

SUMMER 2010

waste watch

 North West Region
Waste Management Group



Welcome

On behalf of the North West Region Waste Management Group (NWRWMG), I would like to welcome you to the second edition of Waste Watch.

The NWRWMG is currently overseeing a £500m public procurement exercise to deliver new waste management facilities for the area – one of the largest and most significant procurement projects ever undertaken in the North West region.

This project will revolutionise our methods of dealing with waste and ensure that the region avoids potentially severe EU fines for failing to reduce dramatically its reliance on landfill sites.

Our aim is to deliver the most environmentally-friendly and cost-effective waste management solution for the region, adopting best practice procedures utilised throughout Europe to develop modern technologies that are capable of turning unrecyclable waste into renewable energy.

The development of these new waste facilities is one half of the NWRWMG's two-pronged approach to waste management, with the other focusing on the drive to 'reduce, reuse and recycle' as much waste as possible. This is where you, the public, have a major role to play.

The past few years have seen the North West make great strides as a region in boosting recycling levels. It is absolutely vital, however, that everyone keeps up the good work and continues to realise their responsibility to view waste as a potential resource from which we can recoup energy – and not just an unwanted by-product.

Our aim with this magazine is to encourage you to adopt more sustainable waste management practices and outline the hard work being carried out by both the NWRWMG's Joint Committee and the constituent councils to help you reduce, reuse and recycle more waste, both at home and at work.

Chairman,
Cllr Evelyne Robinson



waste watch

North West Region
Waste Management Group

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GLANCE

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FOLLOW THE TRAIL: We take a close look at what actually happens to your waste once the council officers collect your blue recycling bin from your home, focusing specifically on the trail cartons follow as they travel from being items of household rubbish to recycled products.

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CALLING ON COUNCILS: We examine some of the many waste management initiatives being carried out by the NWRWMG's member councils, from Derry City Council encouraging all parents to use environmentally-friendly nappies to Limavady Borough Council's commercial dry recycling project for local businesses.

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RETHINK WASTE: The Department of the Environment recently launched a new waste prevention website as part of its Rethink Waste campaign. We highlight the thinking behind this new site and the benefits it will provide.

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PROCUREMENT PROJECT: An update on the £500m public procurement exercise to deliver new waste management facilities for the region.

Who we are

The North West Region Waste Management Group is the team of seven councils responsible for ensuring that waste management in the North West region of Northern Ireland is carried out effectively.

The overall aim of the group is to develop a waste management system that meets the region's needs, turns waste into a resource from which energy can be generated and contributes to economic and social development.

The NWRWMG has a land area of 3,830 sq km, which represents 27% of the area of Northern Ireland.

THE MEMBER COUNCILS ARE:

Ballymoney Borough Council
Coleraine Borough Council
Derry City Council
Limavady Borough Council
Magherafelt District Council
Moyle District Council
Strabane District Council



Contact Us:

North West Region Waste Management Group,
 Derry City Council,
 98 Strand Road,
 Derry BT48 7NN

Tel: 028 7137 0808,
 Fax: 028 7137 0684
 Email: info@northwestwaste.org.uk
 Web: www.northwestwaste.org.uk

Management plan



The NWRWMG was formed in 1999, when it was decided by the seven councils involved that a joint approach would be the most effective method of deciding how best to deal with waste in the area.

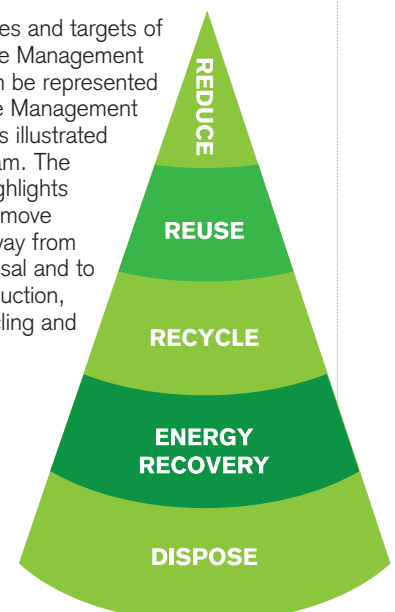
The group formed a Joint Committee of Councils under the Local Government Act

(Northern Ireland) 1972 in order to carry out this work, with two elected members from each council sitting on the NWRWMG Joint Committee.

A Waste Management Plan was prepared which has evolved over time and offers the potential not only to reduce the environmental impact of current waste management practices, but also to contribute to sustainable economic development.

Since 2000 the NWRWMG has made significant investments in facilities/operations to achieve the targets set out in its Waste Management Plan. In 2000 there were 37 Household Waste/ Recycling Centres and Bring sites in the region and today the Group has 106 such centres. In addition 128,000 households have blue bins and more than 31,000 home composters have been distributed. A comprehensive Waste Education Programme has been organised by the councils to support the infrastructure investments to date. Three of the councils have brown bins for the collection of organic materials.

The objectives and targets of the NI Waste Management Strategy can be represented in the Waste Management Hierarchy, as illustrated in the diagram. The hierarchy highlights the need to move practices away from landfill disposal and to promote reduction, reuse, recycling and recovery.



Follow the trail

Have you ever wondered what actually happens to the contents of your blue bin once it is collected from your house by council officers? You know that by dispatching all of your old newspapers, empty plastic milk containers, cereal boxes and other materials into your recycling wheelie bin that you are helping the North West region in its bid to improve recycling rates.

