

wasteline

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INSIDE:

Wasted Thoughts

It's a 'WRAP'

International Crackdown

arc21

CEO FOREWORD



John Quinn

Waste isn't just an issue for Northern Ireland, it's a global issue. In this edition of WasteLine we take a look at some international aspects of waste - ranging from the world's largest 'landfill' site to crackdowns on waste mismanagement in Greece and Italy, and the consequences of illegal dumping overseas.

Closer to home there have been new initiatives to help boost recycling levels, including a new £5m fund supported by the Department of the Environment, the introduction of 'talking bins' and the roll-out of a scheme to turn 70,000 tonnes of garden / kitchen waste from across arc21 into high grade compost.

Recycling is working and the public has helped deliver a five-fold increase in recycling rates over the past decade. Apart from the environmental benefits and the need to comply with European regulations, this material makes an increasingly important contribution to the local economy. For instance, did you know that there are four local companies reprocessing this material into everything from egg boxes to paper cups - supporting 1,000 jobs in the process? One more good reason to keep up all your good recycling work!

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WASTE STORAGE GUIDE

A new guide has been published to help ensure that homes and businesses in Northern Ireland are designed with waste storage / access issues in mind. It will be of particular use as an initial point of reference for architects, developers, building contractors and property owners who need to comply with waste-related building regulations.

The Local Government Waste Storage Guide was compiled by Northern Ireland's three waste management groups, including arc21, along with the NI Local Government Association and TAG (the Local Government Technical Advisers Group).

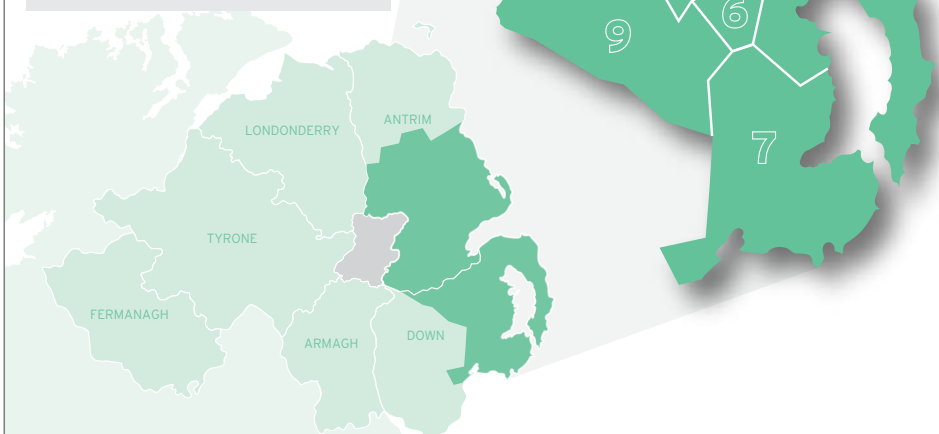
The guide builds upon previous work by Belfast City Council and can be downloaded from www.arc21.org.uk



THE ARC21 AREA

arc21 Councils

1. Antrim Borough Council
2. Ards Borough Council
3. Ballymena Borough Council
4. Belfast City Council
5. Carrickfergus Borough Council
6. Castlereagh Borough Council
7. Down District Council
8. Larne Borough Council
9. Lisburn City Council
10. Newtownabbey Borough Council
11. North Down Borough Council





IT'S A 'WRAP'

Ian Garner, Manager of WRAP NI (far right), joins Minister Edwin Poots and representatives from Dale Farm which has signed up to a new commitment to reduce waste

Ian Garner, Manager of WRAP Northern Ireland, explains how their work is helping arc21 councils deliver improvements in recycling and waste reduction.

As the UK's main resource efficiency body, WRAP can appear a large and complex organisation, working in many different areas. Across the UK, our work takes in sectors as diverse as construction, manufacturing, retail and agriculture, with dedicated programmes focussed on making the best use of resources within those industries.

Operationally, our role in Northern Ireland is more focussed. Chiefly, we deliver on-the-ground support to councils, waste management partnerships and the wider resource management industry. This can be through brokering support, delivering training and advising on organisational development. We work in partnership, never in isolation, and try to join up effective local delivery with the bigger strategic picture. So, we recognise the inherent value in the approach embodied by arc21 and the other strategic partnerships.

Recently we have been administering a capital fund on behalf of the Department of the Environment. The applications include a number of very practical 'quick wins' and some innovative ideas which could help deliver long-term change.

Importantly, our offering to councils goes beyond just allocating funds. We would hope to work with both the successful and unsuccessful bids to support best practice

and lever in operational, technical and market expertise where it is needed.

Indeed, this is really where we can add most value, by combining local knowledge with UK-wide expertise. We can draw on a body of market knowledge, material and sector specialists, technical reports and communications strategies, whilst also 'translating' it for the particular social, economic or geographic issues that Northern Irish councils and businesses face.

A recent example of this added value can be seen in the Northern Ireland Environment Agency's decision to adopt a whole series of quality protocols which WRAP, at UK level, has helped develop to support end-of-waste decision making and ensure quality standards throughout the recycling and reprocessing industries. Protocols for tyre crumb, compost and aggregates have already been adopted, with digestate and plasterboard in the pipeline. This is an important step in developing a robust, market-oriented industry and giving improved certainty to councils and other waste collectors.

