	0.3
Others	1.7	0.9
Total %	24.0	17.4

¹ Table 5, Table 7 EPA National Waste Report 2004

Table 11.3 shows the estimated amount of packaging waste landfilled in Donegal in 2004, based on applying the above factors to the total quantities of household and commercial waste landfilled.

Table 11.3 Estimated Quantity of packaging waste landfilled in Donegal in 2004

	Household	Commercial
Total Waste Landfilled (Tonnes)	22,009	14,646
% Packaging*	24.0%	17.4%
Packaging Waste Landfilled (Tonnes)	5,282	2,548
Total Packaging waste landfilled (Tonnes)	7,831	

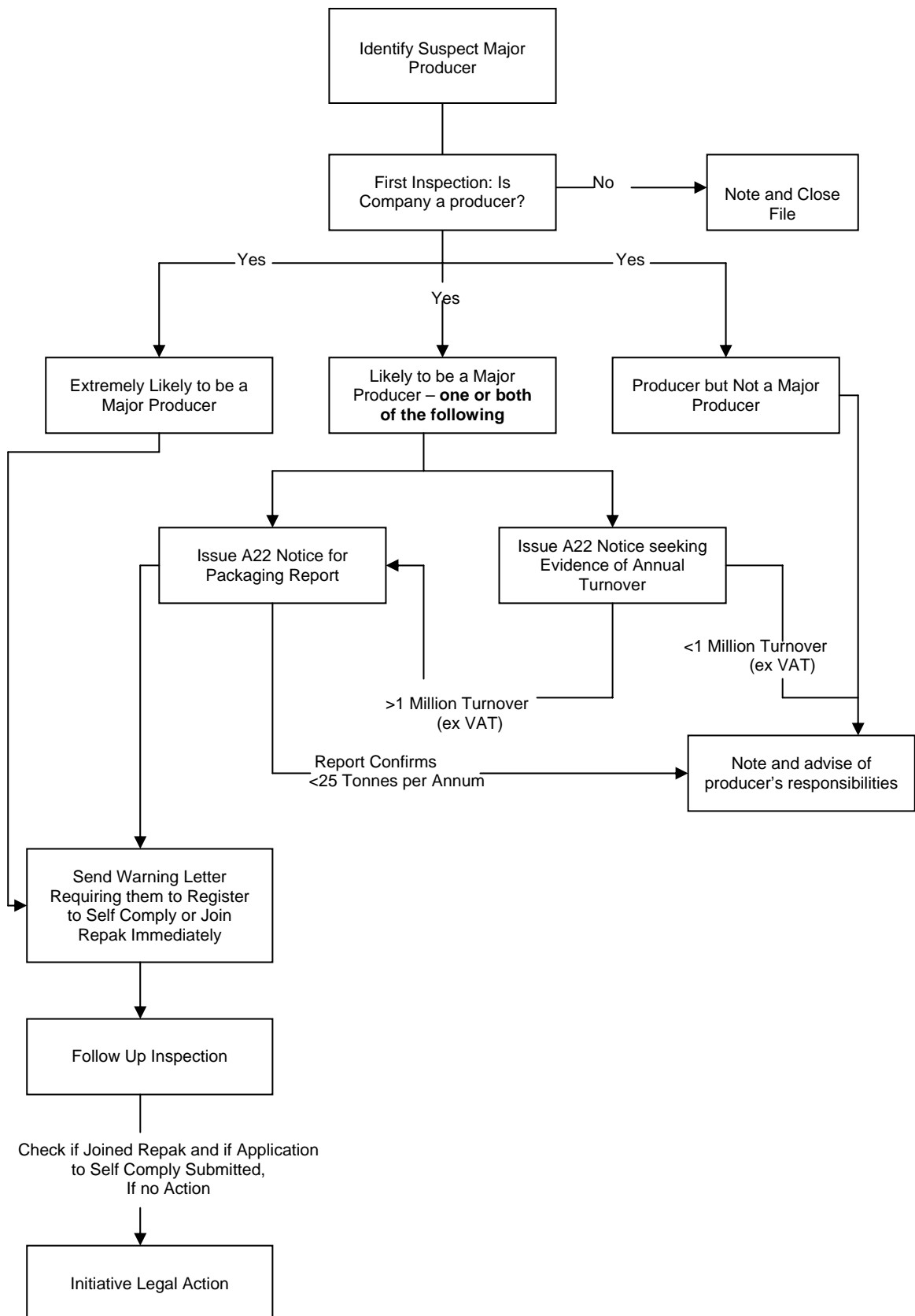
* Table 5, Table 7 EPA National Waste Report 2004

11.4 CURRENT IMPLEMENTATION OF PACKAGING REGULATIONS

11.4.1 Identification of Major Producers

Donegal County Council are currently in the process of identifying businesses in the County which may be large producers of packaging waste. If the company is deemed to be a large producer, an Article 22 Notice is served on the business requesting a packaging report to be made to the local authority. Businesses who produce over 25 tonnes of packaging waste (large producers) will then have to become self-compliant and put in place measures to recover packaging waste or become members of Repak. Other producers will be advised of their responsibilities and obligations under the regulations. Figure 11.1 outlines the process for identification of major producers.

