

Green Waste Composting Themed Meeting, March

A themed meeting on 'Green Waste Composting' was held on 14th March in Athy. 60 delegates from local authorities, consultants, and compost producers attended the meeting. All presentations may be downloaded from www.cre.ie.

- Policies & Opportunities, Lorraine Herity, RPS
- Technologies, design & Management Dermot Burke, TES
- Green Waste & Civic Amenities, Mark Heesom Greenstar
- Composting Site Selection - Munoo Prasad, Bord na Mona
- Kilberry Composting Site - Munoo Prasad, Bord na Mona



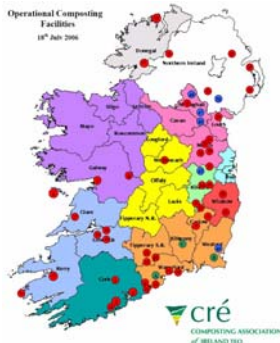
After lunch, the group visited the Bord na Mona Kilberry composting facility and compost bagging plant. The Kilberry



site covers 4.2 ha and comprises an enclosed asphalt surface with a leachate collection and recirculation system. The EPA licence the facility. Green waste and some industrial by-products are collected from the

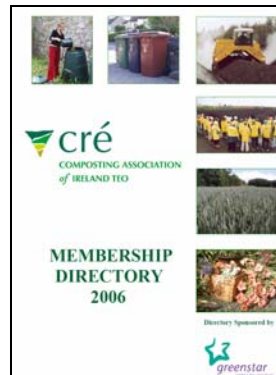
Dublin region and brought to the site. The material is shredded; windrows are formed and turned regularly with a straddle turner. The compost is tested and when deemed mature, is brought to the bagging plant. The bagging plant is highly automated. The compost is used to dilute the peat and is bagged in various sizes. All peat/compost media is sold to a DIY chain in the UK and Ireland. All delegates went home with a free bag of Bord na Mona compost!

New Facilities Map and Cré Membership Directory



An updated map of operational composting sites can be downloaded from www.cre.ie. This was completed in July 2006 and is based on a national review

Composting, anaerobic digestion and mushroom composting facilities are among the 50 facilities listed.



A new copy of the Cré membership directory has been posted to all members and others with this newsletter. All 2005-2006 members are listed here, sorted by category of business. The Directory will be widely distributed and electronic copies may be downloaded from www.cre.ie.

Cré Officers and Board of Administration 2006-2007

The Cré General Meeting was held on July 4th. Nominations had been solicited for all positions. The following were re-elected for the year ahead; Conor McGovern (Chair), Fiacra Quinn (Treasurer), Munoo Prasad (Head of the Technical Committee) and Craig Benton (Head of PR Committee).

The new Board of Administration are Conor McGovern, Fiacra Quinn, Munoo Prasad, Craig Benton, Lorraine Herity, Dermot Burke, Conor Walsh and Gary O'Lochlainn.

Members of the Technical Committee are; Andrew Walsh, Brian Sheridan, Fiona Doyle, Matt Connaire, Conor McGovern, Vicky Heslop, Tom McDonnell and Dermot Burke.

Members of the Public Relations Committee are; Tim Duggan, Lorraine Herity, Conall Boland, Fiacra Quinn, Dermot Burke and Munoo Prasad.

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Cré Conference, Bigger and Better!

The 6th Annual Cré Conference was held on 4th May in Enfield Co. Meath and was attended by 140 delegates. Dick Roche T.D. Minister for the Environment, Heritage and Local Government gave the keynote address. Minister Roche discussed the National Strategy on Biodegradable Waste and his interest and commitment to develop a sustainable composting sector in Ireland.

There is big interest in the growth of the composting industry in Ireland. A wide range of delegates stemming from local authorities, the EPA, governmental departments, planning organisations, equipment suppliers, compost producers and users, attended the conference.



Fiacra Quinn (Treasurer), Minister Dick Roche T.D., Percy Foster (Executive Administrator) and Conor McGovern (Chair)

The conference had a display of compost produced from various facilities from around the country. Minister Roche was particularly interested in this display and to see the quality compost products, which were generated, from various wastes and technologies. Promoting research in the area of composting is part of Cré's mission statement and this year there was a display of 12 posters on various compost research projects been done in Ireland.

The content of the presentations varied. The new National Biodegradable Waste Strategy for Ireland came under scrutiny. The plans for the introduction of 'Brown Bins' for households in Dublin were discussed and the example of Fingal County Council brown bin scheme was shown. The status of composting facilities in Ireland was described.