The added value which WRAP can bring also extends to areas which may not be as visible to councils, but which still have a profound effect. The Courtauld Commitment, WRAP's UK agreement with grocery brands and retailers to reduce the environmental impact of packaging and food waste, is a prime example.

The original commitment saw all the major supermarkets, including Musgraves, from these shores come together with brands like Coca-Cola and Kelloggs to reverse the growth in packaging. We estimate that Courtauld has helped take

half a million tonnes of packaging off the shelves since it began.

Reducing packaging has obvious environmental benefits, but it is the cost savings, both to the manufacturers and retailers, and to the councils which recycle or dispose of packaging waste, which makes this especially valuable in the current climate.

Courtauld has recently entered a second phase with targets focussing on the wider resource and greenhouse gas implications of food and packaging, including through the wider supply chain. Already, we have seen Dale Farm and Moy Park become the first Northern Irish grocery producers brands to sign up.

One implication of Courtauld 2 will be to normalise the use of recycled content in packaging. We are already seeing record demand for recycled PET and HDPE, for example. Healthier market demand will create a driver for councils to collect more material, and to drive up quality. It may also provide an opportunity for ambitious recyclers and reproducers to start looking at food-grade recycling operations, giving a better return on recycle collected.

So, whether through our direct work on the ground in Northern Ireland, or by UK-wide industry work, WRAP is adding value to councils and the arc21 partnership. We look forward to continuing to capitalise on our collective strengths in the future.

For more information on how WRAP Northern Ireland can assist you, visit www.wrapni.org.uk or contact 02890 511519.



THE WORLD'S LARGEST 'LANDFILL' SITE

Here's a question to tease your friends with - "Where is the world's largest unofficial 'landfill' site?" Don't be surprised if they don't guess correctly, it's not even on dry land but in the middle of the ocean between America and Japan.

The 'Great Pacific Garbage Patch' covers an area six times the size of Britain (540,000 sq miles) and is an immense floating island of rubbish which has doubled in size in the past decade. Most of the 100 million tonnes of rubbish rotating slowly in the current is made up of plastic - some is discarded from shipping, but the vast majority is carried from coastlines across the Pacific Rim.

If you needed any convincing that recycling was a good thing, the Great Pacific Garbage Patch is it. All that rubbish drifting in the ocean is ruining the marine environment. As the debris breaks down it forms smaller plastic particles below the surface of the water - in some

instances the 'gloop' is 90ft deep. This and other toxic chemicals are eventually absorbed by wildlife and plankton, and are likely to work their way into the human food chain.

The rubbish is also washed ashore and in some parts of the Hawaiian islands

beaches have been inundated with 'plastic sand' and up to 10ft of trash.

Failure to recycle or to carefully manage our waste can have dramatic and unintended consequences - so always remember the '3Rs' of 'Reduce, Reuse, Recycle'.



INTERNATIONAL CRACKDOWN

Although the Pacific may have become a dumping ground for international waste, legal action against polluters is also on the up.

In the summer, for instance, a Dutch court fined a Swiss company €1m after authorities in the Ivory Coast alleged that waste dumped from a ship chartered by the firm led to the poisoning and deaths of 17 people.

The company was found guilty of breaking European waste export laws and concealing the nature of the waste onboard the vessel, the 'Probo Koala',

which originally docked in Amsterdam in July 2006. The captain also received a five-year suspended jail term and a company employee who managed the operation in Amsterdam received a €25,000 fine.

Authorities in Amsterdam refused to treat caustic soda and petroleum residues from the Probo Koala after a disagreement over price (the materials were used to clean fuel transportation tanks). The waste was re-directed to Abidjan in the Ivory Coast where it was dumped on the city's waste tips.

Although the company has an independent experts' report refuting any link between the waste and the

deaths, a United Nations report has found "strong" evidence connecting the waste to at least 15 deaths and several hospitalisations.

There are, of course, legitimate reasons for the transportation of waste, but its movement is strictly regulated in the UK and Europe.

The level of control depends upon the nature of the material, but no matter what is being imported or exported, anyone involved in the process must "take all necessary steps to ensure that the waste is managed in an environmentally sound manner". Clearly, such steps were not taken by the operators of the 'Probo Koala'.

International polluters beware - the Probo Koala was the subject of an international legal case involving the Ivory Coast and Holland



'WASTED' THOUGHTS

Back in spring the Department of the Environment conducted a wide ranging survey of public attitudes towards waste in Northern Ireland. Wasteline takes a look at the results to see if the public thinks waste really is a load of rubbish.

On the whole, the message from the survey was very encouraging. 90% of the public had heard of the '3R's message to Reduce, Reuse, Recycle and a smaller proportion (45%) were aware of the fourth 'R', Recovery, which applies to that waste which it isn't possible to practically recycle or compost. A high proportion, 77%, agreed that preventing waste or minimising it in the first place was 'very worthwhile' and a similarly high proportion agreed that recycling was also very worthwhile.