Figure 11.1 Process flow chart for identification of major producers



11.4.2 Repak

REPAK Ltd was set up in 1997 under voluntary agreement between Industry and Government for this purpose. The functions of REPAK are to assume responsibility on behalf of its members for the recovery and recycling of packaging waste in the industrial, commercial and domestic sectors. This is achieved through the raising and dispersing of funds from industry and other sources and agreeing as well as implementing strategies with industry, government and local authorities for meeting targets. In addition to this, REPAK monitor progression towards targets through the collection of packaging waste statistics. This management system thus ensures that comprehensive data is available against which progress can be made.

Companies can choose to become members of Repak or be self regulating through the Local Authority. There are now 107 members of Repak in Donegal, an increase of 88% since the 2000 Waste Management Plan. Repak figures on packaging waste are confidential between the Member Company and Repak. There are no self-regulating companies with Donegal County Council.

11.4.3 EPA Packaging Enforcement Network

The EPA took over responsibility for the Packaging Enforcement Network in September 2004, within the Office of Environmental Enforcement. This office has responsibility to improve overall levels of compliance with the Packaging Waste Regulations. Within the network, there are two working groups dedicated to packaging waste - Packaging Waste Working Group and the Packaging Waste Enforcement Network. Donegal County Council are represented on the Packaging Waste Enforcement Network. Guidelines for identifying major producers and improved enforcement have been developed by the Packaging Working Group for Local Authorities. Local Authority enforcement officers meet with the OEE, Network Groups and Department of Environment Heritage & Local Government in order to update on progress in these areas.

11.4.4 Plastic Bag Levy

The Plastic Bag Levy was introduced in March 2004 under EU Directive 94/6/EC on Packaging and Packaging Waste. Local Authorities have a number of obligations in regards to enforcing the Plastic Bag Levy. The following actions are to be undertaken by local authorities to ensure compliance by retailers with the requirements of the levy regulations:

- Visiting retail outlets and talking to retailers
- Carrying out initial spot checks
- Monitoring implementation
- Ensuring that the levy is passed on in full to customers
- Ensuring that exemptions are not being abused

- Checking tills to confirm that customers are being charged the 15 cent levy for plastic bags where applicable
- Taking appropriate action where it has been established that the levy has not been charged to customers – e.g. issuing letter informing retailer of obligations under the regulations and follow up where necessary
- Following up on any complaints from the public

11.5 PROGRESS AGAINST TARGETS AND OBJECTIVES

Nationally Repak have met the EU target of recovering packaging by 25% and Ireland are well on the way to achieving the 2005 targets of 50% recovery packaging waste and 15% recycling for each packaging material.

Since March 2002, the quantity of waste derived from plastic bags has decreased with the introduction of the plastic bag levy. Retailers report that there has been a 90% reduction in the use of plastic bags across the country.

Since the introduction of the Packaging Regulations in 2003, 186 companies in Donegal have been contacted informing them of their obligations and requesting information from them on packaging waste arisings. This has involved notification by post, inspections of premises. Ten notices under Article 22 have been issued in 2005.

Awareness and education in Donegal of the Packaging Waste Regulations are promoted through the Donegal County Council Website, Repak Green Christmas Campaign, Repak Recycling Week, Green Piece (quarterly newpage in the local papers), Race Against Waste Action at Work campaign (large organisations) and the Small Change campaign for SME's.

Awareness seminars are planned for small businesses next year in conjunction with the Race Against Waste Campaign.

11.6 FUTURE POLICIES

Donegal County Council plan to ensure full compliance with the legislation by enforcement procedures and to carry out more regular inspections of producers.

11.6.1 Issues For Future Policies

Future policies at national and local level will have to examine the lack of infrastructure in Ireland for recycling waste. Local Authorities may need to look at collecting more from the domestic waste stream. This may occur through the provision of kerbside collection services and the roll out of more civic amenity sites. Another important issue is that of elimination of packaging waste at source,

emphasising prevention & minimisation at source – i.e. in industry. However, this may be difficult to achieve since approximately 80% packaged goods sold in Ireland are imported, therefore limiting prevention and minimisation at source.