The use of compost in landscaping and sports fields in Denmark was explained. The benefit of using compost on agricultural land in Ireland was presented. To round off the day Bord na Mona gave free bags of compost to all the delegates. There was a short trip to OCAE consultants winter wheat crop research trial grown with green waste compost, which showed the benefits of using compost in arable crops.

The conference was organised by the Cré Public Relations Committee, who started back last December 2005 planning the event. Special thanks goes to all involved – Craig Benton, Conor McGovern, Conall Boland, Lorraine Herity, Fiacra, Quinn, Dermot Burke, Munoo Prasad and Percy Foster.

Special thanks also to all the speakers Minister Roche, Pat Macken, Brendan O'Neill, Conor Walsh, Conall Boland, Conor McGovern, Michael Storan, Mary McCarthy, Eammon Walsh, Vincent Phelan, Gerry Bird, Munoo Prasad, Morten Carlbæk.

Cré thanks sponsors of the conference; main sponsor – Bord na Mona, Newsletter – RPS, Membership Directory – Greenstar, Lunch- Golder Associates, Delegate pack- TES, Website- Celtic Composting, Poster Exhibition – Environmental Protection Agency, Coffee breaks – LK Shields, Michael Higgins.

Delegate who attended the conference were surveyed All the feedback was very positive. The survey results can be downloaded from www.cre.ie.

The conference proceedings can be purchased for €100 on www.cre.ie

States Launch Broadside on EU Biowaste Future

Four EU member states unhappy at the European commission unwillingness to propose an EU directive on biowaste treatment have launched a campaign canvassing support for the idea from other countries. Portugal, Spain, Germany and Austria say rules promoting separate collection and processing of biowaste are essential to kick-start a viable EU market for compost.

At a conference in Brussels on Wednesday 31st May the quartet set out their case for dedicated European biowaste legislation to officials from fellow EU states. The initiative is supported by waste management industry association Fead, composting body ECN, sustainable resource use association Assurre and the European environment bureau. More details at www.cre.ie.

Market Development Group

A Market Development Group (MDG) of key stakeholders was established in 2004 under the guidance of the Department of Environment, Heritage, Local and Government to drive forward markets development for recyclables and to identify new applications and markets for recyclables and secondary recycled products.

The MDG has been formed a Sub Committee on Organics. It will have an important role in the development of sustainable markets for organic material collected from municipal waste. Cré has made a submission to this Organics Sub Committee. More details at www.cre.ie.

ORBIT-2006 Biowaste Conference

ORBIT 2006, a large international biowaste conference, will take place on 13th - 15th September 2006 in Weimar, Germany. ORBIT 2006 will look at biomass, traditional subjects of composting and anaerobic digestion and matters relating to technology and product quality. Details can be found at: www.orbit2006.de

Biological Treatment Survey

The International Solid Waste Association has published results of a Europe-wide questionnaire. The ambition is to update the publication at regular intervals and to enclose further countries. The publication is available in the ISWA online bookshop. <http://iswa.org>



The Role of Composting in Ireland's Biodegradable Waste Strategy

Conor Walsh, Thornton's Recycling

The National Strategy on Biodegradable Waste was launched in Dublin in April by Minister Roche. The strategy is designed to assist the country in complying with the targets set in the Landfill Directive (1999/31/EC) for the diversion of biodegradable waste from landfill. The Government decided to exercise their option of the four year derogation on the 2006 and 2009 targets, but no derogation is being sought for the 2016 target. The plan envisages the diversion from landfill of 1.4 million tonnes per annum of biodegradable municipal waste (BMW) by 2010 and 1.8 million t/a by 2016.

In 2004, Ireland diverted 630,788 tonnes of BMW from landfill, so clearly there is a significant gap to close by 2010. The strategy proposes to close this gap by a combination of measures including; waste prevention; recycling of paper, card, wood and textiles; home composting; centralised biological treatment; mechanical biological treatment (MBT); and incineration.