Just over half of households believe that they're doing as much as they can to prevent waste in the first place, 35% thought they could do a little more while 10% believed they could do a lot more. The greatest motivator for taking more action was 'saving money' although this was closely followed by a 'concern for the environment'. Lack of time and 'hassle' were given as the main obstacles to doing more to prevent waste.

Around 80% of us are already recycling paper, plastic and glass products, but a majority confessed they could do more when it came to recycling garden waste, household appliances and food waste. Batteries, however, emerged as the most likely item which we don't recycle, but know that we can.

Regarding waste management, an overwhelming majority agreed that it was important for environmental reasons, but just over a fifth didn't realise that failure to tackle the amount of waste being sent to landfill could lead to large fines from the EU. Three-quarters of those asked were very or fairly satisfied with waste services / facilities provided in their area.

On the whole there is much to be positive about in the findings, not least the claim by 55% of respondents that they were producing less rubbish than a year ago - a claim which is backed up by recent waste statistics.

90%
of the Public
have heard of the
3Rs

It is also clear that most people are aware of the value the '3Rs' have for the environment and their pockets. As ever, though, more needs to be done and there's a challenge for all of us - for individuals to go the extra recycling mile or for waste bodies to make the process of recycling even easier.

Progress is being made, though, and if we continue the good work we will remain on track to hit the target of recycling at least 50% of household waste by 2020.

55% OF RESPONDENTS SAID THAT THEY WERE PRODUCING LESS RUBBISH THAN A YEAR AGO



WASTE 'GROWTH' ON THE UP



The first stage in the recycling process starts by depositing garden clippings and food waste in the appropriate bins/food caddies which have been provided by councils within arc21.



The next stage is for councils to collect the waste stored in the bins and food caddies.



The organic waste is transported to recycling facilities where it is broken down using a shredding machine in preparation for a procedure known as in-vessel composting.

Usually 'waste' and 'growth' are two concepts arc21 doesn't like to hear mentioned in the same breath as we endeavour to reduce the 500,000 tonnes plus of waste which households create annually across the region. But when it comes to organic waste - that produced in our gardens and kitchens - that's exactly what we want to hear.

In the last edition of WasteLine we announced details of a £75m contract from arc21 to collect and recycle over a third of all organic household waste produced in the region. Ultimately the waste will be turned into compost for gardens, golf courses and other horticultural uses - hence the need to use your waste to go for growth. This time round, speak to arc21's contractor, NWP, to find out how they turn your organic waste into valuable compost.

According to NWP the amount of waste produced every year by Northern Ireland's households could cover 900 football pitches with waste one metre deep. The new 15-year contract between arc21 and NWP will divert 70,000 tonnes annually away from landfill. But just how does it work?

Step One

Put your garden and kitchen waste in the appropriate bin / food caddy provided by your council. This will include grass clippings / dead plants / vegetables /

meat etc (please note that kitchen waste collections are not yet available in all areas - check with your local council if you're unsure).

Once the waste has been collected it will be transported to arc21's contractors recycling facilities in Glenside on the outskirts of Belfast.

Step Two

The organic waste is broken down using a shredding machine in preparation for a procedure using leading edge Dutch technology known as 'in-vessel composting'. This is a sealed process with strict environmental control that accelerates the composting process.

The waste is enclosed in a sealed tunnel system to encourage the natural composting process. After eight weeks the waste will be converted into a soil-like material.

One of the benefits of this technology is that it provides much greater control of both the composting process and the production of any by-products. For example, an essential element in composting is to screen the material to remove any residual plastic or stones.

The end result is a high quality product called Rosey Lee Organic Compost which is distributed to garden centres throughout Northern Ireland - it's the first compost from Northern Ireland to receive a BSI PAS 100 standard of quality as certified by the UK's Composting Association.

Caolan Woods, a Director from NWP, said:

"As a local recycling company we have been impressed by the number of people who are recycling their green waste. A key benefit of disposing of organic waste in this way is that it can be used to produce compost which significantly reduces the reliance on natural resources like peat which has to be ripped up by a mechanical digger - destroying a unique and natural habitat for many species of plants and animals."

And it is not just gardeners who have benefited from the compost, but golfers too, such as the prestigious Royal Portrush Golf Course, one of the many customers to use Rosey Lee as an organic soil conditioner. So remember, next time you recycle your organic waste, you could be helping local golfers get the rub of the green.



Siodhna Woods shows off the final product produced from green waste, a high quality product called Rosey Lee Organic Compost.

BEHIND THE SCENES

It's estimated that there are almost 150,000 people employed in the UK's waste management sector, helping handle around 400 million tonnes of waste every year. In this edition, WasteLine takes a closer look at just one of those jobs - arc21's Technical Officer, Ronan Matthews.

With an Engineering background from Queen's University, Belfast, Ronan's early career took an interesting route via a job in an Egyptian steel plant as a quality controller and a teaching post in Madrid. While arc21's offices on the edge of Belfast may not enjoy quite as exotic a location, the day-to-day demands of the job are providing Ronan with plenty of challenges.

Ronan is involved in two principal areas - procurement and contract management. As the umbrella waste management body for the east of Northern Ireland, arc21 delivers and manages a wide variety of waste services for its 11 member councils. The idea is that by acting together the councils will be able to manage waste more effectively and at a better price - something which helps keep rate bills down. The theory has worked well in practice and it's estimated that arc21 is helping its councils save £4m annually.