However, have you ever stopped to think where the materials go to and what it is they are made into?

Well, the short answer is that the blue recycling bins are collected once a fortnight and taken to Glassdon's Materials Recycling Facility in Toomebridge. Here, the contents are sorted, baled and sent around the UK and further afield for recycling.



1

Before the bin lorry goes out on a 'blue bin day', it is washed and prepared to carry the clean, dry, recyclable material

2

Council personnel collect the blue recycling bins from your home once a fortnight



9

The materials are made into something new that you can buy, use and recycle again.

- Paper is recycled into new newsprint paper - some of which is bought by newspaper companies in Northern Ireland - or egg boxes.
- Card and cardboard are recycled into new card whilst tins and cans are made into new drink, food and aerosol cans.



8

Once sorted and/or baled, the material is sent around the UK and further afield for reprocessing into new materials



7

The mixed paper, card, cardboard, plastic bottles, plastic food containers, food tins, drink cans, aerosol tins and beverage cartons are loaded into a huge mechanical sorter which separates and bales the materials



3

The contents of the blue bins are taken to transfer sheds throughout the region, where they are stored



4

When there is enough material in the transfer sheds it is loaded onto one of Glassdon's lorries and taken to Toomebridge for sorting



5

Once they arrive at Glassdon's Material Recycling Facility, the contents of the blue bins are sorted for recycling

6

The contents are first put on to a conveyor belt where the materials are separated



CARTON CALL

So, you now know what happens to your waste when it leaves your home and goes to Glassdon's Materials Recycling Facility. We thought it would be useful to take an in-depth look at one type of material to see what stages it goes through when it leaves Glassdon to be recycled. In future editions we will cover all materials, but will begin our case studies on cartons.

In the UK an estimated 58,000 tonnes of paper-based cartons are used every year – the equivalent weight of a whopping 337 blue whales, or 2.3kg per household. These liquid food and drink cartons, such as those produced by Tetra Pak, are widely recyclable in the UK.

Across the NWRWMG region, cartons are collected both by kerbside schemes and through bring bank collection points. Once collected and sorted, the cartons are baled and stored until there is enough material to make up a full truck-load. The cartons are then baled and efficiently transported to a recycling mill in Orebro, Sweden, where they are recycled.

The mill in Sweden needs a high-strength paper (like cartons) and is presently the best place for cartons from the UK to be recycled. Once in Sweden, the recovered cartons are shredded, and mixed with warm water in a pulper much like in a top loader washing machine, for 30 minutes. The paper fibre ends up like a soup in the water. The water is drained off and the paper fibre is rolled out like a pastry into plasterboard liner which is used by the construction industry – so your used orange juice cartons could end up in a new wall near you!

At the moment, the mill separates the fibre out from the aluminium and plastic residue, and uses them to power the mill itself, but the carton industry body ACE UK is currently researching other uses for these materials during the recycling process.

Tetra Pak Ltd. contributed to this article.



Parents urged to get real

Derry City Council is encouraging all local parents to save waste by making the most environmentally-friendly choice of nappies for their children – and save more money for their family at the same time!

The council's Real Nappy Campaign aims to highlight the problems associated with common disposable nappies and persuade local mums and dads to make the switch to washable cotton alternatives, which will help to protect the resources their children will rely on in the future.

Approximately one tonne of disposable nappies per baby is thrown away every year – in a household with a baby, up to 50% of household rubbish could be disposable nappies. Every year councils in the UK spend at least £40m disposing of disposable nappies.

Julie Hannaway, Waste Minimisation and Recycling Officer with Derry City Council, said: "The European Landfill Directive and national government policies are driving local authorities to reduce the amount of municipal waste sent to landfill.

"Nearly 3 billion nappies are thrown away in the UK every year. The vast majority of these end up in landfill. Real nappies are made from natural fibres while disposable nappies are made of super-absorbent chemicals, paper pulp, plastics and adhesives – while we can't be sure how long it takes them to decompose, we estimate that it could take hundreds of years, resulting in a very negative environmental impact."

Part of the focus of the campaign this year is on money and how parents can help combat the credit crunch by using washable nappies instead of disposables.

A number of seminars are being held in anti-natal classes and Parentcraft classes throughout the city. These seminars demonstrate and explain the main nappy systems, together with the pros and cons of the different types, and helpful tips are given on how to use and wash the nappies.

"It has been estimated that the average baby uses in the region of six thousand nappies from her/his birth, until s/



he is toilet-trained; if these nappies are 'disposable', this will cost, approximately, eight hundred pounds," Ms Hannaway added.

"However, if you consider that completely re-usable nappies and an accompanying storage bucket can be purchased, maybe as a gift, for no more than 300 pounds, the financial savings for parents are obvious, especially in the current tough economic climate.

"Derry City Council is committed to the principle of waste prevention at source

as the most effective way of reducing our rubbish. By promoting the use of real nappies as a viable replacement for disposable nappies, we can significantly minimise waste and therefore disposal costs

"It is recommended that re-usable nappies are washed on a low heat and are either line dried or dried over a radiator, as opposed to in a tumble drier. That's it. They do not require either special detergents or fabric softeners."

Anyone interested in finding out more about Real Nappies should contact Julie Hannaway, Waste Minimisation and Recycling Officer on (028) 71 365151.