Other issues which will affect future policies include:

- Absence of energy recovery facilities – therefore have to recycle as much as possible – expensive option
- Limited indigenous packaging industry, means limited support for local packaging recycling & collection infrastructure
- Slow pace of development of domestic recycling collection systems nationwide/Donegal
- Non-producers of packaging waste, which through use, cause packaging waste

During the public consultation period in Donegal, packaging waste raised several times. Most submissions felt that more can be done and needs to be done to reduce packaging waste, particularly from the manufactures and industry. This supports the objectives of this Plan to prevent waste as a priority, particularly packaging waste.

11.6.2 Prevention

Prevention policies such as those reported in Chapter 4 will be applicable to packaging waste. The National Waste Prevention Programme & Core Prevention Team within the EPA will assist prevention policies and work in conjunction with local authorities. Both household and businesses will have to be targeted in terms of packaging prevention. The Donegal Waste Awareness Officer will therefore play a major role in the dissemination of information to producers of packaging waste.

11.6.3 Enforcement

Enforcement of the packaging regulations is currently underway by Donegal County Council. The Council are aiming to target all potential major producers and producers of packaging waste and make them aware of their obligations under the regulations.

Donegal County Council have to date:

- Contacted 186 companies in Donegal informing them of their obligations
- Requested information from the above companies on their packaging waste arisings
- Issued 10 notices under Article 22 of the Packaging Regulations
- Conducted Site Inspections to ensure compliance with the packaging regulations

There are no self-regulating companies with Donegal County Council.

More resources may be required to enforce the regulations and monitor producers in the county.

11.6.4 Recycling & Recovery

The Donegal County Council Waste Management Plan is focused on putting in place schemes for the separate collection of recyclables and compostables from household wastes over the period of the Plan. This is consistent with the requirement to increase the quantities of packaging waste recovered from the household as identified above, and such schemes will contribute to the overall levels of packaging recovered and recycled in Donegal.

Although implementation will lead to a step change in the way in which waste is collected from the household, it is the Donegal County Council's firm belief that, following the consultation process, the public is keen to have such services and play their part in protecting the environment, through participation in more sustainable waste management practices.

It is important to extract high quality materials, with a particular emphasis on the household waste stream. This requires public awareness of the types of mixed dry recyclable waste to segregate, and the development of materials recovery facilities to further sort and segregate recyclable materials.

In order to maintain progress and to meet or exceed the Directive targets the current infrastructure of bring banks and civic amenity sites will need to be expanded to serve a wider area, particularly with an allocation of bring banks to rural areas.

Businesses in the County are being targeted with regards to recycling and recovery through the packaging regulations and Repak. However, affordable methods will need to be put in place in order for small businesses to comply with the regulations. Business who are not producers of packaging waste, but do generate packaging waste may also need to be targeted in order to recover and recycle waste from this sector. This may require commercial waste bye-laws to be implemented.

Green procurement policies should be implemented within the Local Authority and then used as a model for local businesses. A Green Purchasing Policy has been initiated within Donegal County Council and an EMS is also in place with in house recycling throughout all the Public Service Centres, and at the council headquarters in Lifford.

12. WASTE MANAGEMENT INFRASTRUCTURE

12.1 INTRODUCTION

The 2000 Waste Plan for Donegal County Council identified significant challenges in developing sustainable waste management practices that comply with policy and legislative requirements. The Plan identified a “Triple Track” approach set out in “Changing Our Ways” through the following broad approaches:

- Planning for the provision of requisite infrastructure either on a stand-alone basis or through its participation in the North West Region Cross Border Group Waste Management Strategy, but excluding any thermal treatment options at this time;
- Identification of suitable sites to ensure the provision of secure long-term landfill disposal capacity to underpin the Waste Management Plan, with the phased closure of the existing landfills in the short-term;
- Development of the existing waste recovery programme through the phased expansion of the bring recycling system, the development of a home composting programme and an ongoing educational programme.

This chapter will analyse the progress made towards the objectives set out in the 2000 Plan, the positive additions to waste infrastructure in the County as well as the short comings thereof.

12.2 WASTE MANAGEMENT DATA

All waste collectors and facility operators must submit annual environmental reports to Donegal County Council. The data is then compiled to estimate the waste arisings, waste recovered and waste disposed in the County for the specific sectors.