Although arc21's largest procurement exercise is the £1bn Residual Waste Treatment Project to provide Mechanical Biological Treatment facilities and an Energy from Waste plant, it also manages a wide range of waste related contracts with a value of c.£200m. Ronan's job is to ensure that these projects are running smoothly, to liaise between councils and suppliers, and to deliver new contracts.

One of the schemes under Ronan's watch is the management of two contracts worth approximately £25m per annum with two privately owned landfill sites near Belfast handling 330,000 tonnes of waste annually; another is a £3m haulage contract to help deliver the waste. As part of the job Ronan visits the landfill sites regularly to monitor service



arc21's Technical Officer, Ronan Matthews, on site

delivery, meet with the contractors and review issues such as health and safety, and environmental impact. He's also responsible for making sure that accurate records are kept of the 110 bin lorries which deliver loads to the sites on a daily basis and that the contractors' invoices match the records.

Other contracts include a £75m organics scheme which has boosted recycling figures by 70,000 tonnes per annum as extra garden clippings and food waste are collected across the arc21 region. There are also service contracts with Bryson Recycling to provide and operate a Materials Recycling Facility for items such as paper and card, a contract for NVQ training and assessment for staff, and supply contracts to provide councils with a range of products including bins, composters and kitchen caddy liners.

Over the next couple of years Ronan is tasked with running a number of new procurement exercises to tender new services and retender existing contracts. Although it's a far cry from his PhD in Chemical Engineering, it's a part of the job Ronan relishes; starting with a blank sheet of paper and eventually delivering tangible services which help push the arc21 region ever closer to its target recycling rate of at least 50%.

The constant stream of new EU directives, UK regulations and changing legal environment also keeps him on his toes; he's currently completing a diploma in purchasing and supply to complement his membership of two professional bodies.

Ronan adds:

"I can't imagine too many teenagers leave school with the idea that waste management is the career for them - myself included! However, it's actually a very dynamic industry which is supported by an enormous range of jobs and touches upon issues ranging from energy generation to recycling, environmental protection and economic regeneration. There's always new technology, new regulations and new solutions to keep on top of, so if you're up for a challenge it could be the sector for you.

"My specialism, procurement, is an important discipline throughout the industry which - in arc21's case - helps deliver better services for councils and ratepayers at the best possible price. It's satisfying to know that by applying a high degree of professionalism to the procurement process we can help deliver real benefits to the wider community."

NI REPROCESSORS **NEED YOU!**



Recent reports in the press may have left some people with the impression that significant amounts of recyclable material is ending up in landfill sites.

The reality in Northern Ireland, however, is rather different with the vast majority of recyclable waste being recycled.

Indeed, such is the scale of recycling now underway in the Province, much of the material collected from local households - such as glass, paper, plastic bottles and textiles is being recycled (or reprocessed) by Northern Ireland businesses.

Four local firms - Quinn Glass, Huhtamaki, Cherry Polymers and Cookstown Textile Recyclers - for instance, have a combined annual turnover of over £240m and support 1,000 local jobs between them. They're also investing £175m to support recycling activities.

There is an issue, though, with some of the waste supplied to them being contaminated by unwanted materials, ie, tetra packs being accidentally placed in recycling bins which then gets mixed up with other materials such as paper. It doesn't sound like a big problem, but it could end up costing jobs in the local economy.

Companies are asking the Northern Ireland Assembly to help ensure that the quality / purity of material collected from

households is sufficiently good enough to be used by local recycling firms.

If the quality is poor, it makes it very difficult for the reprocessors to create a marketable product.

Lurgan-based Huhtamaki, for example, is a world leader in producing environmentally friendly packaging with its Northern Ireland plant providing 50% of the UK and Ireland's egg boxes - all from recycled materials, primarily paper. Contamination of the paper-based products supplied to Huhtamaki by items such as plastics, tetra cartons and textiles, however, adds to its energy and labour costs, reduces output and increases the amount of material which can't be recycled.

Although recycling levels have increased dramatically in Northern Ireland in recent years, new regulations are increasing the need to recycle even more. Reprocessors are concerned that the need to recycle more may reduce the quality /purity of the material collected to such a degree that it may be no longer possible to reprocess it locally.

It's not an insolvable problem, but it's one that arc21 appreciates is vital to get right if local reprocessors are to continue to grow and be competitive. Ricky Burnett of arc21 believes the solution starts in the home:

"The overwhelming majority of waste collected for recycling is recycled - much of it being used by local reprocessors. No system is perfect, however, and it's inevitable that a small amount of recyclable material will become contaminated. The best way to avoid that, however, is to put the right waste into the right bin or kerbside box.

"Material in the wrong bin clogs up machinery, reduces the amount of material that can be recycled and can cause real difficulties for local reprocessors. It also makes waste collection more difficult and more costly - something which ultimately pushes rates bills up.

"People in Northern Ireland should be proud about how well recycling has improved, but we need to keep going and make sure that when we do recycle we put the correct materials in the right bin or box.

"I encourage everybody to support their councils recycling schemes as much as they possibly can."