SCHOOLS PAY A RECYCLING VISIT

Schoolchildren in the Strabane area are being given the chance to gain an insight into the operation of a recycling centre and what exactly happens to waste when it goes to the centres.

Strabane District Council has been organising school visits to the centres, with Ardstraw, Sion Mills and Bridgehill primary schools having already visited Newtown Stewart Recycling Centre and pupils from Donemana Primary School availing of the opportunity to get a close-up look at the operation at Donemana Recycling Centre.

Commenting on the success of the scheme so far, Kieran McGuire, Chairman of Strabane District Council, said: "These visits have coincided with each school's own relevant topics in the curriculum relating to waste, recycling and the environment.

"In some cases the visits to the recycling centres have been preceded by a member of the council recycling team going in to that school to talk about recycling and explain what, where and how we can recycle materials. This makes it much easier for the children to understand the process of recycling when they come to the centres.

"The visits have shown them the wide range of items and materials which can be taken to the Recycling Centres and sent off to different companies to be made into new products. They were able to see how everything that is brought to the Recycling Centre is segregated and put into the relevant container, which could be a skip, a lorry, a special bin, box or bay.



"The children also learnt how harmful it is to the environment to dump waste in the countryside. Items such as batteries, paint, electrical goods, for example, if left out in hedges, ditches or fields leak harmful chemicals into the ground which will eventually cause pollution to water systems."

"The visits have shown them the wide range of items and materials which can be taken to the Recycling Centres and sent off to different companies to be made into new products."



COUNCIL'S COMMERCIAL CALL

Limavady Borough Council has launched a commercial dry recycling project which aims to help local businesses improve the amount of waste they recycle – and save money at the same time.

Fifteen commercial premises in the borough are taking part in the scheme after an opportunity to divert more waste from landfill into the recycling stream was identified by council officers.

Until recently rejected waste materials from businesses were collected in the black residual bin and sent to landfill. However, large amounts of these materials are similar in nature to those collected in the domestic blue bin dry recyclable collection and this scheme aims to make sure this now happens.

The effect of this system improvement is threefold:

1. Borough recycling rates are improved with more efficient capture of available materials.

2. Landfill tonnage is reduced, further helping council to meet its mandatory diversion targets.
3. Those businesses involved in the scheme have their recyclables collected for a reduced fee of 10% less than the cost of the residual collection. So by improving their recycling performance businesses have a welcome opportunity to cut overheads

John McCarron, Recycling Officer of Limavady Borough Council, commented:

"To reduce set-up costs businesses can use an existing bin which is identified by a large sticker. The scheme has been well received by all involved with some asking why the council didn't start it before now.

"Going forward, officers will be making contact with other businesses with a view to extending the scheme and anyone interested should contact the Waste Management Officer."



Cloughmills 'GROWING' a solution to food waste



Cloughmills Community Action Team, supported by Ballymoney Borough Council, has taken an imaginative approach to minimising food waste and food miles which has raised awareness among the community of the need to become more self-sufficient.

The project has won the support of a wide cross-section of the community, with local people of all ages – from schoolchildren and teenagers to pensioners – getting involved.

The project takes a three-pronged approach to tackling waste, the dimensions of which are:

1. 'Grow Your Own' - local people grow food on a co-operative allotment scheme based on land provided by the Corner House Bar.

2. 'Salad in a Box' – residents receive a small box of salad plugs which are designed to provide fresh salad foods over the summer and encourage the growing of food in homes with and without gardens.

3. 'Left Over Luxuries' – tackles food waste by promoting the concept of buying locally grown or produced food items, producing a guide to cooking with left overs, encouraging the local restaurant to produce a meal with food grown or produced within 10 miles of



Rick, Patrick, Dylan, Megan, Naomi and Emma from the Cloughmills Community Action Team get ready to plant some fruit bushes



the village and, finally, challenging a local chef to purchase enough ingredients for £5 from local shops and butchers to cook a meal for a family.

Patrick Frew, Cloughmills Community Action Team, commented: "This project has galvanised our community, raising awareness of the need to become more self sufficient. We have young people, assisted by adults, striving to make community food a reality for a rural village.

"We are conscious of the need to tackle food waste at source, as opposed to dealing with it once produced. We feel our approach could be replicated in other areas, allowing other communities to deliver a project with wider sustainable impacts."

Declan Donnelly, Ballymoney Borough Council, added: "If we are to deliver sustainable communities we can only do so in partnership with all social groupings within a community.

"This project draws on rural enterprise, imagination and enthusiasm and moves beyond simple processing of food waste. It gives value to the concepts of reduce and reuse while ensuring that more money is retained in the local economy through support for food-related enterprises.

"It tackles food waste by raising awareness of local food, the difference between 'sell by' and 'use by' dates and how to maximise foodstuffs in the cupboard. It will reduce the carbon footprint of the Cloughmills community by reducing the transport of food items from across the world."

BALLYCASTLE PUPILS BANKING ON IT



St Patrick & St Brigid's Primary School in Ballycastle is in the process of moving to a new school building, so before the big move the pupils and staff have been hard at work collecting paper for recycling.