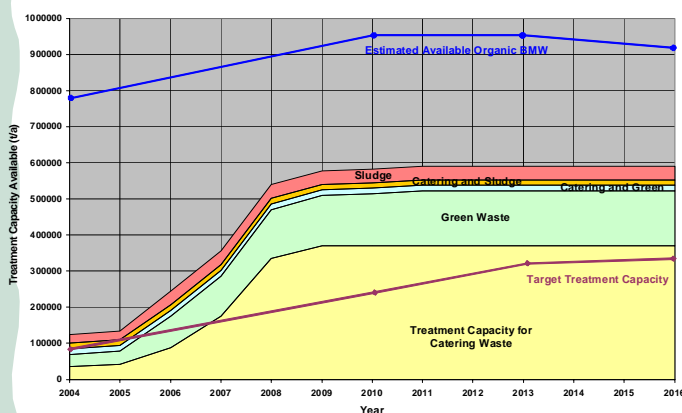
The growth in recycling in Ireland has been phenomenal in the last few years and the National MSW recycling rate of 33.6% reported by the EPA in 2004 is expected to be significantly higher in 2006 now that pay-by-use systems have been rolled out across the country. However, an unfortunate side-effect of pay-by-use has seen an increase in backyard burning and fly-tipping. Observations of recent outbreaks of chimney-fires suggest that some householders find that using the kitchen stove is more in line with the 'proximity principle' than transporting the waste to the barrel in the back garden.

The next two years are expected to see the nationwide introduction of a third (organic) bin to the estimated 42% of households that are currently served with two bins. This will be supplemented with drop-off facilities for green waste and a programme to encourage home composting, particularly in rural areas.

While the pace of development of composting has been slow heretofore, a major expansion phase has now commenced in anticipation of the need for centralised biological treatment to meet the BMW diversion targets. The targets set for centralised biological treatment in the strategy range from 250,000 t/a in 2010 to 330,000 t/a in 2016.

Figure 1 shows the capacity for centralised biological treatment that is currently in place or under development in Ireland. It appears that the strategy's targets are not very ambitious in the context of the growth in treatment capacity and the amount of organic BMW available.

Figure 1: Centralised Biological Treatment Facilities in Ireland



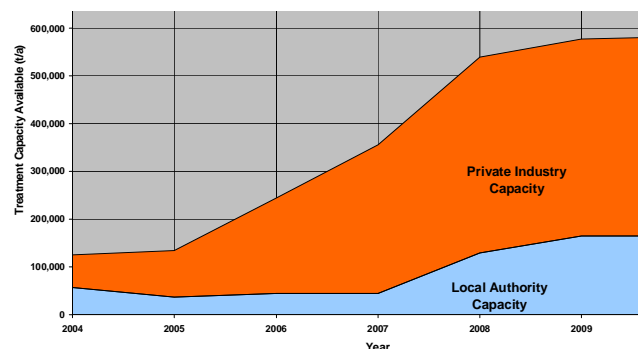
In order to achieve the targets for centralised biological treatment as outlined above, the strategy proposes the use of a number of policy instruments that represent a mix of economic and regulatory measures that encourage presentation, collection, treatment and marketing of organic wastes.

The recent success in the growth of recycling in Ireland took place in a climate of exceptionally high landfill prices (€140 to €230 per tonne), subsidised recycling of packaging waste through the Repak scheme and growing markets for recyclables. The current climate for the development of composting is quite different. Landfill prices are now falling below €100 per tonne, there is no subsidy on compost and the markets for the product are undeveloped.

The landfill levy, currently at €15 per tonne and generating in excess of €30million per annum, has a significant role to play in the economic viability of composting. Currently, a portion of this fund is being allocated as capital grants for the development of composting facilities by local authorities.

The private sector is specifically excluded from receipt of such grants and this is a major bone of contention in a competitive marketplace. Two-thirds of the landfill levy is paid by customers of the private sector waste industry, yet that sector has access to 0% of the fund. Figure 2 shows the extent of public and private sector development of biological treatment facilities and it can be seen that the local authority facilities represent less than 30% of the composting capacity that is currently under development.

Figure 2: Private Vs Public Sector Biological Facilities



A more equitable use of the environment fund would be the development of a subsidy for the production of high grade compost from source segregated catering and green wastes. The system of subsidising recycling is already tried and tested in Ireland through the Repak scheme that has successfully raised recycling levels in packaging waste to 64% by 2005, well ahead of the 50% target. It is the success of the Repak scheme that has raised the confidence of investors in the waste management industry in Ireland.

The next step in developing the composting industry is the development of quality standards for compost. This important action is proposed in the strategy to be completed within the next 12 to 18 months and the composting industry, through Cré, expects to play a major role in the development of the standards.

An EPA report (ERTDI programme) on potential markets for compost derived from municipal waste was published in 2002 and suggested that 70% of potential outlets could be found in agriculture. The biodegradable waste strategy reinforced that view. However, the Department of Agriculture has banned the use of this material on pasture land in response to animal by-product concerns and the Nitrates Directive is restricting the use of compost on arable land.