Get It Right



- No Plastic Bags
- No Envelopes (too much glue)
- No Shredded paper
- No Glass (bring to sites)
- No Margarine tubs
- No Yoghurt pots
- No Tetra paks (juice cartons)
- No Domestic Waste
- No Food waste
- No Plastic food trays
- No Pizza boxes
- No Engine oil bottles
- No Clothing (bring to sites)
- No Wood
- No Wrapping paper



- Plastic Bottles (no other form of plastic)
- Newspaper/Magazines
- Paper
- Cardboard (ripped up)
- Light card (cereal boxes etc)
- Aluminium cans (drinks cans)
- Steel cans (food cans)
- Aerosols
- Biscuit tins
- Plastic shampoo bottles
- Plastic milk containers
- Plastic fizzy drink bottles

or Get It Left!



WASTE WEEK 2010

Belfast City Council's annual Waste Week in June was, as usual, anything but a waste of time! This year's mix of innovative events was designed to get the public thinking about what they can do to support the '3Rs' and find out more about what the council is doing to minimise the impact of waste. They included:

WASTE FAIR FOR SCHOOLS

The ever-popular Waste Fair took place again this year with 32 local schools and 1,000 pupils taking part in parks around the city. Apart from teaching curriculum-linked topics such as Reduce, Reuse, Recycle, composting and biodiversity, a Recycling Magician was also on hand to add a bit of pazazz.

UNIQUE BOUTIQUE

Inspired by the council's award-winning Stitch and Style project, Unique Boutique was focussed on furniture rather than clothes. Much of the furniture landfilled every year in Northern Ireland could be refurbished or repainted and there was an exhibition in Victoria Square showing just what could be achieved. There were also demonstrations by local refurbishment artists and a workshop where shoppers learnt to recycle old cardigans into cushion covers!

MOVIES WITH GLASS

In partnership with the Moviehouse, Dublin Road, the classic 'Some Like it Hot'

was on show for anyone with unwanted glass jars. Admittance was free for anyone who brought along a glass jar for our recycling bank. In true recycling style the idea was inspired by post-war time initiatives to save resources and money.

CAR BOOT SALE

A classic reuse tool, the car boot sale has been around for generations. Encouraging people to think about items being 'one man's waste is another man's treasure' can dramatically reduce the amount of waste going to landfill. More than 40 cars signed up to sell at the event on Ormeau Avenue and around 300 dropped in to pick up a bargain.



Unique Boutique

REPAIR REVAMP RESTYLE

North Down Borough Council and Bloomfield Shopping Centre have hosted Bangor's first 'Repair, Revamp, Restyle' Workshop and Fashion Show - an event that demonstrated how to save money and prevent waste by using traditional crafts like knitting, sewing and dressmaking to revamp used clothes.

The workshops showcased how to revive, embellish, mend and stitch old or unwanted garments and provided plenty of hands-on experience as well.

The Fashion Show highlighted how previously loved, revamped or nearly new clothes and accessories can be coupled with the latest trends to offer up-to-date, wearable fashion. Local charity shops as well as retailers from Bloomfield Shopping Centre exhibited clothes available in their



shops, some of which had already been thrown away by someone. One particular attraction was the bridal range from Oxfam for that dream wedding dress on a budget!

For those mothers looking for a more eco-friendly nappy solution, children from Kilcooley Mums & Toddlers and other local children showed off the green alternative courtesy of Bangor's Real Nappy Company.

Congratulations to Bloomfield Shopping Centre, Gordons Chemist, Vintage Rocks Hair Studio, Cookstown Textile Recyclers for providing the clothes, Tailormaid, which resculpted one outfit into five alternative looks, and Changing Rooms NI for supporting the event and bringing revamped chic to North Down.

TOP TIPS

- think about what you need before you go shopping and remember to bring a reusable bag
- avoid buying one outfit for one occasion - buy classic styles instead that will last and can be accessorised throughout the year
- look in second-hand shops for unique accessories and clothes and ask shop assistants to look out for interesting items for you
- check out local fairs and markets - they often have vintage and funky items
- shop ethically and only buy what you really need
- look out for recycled clothes, handbags and jewellery

RECYCLING IDEAS

- take unwanted clothes to local charity shops
- host a clothes 'swap party' - invite your friends and share your unwanted clothes and accessories
- really worn items can be taken to your local recycling centre - they will be used to make cloths for industry and car seat stuffing
- strip worn garments of interesting material, such as ribbons or buttons, in case you can recycle them with another outfit

TALKING BINS

Have any of your late summer picnics been plagued by wasps and flies making the most of overflowing bins? Larne Borough believes it has the solution!

The Antrim Coast Road, which runs through the Borough, has been described by Lonely Planet as one of the greatest road trips in the world. Thanks to the council's move to introduce 19 new hi-tech bins throughout the area, it may just have got even better.

Larne has become the first council in Northern Ireland to provide solar powered compactor bins to tackle the problem of overflowing waste. The new bins will automatically compact rubbish once litter



Larne Borough Council has introduced Northern Ireland's first talking bin

reaches a certain level - allowing the bin to hold up to eight times more waste than normal. It also contains a SIM card which will automatically send a text or e-mail to the council once the bin is 85% full to prompt a collection.