A huge number of bags was collected and recycled in the local paper banks near the school. The pictures left/right show St Patrick's and St Brigid's Primary pupils Aaron McCaughan, Rachel Nolan, Caron Butler and Oran Kearney depositing paper in their local paper banks for recycling



Kilrea makes history with Eco-Schools award



Mayor of Coleraine Borough Council, Councillor Sandy Gilkinson, and Joan Peden of Tidy Northern Ireland, presenting Kilrea Primary School Eco Committee members, teacher Ryan Crawford and school principal Karen Stinson with their sixth Green Flag Eco-Schools Award.

A primary school just outside Coleraine has made history by winning the top award in a worldwide environmental awareness programme – for a record-breaking sixth time!

Kilrea Primary School is the first and only school in Northern Ireland to have been awarded the Green Flag for environmental achievement more than four times by Eco-School – the initiative in which over 26,000 schools and six million pupils from across the globe participate.

Following concern for their environment and wishing to extend the school curriculum to include practical action, Kilrea pupils and teachers embarked upon a programme of environmental improvement which impressed

the visiting Eco-Schools inspectors so much that they once again awarded the school the Green Flag.

Joan Peden, Eco-Schools, explained: "The school has worked on many of the Eco-School topics including litter, energy, water, waste, healthy living, school grounds and biodiversity. Through the programme they have built on and extended the school's existing good practice of healthy breaks, drinking water, reusing and recycling rubbish, improving school grounds for the children and wildlife and encouraging everyone to switch off lights and equipment when they are not needed.

"The staff, children, parents and Eco team members have worked really hard and we are delighted to award Kilrea Primary School with their sixth Green Flag."

Mayor of Coleraine, Councillor Sandy Gilkinson, visited Kilrea Primary School to congratulate everyone on their success and present the Green Flag to the school.

Fiona Watters, Waste and Recycling Officer, Coleraine Borough Council, said: "I am delighted that Kilrea Primary School has been awarded the Green Flag for the sixth time. I would congratulate the school for their pioneering work on environmental issues over the past 10 years.

"The whole school is to be congratulated on their success. The School has put a lot of hard work into improving their environment and this has been recognized by the Eco-Schools programme assessors. The school has achieved the highest level of success under the scheme by being awarded the Green Flag.

"It is clear to me that the children and staff care deeply about their environment - Kilrea Primary School is a great example to us all and one which I would support and encourage other schools to follow."

School principal, Mrs Stinson, said: "Children are naturally enthusiastic about their environment and they have really enjoyed learning through the Eco-Schools programme. Our children have been encouraged to take positive action to improve their school environment, reduce litter, increase environmental awareness, eat healthily and involve their families in green activities. We have all seen what can be achieved and are proud of our success."

Kilrea Primary School is one of only six Green Flag Eco-Schools in Coleraine Borough.

Eco-Schools is an international programme operating in 46 countries worldwide and is operated locally by the environmental charity TIDY Northern Ireland. Nearly half of Northern Ireland's schools have registered on the programme to date, with more signing up every day.

REDUCE, REUSE AND RECYCLE = REWARDS

The '3Rs' of reduce, reuse and recycle really do equal rewards in the Magherafelt District Council area, thanks to a new innovative rewards scheme introduced by the council.

The scheme rewards any resident who recycles or composts their domestic waste at one of the council's four recycling centres – located in Magherafelt, Maghera, Draperstown and Castledawson.

Based on a simple loyalty card scheme, residents that recycle at any of the recycling

centres can collect stamps on their card and, when their card is full or when they have collected enough stamps, they can claim rewards. The rewards range from reusable garden grass bags and reusable shopping bags to PAS 100 recycled compost, made from the material collected in the council's brown bin scheme.

Explaining the rationale behind the scheme, John Murtagh, Environmental Projects Officer for Magherafelt District Council, said:

"Magherafelt District Council prides itself on its excellent recycling record, but it realises that the success that it has enjoyed over the past 10 years would not have been possible without the support and co-operation of its residents. This reward scheme is the council's way of

acknowledging residents' cooperation and of saying thanks for their continued support.

"In recent years Magherafelt District Council has introduced a raft of different recycling initiatives and each time our residents have co-operated fully and supported the schemes. The council appreciates the support that we have received in trying to deliver sustainable waste management to the district."

This initial scheme is a pilot but if it is successful the council hopes to expand it and offer a wider range of rewards for those that continue to support recycling and sustainable waste management within the district.



NEW WEBSITE RETHINKS WASTE

Northern Ireland Environment Minister Edwin Poots recently launched the Department of the Environment's new waste prevention website, marking the first step in its Rethink Waste campaign.



The Rethink Waste campaign website, www.rethinkwasteni.org, aims to raise awareness, encourage best practice and achieve behavioural change among households, the business community and education sectors. The campaign seeks to affect a cultural shift towards better waste prevention and resource management and improved environmental quality in Northern Ireland.

It also aims to raise awareness of the simple steps that people can take to help reduce the amount of waste sent to landfill and improve our environment for future generations.



Helping Environment Minister Edwin Poots launch the DOE's new waste prevention website, www.rethinkwasteni.org are primary school pupils Jane and Adam Monahan, Hannah Neeson and John Monahan

Commenting at the launch the Minister said: "Rethinkwasteni.org seeks to communicate the message that waste affects aspects of everyday life in households, businesses, schools and communities right across Northern Ireland.

"We are asking individuals and organizations to rethink their attitudes to waste and to become more aware of simple steps that they can take to reduce, reuse, recycle and recover waste in order to send less of it to landfill.