Donegal County Council must submit an annual return to the EPA detailing all the waste arisings and movements of waste within the local authority area. This report follows a prescribed format and details all waste arisings and movements within the County.

It is imperative that accurate annual returns are received by the local authority and that this information is carefully collated in order to provide accurate estimates of waste arisings etc. This will have a bearing on the development of waste facilities.

12.3 WASTE MANAGEMENT INFRASTRUCTURE

At present Donegal has limited landfill facilities and waste recovery facilities. Currently there is one landfill site in the County at Ballynacarrick in Ballintra and two civic amenity sites located in Carndonagh and Stranorlar.

The proposal to provide a landfill facility at Meenaboll was refused approval by An Bord Pleanála in January 2006, however a waste licence for the Meenaboll site has been granted by the EPA.

Construction is underway for the civic amenity site in Laghey and the construction work for the Letterkenny civic amenity site is due to commence in 2006. Two further sites in Milford and Dungloe have been granted funding from the Department of Environment and are anticipated to be constructed within the timeframe of this plan. The following section summarises the recommendations for waste facilities and infrastructural requirements in the County.

Significant progress has been made in terms of expanding the recycling infrastructure, particularly for householders. However, improvements in waste collection are required. Efficient waste collection services including segregating waste are difficult due to the rural nature of the County, with urban areas being more adequately serviced than their rural counterparts.

12.4 DEFICIENCIES IN WASTE MANAGEMENT INFRASTRUCTURE

The household waste recycling rate of 16% is slightly below the national average. The methodology to calculate this figure has followed that used by the EPA and excludes uncollected household waste.

Progress is being made with the delivery of recycling infrastructure in the County with the number of civic amenity sites in the County targeted to reach 8 by the end of 2008. It is important that progress continues to be made towards the expansion of the number of recycling centres in the County to ensure provision of outlets for the public to recycle.

There is a need for the development of facilities for treating key waste fractions such as biodegradable waste. At present there are no separate collection schemes of household biodegradable waste in the County. The ambitious targets set out in the EC Landfill Directive require that this fraction of the household waste stream is recovered. This has been recognised by the National Strategy for Biodegradable Waste and Donegal must play its part in meeting these targets.

The Plan has a set out a series of actions for the 5 year period including the provision of civic amenity sites, bring banks, home composting and kerbside collection systems. The results in terms of recycling percentages that are likely to be achieved and the associated costs are detailed in Section 14 of the Plan. However to comply with the 2010 landfill diversion targets there will be a need in County Donegal for access to alternative waste management technologies e.g. MBT, Energy

Recovery. Due to economies of scale such facilities are unlikely to be located in County Donegal and some waste from the County is likely to be transported to adjacent planning regions to access the alternative technologies e.g. North West Region Waste Management Group (NWRWMG). The NWRWMG have recently completed the consultation of the Review of their Waste Management Plan and the final Plan was published in June 2006. The Waste Management Plan details proposed infrastructure for dealing with waste in the North West area, further clarity regarding potential links with the NWRWMG will be sought in the future.

12.5 PUBLIC SECTOR INVOLVEMENT

All landfill sites and civic amenity sites in Donegal are owned by Donegal County Council and the Council are responsible for the running costs and costs relating to remediation and aftercare. The landfill site at Ballynacarrick is operated by a private contractor on behalf of Donegal County Council, while the recycling centres are currently operated by the County Council. All waste collection services are provided by the private sector. There are currently 128 contractors permitted to collect waste in Donegal. (This includes domestic, commercial and industrial wastes). There are several waste transfer facilities in the County and a composting facility in south Donegal operated by the private sector and it is recognised that the private sector will be critical in the development of large scale facilities in the future. It is vitally important that the Private Sector play their role in the delivery of the waste management plan with particular focus on rolling out the recycling kerbside collection schemes and delivering the collected recyclables to appropriate end markets.

It will be the policy of the Council that the cost of recycling at Civic Amenity sites shall take into account the affordability of the charges which in turn should be reflected in the private sector service charges.

12.6 COMMUNITY ISSUES

The National Waste Policy recognises that 'mobilisation of public support and participation' is necessary for a successful strategy. The recruitment of the Environmental Awareness Officer in Donegal County Council as recommended in the previous Plan has greatly improved communications between the Council and community groups, improved awareness of the ordinary householder and assisted in improving environmental education in schools. Current community waste management issues have been discussed in Chapter 6.

National initiatives such as the plastic bag levy awareness campaigns (Race Against Waste) have also been very successful in showing the public what significance their role is in modern waste management. Further developments in community based waste management approaches will be required in order to provide all communities with adequate waste management infrastructure and services.