Larne council's director of environmental services, Philip Thompson, said the bins would reduce operating costs and be more environmentally friendly:

"The compacting aspect of the bins makes them ideal for busy tourist locations because the compacting function increases the holding capacity of the bin.

"This is particularly useful because the added volume helps cater for increased use on busy tourist days. Moreover, as they are completely pest-proof, the bins also eliminate the potential for birds and rodents to access the litter."

Solar-powered bins are already used in major US cities including Boston, Philadelphia, and Baltimore, and at tourist sites such as the Alamo in Texas, and Harvard University.

Just goes to prove, 'talking rubbish' isn't such a bad idea after all!

EU GETS TOUGH ON WASTE

One reason why arc21 is progressing new waste facilities with a value of £1bn is the legal requirement to meet tough new European Union targets to reduce landfill. Failure to do so could lead to significant fines which ratepayers would have to meet.

The EU has been taking an increasingly tough stance on waste issues with Greece and Italy already falling foul.

GREEK TRAGEDY

Back in 2000, in the first ruling of its kind, the European Court of Justice fined Greece €20,000 for failing to close a toxic waste dump in Crete which was found to be a danger to the environment and human health. In total, fines in excess of €4.7m were racked up by Greek taxpayers over the Kouroupitos dump.

In 2003, however, Greece was taken to court again for failure to properly clean up the Kouroupitos site and another dump at Messomouri. A separate case was taken over the country's failure to provide a nation-wide system to deal with hazardous waste, which Brussels claimed was ending up untreated in almost 1,500 illegal landfills. In 2008 the Crete sites were again referred to the European Court for further waste infringements and in June this year another landfill site at Fyli-Skalistiri was referred.

ITALIAN PAIN

In 2007 Italy was taken to court for failing to provide an integrated and adequate network of disposal installations in the Campagna region. The Commission maintained that the situation was a source of danger both for human health and for the environment.

The case was sparked by collection problems in Naples - a widely covered story which led to 55,000 tonnes of waste piling up alongside public roads, despite help from other Italian regions and the German authorities. The Commission argued that this revealed a structural deficit in the provision of waste infrastructure.

In March this year the EU's Court found against Italy for failing to put waste facilities in place as near as possible to where the waste was produced. Italy must now bring its laws and waste-disposal systems into line with the court's ruling as fast as possible, or face the possibility of more legal action and a fine.

Similar tough action can be expected against nation states and regions which fail to comply with the EU's drive to reduce landfill levels to just 35% of 1995 levels by 2020.



CLEAN ENVIRONMENTS

Legislators at the Northern Ireland Assembly are doing their bit to help clean up Northern Ireland with a new Clean Environment Bill which is working its way through Stormont.

While the vast majority of people are supportive of the need to Reduce, Reuse and Recycle, you don't have to walk too far in our towns or villages, or drive down too many country roads, to realize that some can't even be bothered to put their waste in a bin, let alone recycle it.

Help may be at hand. The new legislation, which is based on that already operating in England and Wales, aims to encourage clean and tidy neighbourhoods.

As the DoE Minister, Edwin Poots, said in the Assembly, the Bill deals with a "wide range of low-level environmental crime, such as littering, dog fouling, graffiti and fly-posting. It also deals with the nuisance that is caused by noise, poorly directed artificial lighting, abandoned vehicles and irresponsible parking, abandoned shopping trolleys and even unwanted behaviour in back alleys".

Of particular interest to arc21 are the proposed measures to deal with litter which is a major issue for local councils and, consequently, a major cost for local ratepayers. Last year £34m was spent on street cleansing in Northern Ireland, the equivalent of almost £100,000 every day - money which could be better spent elsewhere.

The new Bill will help local councils deal more effectively with a range of litter problems by providing new powers, such as litter clearing notices that will require businesses and individuals to clear litter from their land and street litter control notices requiring businesses to help clear up the litter which they generate.

The legislation will also encourage greater use of fixed notice penalties for littering - in the year after the legislation was introduced in England the number of penalty notices issued for litter offences jumped from 7,565 to 43,624.

The Bill is currently being considered at Committee Stage and is likely to be agreed during the next session of the Assembly.

Litter bugs beware!

RECYCLING FUND HITS £5M

Waste has been moving up the political agenda for some time now as Government acknowledges the need - and the benefits - of managing waste more effectively. This Autumn has already included two major initiatives from the Department of the Environment (DoE) to help divert waste from landfill sites and boost recycling.

RECYCLING INITIATIVES

DoE has now made £5 million available for projects that will reduce waste to landfill through recycling or reuse activity. The Environment Minister, Edwin Poots, has announced £2.83 million of capital funding for 16 successful projects from the first round of the Rethink Waste Fund. He also announced that a further £2.3 million has been earmarked for additional recycling initiatives.

It is estimated that the 16 projects will help divert 12,000 tonnes of waste from landfill each year. This has the potential to save ratepayers across Northern Ireland over £575,000 every year in landfill taxes. The funding is available for capital costs such as the provision of collection vehicles, bins, improvements to amenity sites or household recycling centres.