"Everyone has a part to play if Northern Ireland is to comply with EU targets and avoid infractions."

The website contains carefully tailored information for each target group, and aims to engage the public through user-friendly, interactive features. It will also act as an effective portal and signpost to partner organizations, with a focus on sharing best practice across different sectors.

The Department for the Environment developed the content for this article

On the charge for recycling

Most of us use batteries every day of our lives. From portable batteries like AA cells to those in our mobile phones or those used to start our cars, we would have difficulty conducting our day-to-day lives without them.

However, how many of us think carefully about how we dispose of these batteries when we are finished with them, about how their contents could be used again or about what damage they could do to the environment if not recycled properly?

A lot of the contents of batteries have a high monetary value so recycling them can save some of the earth's natural resources and save on CO2 emissions by reducing the need to mine new materials.

Additionally, ensuring that we do not throw batteries out with our normal rubbish means they will not end up in landfill, where the chemicals contained may leak into the ground.

In particular, lead and mercury can pollute the soil and water and may potentially harm the health of both humans and animals.

The EU is aware of the importance of recycling batteries and has set targets to encourage the recycling of all types - portable, industrial and automotive. New regulations were published in February to help all producers and users of batteries to dispose of them a way that can help save resources and protect our environment.

Businesses and homeowners in Northern Ireland are well on their way to meeting the European target in relation to recycling automotive batteries, but we can all make improvements in relation to portable and industrial batteries.

Any shop or supermarket that sells over 32kg of batteries annually is now required to provide clearly labelled collection bins for used portable batteries.

There will be no charge for this facility nor any requirement for the batteries to have been bought at that store.

Householders may find this more accessible than visiting their local civic amenity site, although these facilities should be used for automotive and industrial batteries, and should look out for the Be Positive sign.

Further information on how these obligations affect your business and where you can access recycling facilities for your batteries can be found on the DOE website, www.doeni.gov.uk The Department of Environment's Planning and Environmental Policy Group developed the content for this article.



Partnership in the Park



Air Handling Unit



In this and future editions of Waste Watch, we will be highlighting the numerous examples of major investments in services and facilities throughout the North West region which have been of crucial importance to the waste management effort.

Our focus in this edition is on Park Household Waste and Recycling Centre which, since its opening in 2008, has empowered the village of Park and its hinterland to address its recycling needs through the provision of an enhanced local waste management service.

The sustainable design features of the operation have proved a major success, one example of which is the heating system, which takes heat from the air outside and transfers it to the under floor heating system - thereby eliminating any dependence of fossil fuels and reducing Derry City Council's carbon footprint.

The centre takes energy from the air using an Air Handling Unit. This box is situated outside and contains a large fan that draws air into the unit, transferring the energy in the air through large heat exchangers. From there, the process is the same as a Ground Source Heat Pump. They work like a fridge by moving energy from one place to another.

Heat Pumps remove solar energy stored in either the earth, air or water around your building, compress it to a higher temperature and transfer it into your central heating system and hot water tank. They are also known as geothermal, ground source, earth energy, air source, water source heat pumps.

Park Household Waste and Recycling Centre also has an exhibition/teaching area which is used to host displays demonstrating, for example, how the various materials deposited at the site are recycled. It also operates a teaching room - to which the community can come and learn more about waste in a very practical way.

The Learmount Community Development Group utilises the centre, successfully completing a wide variety of projects which enhance the area and reduce rural isolation. Its most recent environmental project was the development of a Wildlife Garden, which is situated at the back of the centre and on the edge of Learmount Forest.

Ivan Black, of Conservation Volunteers Northern Ireland, worked extremely hard with a dedicated team of local volunteers to turn this piece of wasteland into a useful resource, which is a great asset to the area and any future environment projects. The garden has a pond, waterwheel, bird tables, heather and herbal beds, which attract all sorts of wildlife.

The recycling centre theme is evident in the garden, with a mini skip used to grow herbs and a washing machine door used as a bird bath. The project was funded by The Big Lottery 'Breathing Places' Programme and Derry City Council. The Wildlife Garden is used by children who attend the Kid's Environmental Club and is open to anyone from schools, youth clubs and any other member of the public.

There is also an Environmental Educational Room based at Park Recycling Centre, which is an ideal location to base wildlife and environmental events for playgroups, schools or youth groups. Equipped to classroom standard, the facility has a capacity for up to 30 children for activity-based fun and learning.

Located within the centre, it is convenient for on-site eco-activities in relation to waste disposal, recycling and conservation and is the ideal launch pad for nature walks and field trips in Learmount Forest and along the River Faughan.

To book this facility or for more information on it, contact Learmount Community Development Group on 028 7778 1881. Caroline Lynch of the Learmount Community Development Group contributed to this article

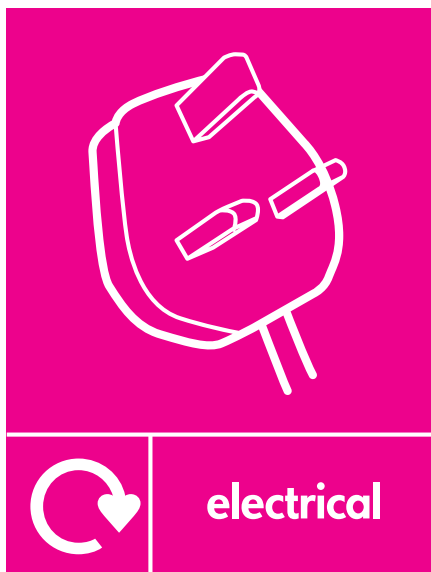
WEEE can waste less

Now that summer's here, many of you will be going through cupboards, sheds and lofts to get out your camping gear, barbecues and bikes. While you're rummaging, you may stumble across a broken toaster or hairdryer, an old mobile phone or even an unwanted computer.

The collective term for this type of waste is WEEE – Waste Electrical and Electronic Equipment – which describes loosely discarded, surplus, obsolete or broken electrical or electronic devices.

Perhaps you didn't want to put these unwanted items in your rubbish bin, but weren't sure what exactly to do with them. Well, don't worry – a solution is now at hand.

For you can now take all of your WEEE to any civic amenity site in the North West region, while, in some council areas, blue recycling bins are now able to accept small electrical appliances as long as they are not larger than a toaster or kettle.



By disposing of your electrical waste in blue bins where appropriate or taking it to civic amenity sites, you will be greatly helping the environment and saving your local council money by keeping hazardous waste out of landfill.

Last year, households in the UK bought over a million tonnes of electrical and electronic equipment. That's an average of around 40kg per household – the equivalent to the weight of around 22 kettles or two microwave ovens from each home. In the North West we recycled over 2,240 tonnes of WEEE last year.

Until recently most of this ended up in landfill when it was no longer useable, with the hazardous metals found in some electrical goods, such as mercury and lead, leaching into the ground and causing pollution.

In July 2007, however, a new law has forced manufacturers of electronic goods to pay for the collection and recycling of their products when they become waste. Recycling recovers most of the valuable materials in the products such as metals, plastic and glass. These materials can then be re-used, which saves energy, as it uses less energy than the extraction of raw materials.

Recycling electrical waste also saves councils a lot of money as it means they don't have to pay for disposal costs and can avoid paying the landfill tax.

There has been significant progress in the recycling of WEEE, with over 400,000 tonnes of electrical waste collected in the UK last year – around 2,240 tonnes of which was from the North West region. This is promising, but there's still a lot of electrical waste going in people's black bins unnecessarily, so a lot of work must be done.

So, if your toaster becomes toast, your computer gives up the ghost or you're your kettle packs it in, then remember you can recycle them.

Scott Butler, General Manager of European Recycling Platform (ERP), contributed to this article.

Eco-Schools explained

In this and the inaugural edition of Waste Watch, we have highlighted schools in the North West region which have received Eco-Schools recognition. We thought this would be an opportune time to explain exactly what the Eco-Schools awards scheme is and what it entails.

The Eco-Schools programme is an international initiative designed to encourage whole-school action for the environment. It is a recognised awards scheme that accredits schools who make a commitment to continuously improve their environmental performance.

It is also a learning resource that raises awareness of environmental and sustainable development issues through activities linked to curricular subjects and areas.

The aim of the Eco-Schools programme is to make environmental awareness and action an intrinsic part of the life and ethos of the school for both pupils and staff

and to engage the wider community, by setting up pupil-led committees and giving them ownership of schools around the countryside, spreading the message of sustainable development and looking after the environment.

A School Eco-Committee is selected by the pupils from P4 to P7 and consists of one teacher, one ancillary staff member, two parents and eight children. The children on the committee are involved at all levels in suggesting ideas, planning, development and action.

These activities include, among others:

- An eco notice board with lots of evidence of topic work going on throughout the school
- Raising money for eco projects through the selling of plants, trees, school uniform and books
- Actively recycling paper, plastic and cardboard and composting food scraps.

This, of course, seems like a lot – but all of the involvement is linked to the curriculum whereby:

- Young classes learn about growth and plant seeds of flowers and vegetables
- Middle school learn about biodiversity and minibeasts
- Older classes learn about sustainability and have projects on how we contribute to food network, organic versus Genetically Modified foods

The Eco-Schools programme in Northern Ireland is now approaching 600 registered schools with over 140 schools having now received their first Green Flag – the highest Eco-Schools award available.

For more information regarding Eco-Schools in Northern Ireland, visit the organisation's recently-launched website, www.eco-schoolsni.org, or call Colin Latham, Eco-Schools Manager, on 028 9073 6920 for more advice.



recycle for your community



What each council's blue bin **CAN** & **CAN'T** take

COUNCIL	Aerosols	Cartons	Food tins & drink cans	Large Tins	Mixed Paper & Card	Plastic bottles & plastic food containers	Textiles	Small Electrical appliances
Ballymoney	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Coleraine	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Derry City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Limavady	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Magherafelt	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Moyle	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Strabane	Yes	Yes	Yes	Yes	Yes	Yes	No	No



aerosols



small appliances



food tins & drink cans



mixed paper & card



mixed textiles & clothes



large tins



cartons



plastics

Blue Bins **CANNOT** take

- X Plastic raw meat trays (trays that have raw chicken, raw beef, raw pork or raw fish)
- X Shredded paper
- X Nappies
- X Tissues
- X T.V.s, microwaves, computer monitors (nothing with glass)

- X General rubbish, plastic bags or food waste

- X Glass

- X Continental quilts

Please ensure materials are empty, washed out and clean. For small appliances, nothing larger than a domestic toaster. For textiles, bring to your nearest charity collection point or put in your blue bin.