Commenting on the news, the Minister said:

“Waste is an extremely valuable resource and we can no longer afford to ignore this value. The fact that £5 million has been secured for recycling in the current financial climate demonstrates that waste is a very important asset for the Northern Ireland economy.

“The 16 recipients named today have been successful because they have identified how to divert waste from landfill and ultimately save ratepayers money. This is not only good for the economy but has tremendous environmental benefits.”



Environment Minister Edwin Poots has announced further funding to boost recycling rates across Northern Ireland. The Minister is pictured at Waverley Court apartments, Lisburn, with the City's Mayor, Ald Paul Porter, and Cllr James Tinsley, Chairman of the council's Environmental Services Committee.

One of the projects includes a grant to Lisburn City Council which will enable it to extend the provision of recycling and organic collection services to approximately 3,000 apartments, townhouses and some rural properties which do not currently receive these services. This is due to either inadequate storage space in the normal wheelie bins or access provision for the current refuse collection vehicles.

Ards Borough Council has also been offered a grant of £154,000 to purchase new roll on/roll off skips and compactors to compact timber at a number of Household Waste Recycling Centres in the Council area. This will enable an additional 1,875 tonnes of waste wood to be recycled over three years.

The Minister continued:

“Whilst much progress has been made in terms of recycling I am convinced that more can be done and I want to do what I can to assist.

“This is why, in addition to the funding already allocated to the Rethink Waste Fund, I have asked officials to develop proposals for a number of pilot projects covering new and innovative approaches to increasing recycling rates.

“I am also considering the potential for a second round of funding, in this financial year. Whilst some councils have not been successful this time around, some of their work and ideas may form the basis of successful future bids. I would therefore urge councils to begin to review any unsuccessful applications for the first round of funding and consider how they would approach any future funding round.”

ADDITIONAL FUNDING

In the same week the Minister also announced additional funding of £200,000 for resource efficiency and innovative waste management projects. Aimed at the community and voluntary sector, private sector and local councils, the funding will help support revenue costs associated with projects that will boost waste prevention, recycling and reuse. These costs include items such as salaries, rent and marketing materials.

Projects diverting household waste from landfill will assist in easing the burden on ratepayers who ultimately bear the cost of landfill tax. Grants will also be available for schemes improving resource efficiency. This includes reducing energy consumption and the use of alternative raw materials (such as recycled products) as well as waste minimisation.

Launching the initiative at the East Belfast Mission, the Minister said:

“East Belfast Mission is proof that waste is a valuable resource. As a result of the original funding made available by my Department, East Belfast Mission now has nine shops selling a variety of second hand goods. This diverted over 420 tonnes of furniture from landfill and generated over £650,000 in 2009, which went directly in to the community.

“I am convinced, however, that more can be done and I am keen to assist. I would encourage all those that are eligible to put forward innovative projects to help improve resource efficiency, divert waste from landfill and meet EU targets.”

Further detailed information on the application process and general recycling news can be found online at:

www.rethinkwasteni.org

A REVOLUTION IN WASTE MANAGEMENT

Speaking recently to a Northern Ireland business magazine, arc21's CEO, John Quinn, sets out a new approach to waste.

"What we are doing will bring about nothing less than a revolutionary change to resource management in Northern Ireland," says John Quinn, "and the need for that change is greater now than it has ever been."

Listening to Mr Quinn as he describes the full scope of the arc21 project, it rapidly becomes apparent that this is not an overstatement.

As Chief Executive of arc21, John Quinn leads one of the three Waste Management Groups (WMGs) with responsibility for implementing a network of waste infrastructure services for the province.

arc21's infrastructure project is supported by Central Government with funding and specialist advice. Capital funding is currently provided by the Department of the Environment (DoE) through its Strategic Waste Infrastructure Fund (SWIF). The project's procurement receives revenue support from DoE and the Strategic Investment Board (SIB).

arc21 is also working with a team of specialist advisors on key aspects of the procurement, including finance, legal and technical, planning and communications.

Reporting to a Joint Committee of 22 elected members, arc21 also has additional responsibilities for the specification, procurement, award and operation of waste management contracts.

"It's a huge challenge for us and for all our key stakeholders in Local and Central Government, in business and for the more than 400,000 households in our catchment area," John explains.

"The current economic downturn has helped highlight the importance of making the best use of limited resources against a back-drop of cuts. Waste is a relatively untapped resource and one that has the potential to help us in a number of ways. Let me be quite clear on this, we simply cannot afford to carry on dumping such a valuable resource in landfill sites.

"Part of our remit is to bring about behavioural and attitudinal change as to how we view waste. In the current economic climate it makes no sense whatsoever to squander a resource, particularly so when that resource can be used to promote sustainability and drive positive economic and environmental change."

And there are cold, hard figures to back up that approach.

Even a cursory glance at the area's waste data figures reveals a significant pattern of opportunity, growth and success.

Although still awaiting final verification, the figures show that in the arc21 region for 2009/2010 a total of over half-a-million tonnes of municipal solid waste was produced.

On average, each household was responsible for 1.15 tonnes (down from 1.18 tonnes in the previous year).

This decrease in waste arisings was given an additional fillip from increased recycling and composting rates, which climbed to 35.3%, up 2% on the 08/09 figure.