Please contact your local authority if you have any questions (details on page 16).

Talking technology

Adhering to the '3Rs' of reducing, reusing and recycling as much day-to-day waste as possible is the most effective way households can contribute to the waste management effort in the region.

The 3Rs are a key priority of the NWRWMG's Waste Management Plan and the great strides made in this area throughout the last decade prove that the message is hitting home with the region's population.

Recycling rates have risen from less than 10% over a decade ago to 34% in 2008-9, and we are confident of meeting our target of recycling and composting at least 50% of our waste by 2020.

Unfortunately, however, not all of our waste is suitable for recycling. It is the responsibility of the NWRWMG to deliver the most environmentally-friendly and cost-effective solution for dealing with residual municipal waste – that waste which is left in your black bags and wheelie bins which cannot be recycled or composted.

Currently the most common method of dealing with unrecyclable waste is to send it to landfill sites but, for a number of reasons, we must dramatically reduce our reliance on landfill.

For a start, it's an environmentally unsound practice which generates significant levels

of methane gas, greatly adding to CO2 emissions. Of more short-term concern is the fact that this approach runs counter to the EU's Landfill Directive, which has set stringent targets to reduce the amount of biodegradable waste sent to landfill to just 35% of 1995 levels by 2020.

Failure to do so could incur infraction fines of up to £500,000 per day for Northern Ireland. Simply put, failure to find a viable alternative to landfill which improves our environment would see ratepayers facing hefty financial penalties.

As countries in Europe and the USA have done to great effect, the NWRWMG is tackling these waste management issues with a two-pronged solution of a focus on the 3Rs combined with the development of new infrastructure to recover energy from the remaining waste which is not suitable for recycling.

The NWRWMG is proposing to utilise advanced thermal technologies which can turn waste into a resource by converting non-recyclable waste into clean, green heat and electricity which is classified as renewable energy.

Following extensive research, we have decided that the most effective of these advanced thermal technologies for the North West region is a combination of Mechanical Biological Treatment (MBT) and Energy Recovery technologies.

The HAASE Energietechnik MBT plant in Neumuenster, Germany



Out to tender

In order to deliver the new waste management technologies, the NWRWMG has embarked upon one of the largest public procurement exercises in the region's history, with an estimated lifetime value of half a billion pounds.

www.northwestwaste.org.uk



The aim of the procurement, which was launched in February 2009, is to secure Mechanical Biological Treatment (MBT) facilities with a capacity to deliver c.140,000 tonnes of waste annually and Energy Recovery facilities with the capacity to deal with the MBT outputs.

The procurement invited private sector companies to bid for the contract to deliver the new waste management facilities. The shortlist of bidders, a mix of UK and Irish waste specialists, through to the next stage is:

- Biffa Waste Services Ltd
- Brickkiln Waste Ltd / United Utilities Plc
- Greenstar Holding Ltd (Greenstar UK) and
- One51 Plc / VT Environmental Engineering Ltd.

Councillor Evelynne Robinson, NWRWMG Chairman, said:

"Apart from the environmental benefits, the project will also generate construction jobs and produce energy

which could be used by industry and homes. We've been very encouraged by the level of interest in the project and expect to be in a position to announce the preferred bidder towards the end of 2010."

It is anticipated that the new waste management facilities will be fully operational by 2014.

FACT: The NWRWMG is planning to develop Mechanical Biological Treatment facilities which can deal with 140,000 tonnes of waste per year

Let us explain

As these waste technologies are new for the North West, it is natural that people will want to know how it works, why it is being introduced to the region and where exactly the new facilities will be located.

Looking to Europe

It is important to remember that, while these facilities will be new to our region, they are very much commonplace in many European countries where they operate to great success – many in urban settings. In Holland, for example, 38% of waste is treated by advanced thermal technologies; in Germany it's 35%. This has helped Germany reduce the amount of waste it sends to landfill to 5% - Northern Ireland's current figure is 70%!

What is MBT and Energy Recovery?

Mechanical Biological Treatment is a term used to describe a group of technologies that deal with residual municipal waste. When waste goes to a MBT facility, recyclable or reusable material will be extracted from it by a mechanical process, with the waste then subjected to a further treatment to produce a more biologically stable material.

Energy Recovery is a waste management method which disposes of residual municipal waste in such a way that energy is produced in the form of heat and/or electricity. There are a number of Energy Recovery technologies available, including mass incineration, gasification, pyrolysis and the use of cement kilns – but the NWRWMG has decided mass incineration is not acceptable for the region.

How do the technologies work?

As the name suggests, there are two main stages – a mechanical stage and a biological stage. The mechanical stage has two main roles, breaking down the waste into smaller parts (e.g. by shredding) and removing some recyclable material. During the biological stage, the waste will either be composted or digested, usually in an enclosed system.

Gasification is used to recover energy from residual waste. Gasification uses small amounts of oxygen to dispose of waste in such a way that useful energy is produced, in the form of electricity and heat. Gasification involves the partial oxidation of a substance. This means that oxygen is added but the amounts are not sufficient to allow complete oxidation or full combustion to occur.

The main product is a syngas, which is used to drive turbines or gas engines to produce electricity. The other main product is a solid residue of non-combustible materials (ash) which contains relatively little carbon.

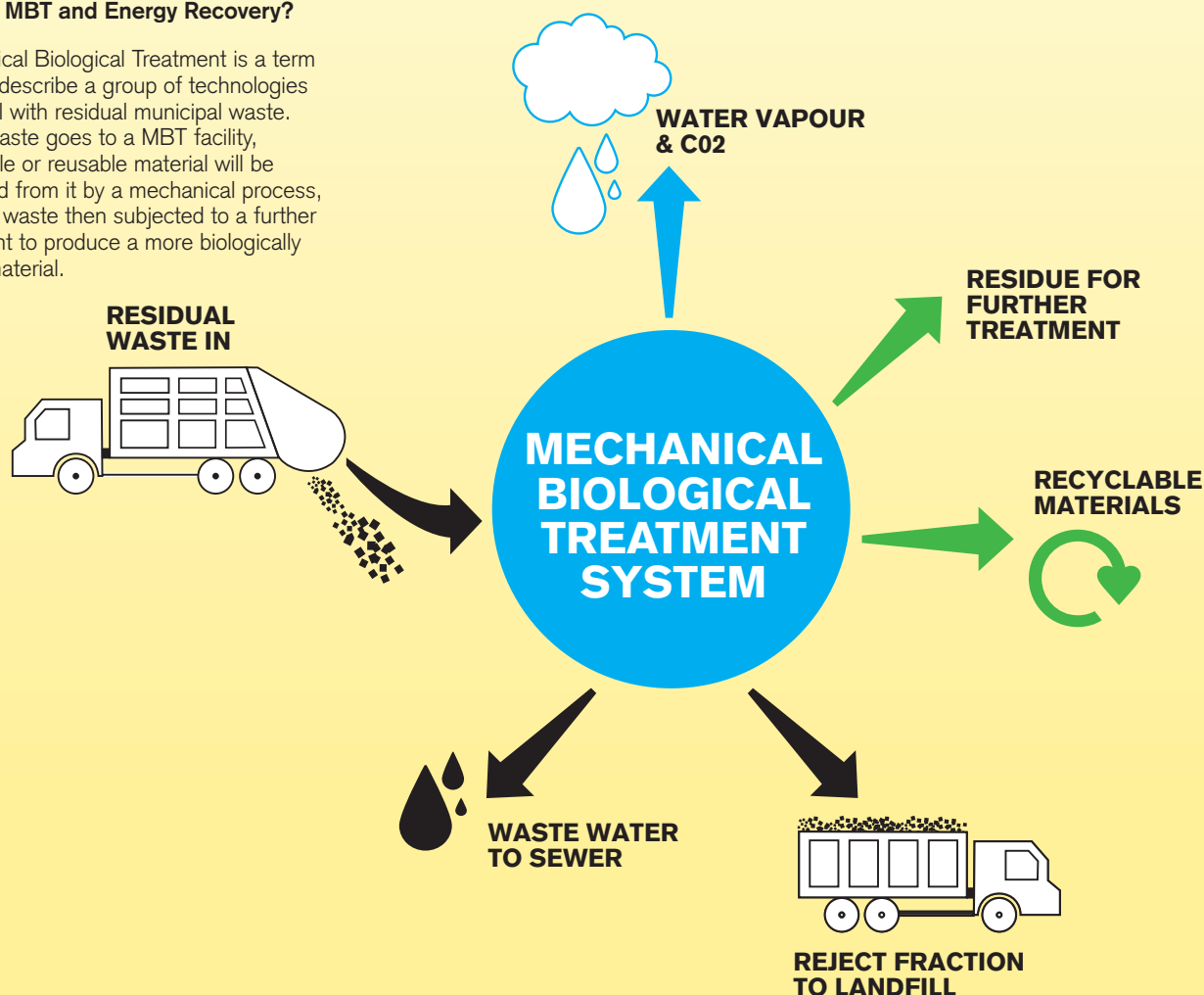
Pyrolysis is a similar process to gasification but uses no oxygen rather than restricted oxygen, as in gasification. In the cement kiln process, the use of fossil fuels is displaced and that energy saved.

Where will the facilities be located?

It is extremely important that the ideal site or sites are found. To help in this process, we have asked the NWRWMG's seven constituent councils and the public and private sectors to suggest potential sites.

When this process is complete a site evaluation will take place to assess the suitability of each location. The criteria involved in this decision will include suitability of access, existing infrastructure and potential flood protection.

Once the preferred sites have been secured, they will be offered for use of the bidders in the procurement, although bidders may also include their own site or sites within their offers.



ACTIVITY SECTION

Young people – you can help your mums and dads contribute to the waste management efforts in your area. The NWRWMG is calling on you to get involved and do whatever you can to make sure as many materials from your house as possible are reduced, recycled and reused. For some fun, why not have a go at playing this Snakes & Ladders game. All you need to play is a single dice and the game board. Have fun and always remember – **reduce, reuse and recycle!**



 North West Region
Waste Management Group
028 7137 0808
www.northwestwaste.org.uk

Supported by:



Ballymoney Borough Council: **028 2766 0200**, Coleraine Borough Council: **028 7034 7272**, Derry City Council: **028 7137 4107**,
Limavady Borough Council: **028 7772 2226**, Magherafelt District Council: **028 7939 7979**, Moyle District Council: **028 2076 2225**,
Strabane District Council: **028 7138 2204**, NWRWMG: **028 7137 0808**