The spin-off benefits can also be seen in the rise of what's become known as 'the green economy' where organisations' business models are based on sustainable development and ecological economics. At the last count, these types of organisations accounted for 1,000 jobs and a turnover of £180 million in Northern Ireland. Indeed, Harland and Wolff has just landed a £20 million contract to design and build two tidal turbines.



John Quinn, arc21 CEO

A well-known and high-profile figure in the waste management industry, Mr Quinn is a civil engineer with a long record of achievement in Local Government, where for nearly 30 years he has worked in waste management, pollution control and technical services. He is also a member of the Chartered Institution of Wastes Management.

Despite the scale of the task, Mr Quinn has maintained an unwavering focus on delivery and on the benefits he is convinced success will bring.

"We've come a long way and made many improvements in recent years, but we're still sending too much waste to landfill. That waste, with proper treatment, could be used to produce useful by-products, such as energy. Leaving aside the economic advantages of doing this, just think of how our environment will improve as a result of breaking our dependence on fossil fuels."

And it's not just John Quinn saying that.

A move towards waste minimisation and increased recycling rates is also high on the Northern Ireland Executive's agenda.

In March of this year, Environment Minister Edwin Poots launched the DOE's new waste prevention website. The Rethink Waste

campaign has a core aim of bringing about behavioural change among consumers, businesses and the community / education sectors in Northern Ireland in order to reduce the amount of waste sent to landfill.

The development of the website was the first step in the Department's campaign which is also backed up by a ReThink Waste Fund that makes grants available to local councils for schemes that support waste recycling and reuse.

Although the thought of financial penalties for missing landfill diversion targets is never far from his mind, John is upbeat about the progress arc21 had made in procuring the appropriate infrastructure.

"This is a complex area and one that we need to get right, first time. We're currently in dialogue with two potential bidders and looking at how their solutions meet our demanding specifications in terms of affordability, deliverability and technical performance."

During October, arc21's bidders submitted their next set of detailed solutions.

Following a period of further dialogue and evaluation, a preferred bidder will be announced during 2011.

It is expected that, subject to Joint Committee approval, a contract will be awarded and construction will begin shortly thereafter.

Given the high prominence of energy issues, particularly the need to diversify our energy mix and a commitment to boost the use of renewable energy, John believes that projects such as arc21's and the other Northern Ireland WMG's procurement exercises are vital.

For its part arc21 is planning to deliver up to two Mechanical Biological Treatment plants to maximise recycling rates and pre-treat waste for an Energy from Waste (EfW) facility which will use non-recyclable waste as a 'fuel'.

It's a waste management approach which is already common on the continent where 400 EfWs currently operate. arc21's aim is to replicate the experience of countries such as Germany, Holland and Denmark which combine high levels of recycling with significant energy production from waste.

The expectation is that arc21's EfW will convert once discarded waste into green, renewable energy - enough to provide the equivalent energy requirements of 40,000 homes; energy which could be used to cheaply supply power to intensive industries, civic buildings or even households.

In Alkmaar, Holland, for instance, an EfW powers a business park and the local 17,000-seater sports stadium. Similarly, an EfW based in Sheffield city centre is used to supply a range of civic buildings including a hospital and the Crucible Theatre which hosts the annual World Snooker Championship. There's no reason why a suitably located EfW in Northern Ireland couldn't be used similarly to attract industry, stimulate economic activity and support other civic and community based projects.

Across the UK it's believed that up to 2,000 new waste facilities will be required to meet the environmental and regulatory challenges of the early 21st Century and John is determined that arc21 will make its contribution, not least because the stakes are high. If Northern Ireland fails to change its approach to waste management by continuing to send upwards of 70% of its waste to landfill, the region could be subject to EU infraction fines that might add £500 to the average household rates bill.

Despite the progress that's been made to date, John is very aware of the consequences if Northern Ireland fails to modernise its waste infrastructure. Unsurprisingly, he's far from complacent.

"There's still a mammoth task ahead of us. Collectively, everyone has a role to play. Government, householders and businesses can all help to minimise waste and increase recycling. It is going to be an uphill struggle but, given what we've achieved so far, I'm confident that we'll succeed," he says.

And with that level of commitment, Northern Ireland has much to gain from arc21's endeavours.



Sheffield's Energy from Waste plant

KIDS' CORNER

SPOT THE DIFFERENCE

Can you spot five differences between the photo on the right and the original photo on page 10

As with past editions of Wasteline, we are again asking young people to get involved with the waste management effort in their area and help their mums and dads to reduce, reuse and recycle as much of their household waste as possible. Why not have a go at our Waste Buster questions to help get you thinking about waste management issues.



WASTE BUSTER

Take the Waste Buster and find out just how much you know about waste and recycling. The answers to these and the spot-the-difference picture will be posted on the news section of arc21's website: www.arc21.gov.uk

1. What are the '3Rs'?

2. Can you recycle waste from your bedroom or bathroom?

3. Can sweet tins be recycled?

4. On average, how much of your family's waste comes from the garden and leftover food?

5. What does EfW stand for?

6. Can shampoo bottles be recycled?

7. What happens at a MRF?

8. What can grass be recycled into?