In conclusion, Ireland is now in a very advantageous position with regard to the provision of composting infrastructure to meet the EU landfill directive targets. However, unless the market situation is resolved, those investors that have made a large leap of faith, in developing facilities to meet a recognised national goal, are likely to get badly burnt.

The industry is calling on the Government to recognise the fact that private investment is providing modern sustainable waste management infrastructure without grant aid and in light of this, we in the industry ask Minister Roche, to support and nurture this investment. He can do this firstly through the development of compost markets with particular emphasis on opening up the agricultural markets and secondly by reconsidering the current ineffective and inequitable use of the Environment Fund, in favour of a system, such as a market subsidy, that rewards those that have taken risks in the name of sustainability.

GIS for the Management of Biodegradable Municipal Waste

Mary Purcell, University College Dublin

Mary Purcell is a student member of Cré, currently carrying out PhD research on Biodegradable Municipal Waste (BMW) at University College Dublin in the School of Architecture, Landscape and Civil Engineering, under supervision of Dr. William Magette, Senior Lecturer. Financial support for this project by the EPA ERTDI Programme and the National Development Plan is gratefully acknowledged.

The aim of the research is to develop a GIS tool for assessing BMW generation on a local basis in both residential and commercial areas of Dublin and to facilitate BMW planning management. This will be achieved through:

- o Analysis and characterisation of BMW according to socio-economic factors
- o Development of algorithms to optimise BMW collection
- o Delineating areas in which targeted intervention strategies should be implemented for maximum effectiveness in diverting BMW.

Using ArcGIS predictions of BMW generation will be mapped according to socio-demographics. Waste generation rates, according to population, social class, socio-economic group and household will be mapped according the Electoral Divisions for the four Local Authorities in the Dublin region.

Waste generation rates from scientific literature will be applied to the data. The waste generation for the commercial sector will also be mapped with the aid of An Post Geodirectory codes, and combined to the household layer to give total BMW generation.

The generation rate arising from the research will be used to estimate the magnitude and distribution of BMW requiring collection and will be used to identify those districts, in which unique intervention strategies may be useful. For a select number of these "unique" areas, residents and businesses will be surveyed regarding attitudes towards waste management.

Once verified against actual waste collection data, the GIS "model" using socio-economic indicators and housing types will constitute a valuable planning tool in predicting the generation of BMW as a function of these variables going into the future.

Contact Mary.Purcell@ucd.ie

The New Nitrates Regulations, 1st August 2006

The Nitrate Regulations SI 788 of 2005 was reviewed and superseded by SI 378 of 2006 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2006

SI 788 did not encourage the use of organic material such as compost on arable land (Nitrogen Index System - Table 10 in SI 788). The reduced chemical nitrogen application allowance, where organic fertiliser had been applied, acted as a deterrent to their use by farmers.

SI 378 has improved the situation. Compost has been moved from index 4 to index 2. For example This means that where winter wheat was restricted to 60 kg/ha of available Nitrogen, SI 378 now allows a 140 kg / ha nitrogen.

SI 788 did not mention the availability of nitrate and phosphate. SI 378 of 2006 has given the following standing to the availability of nitrate and phosphate from compost;

- Nitrate and phosphate from compost is given the same availability as from cattle manure
- An individual compost producer can go to the relevant Local Authority / Environmental Protection Agency and agree a figure on the availability of nitrate/ phosphate from their particular compost.

Scientific information available to Cré does not agree with the statement that nitrate availability from compost is the same as from cattle manure as Nitrate is slowly available from compost. However there is a 'default mechanism' in which a compost producer can agree with the Local Authority /EPA on the availability from compost. However this 'default mechanism' could lead to varying 'agreed figures' from different regulators.

To avoid the situation of conflicting 'agreed figures' Cré is taking the lead on a project which will review all scientific publications available and will seek to develop a 'Standard Reference Document' for the Composting Sector, Local Authorities and Environmental Protection Agency. Cré would hope that this Standard Reference Document can be developed in association with all the relevant regulators (Department of Environment, Heritage and Local Government, Environmental Protection Agency and Department of Agriculture and Food). A copy of the New Nitrate Regulations may be downloaded from www.cre.ie.

Animal by Products Workshop

11th -13th October in Stuggart, Germany.

Details on this event in 'European News' section on www.cre.ie

Cre Website www.cre.ie - Updated

The Cre website has been revamped and updated. There are new additions to the website and Cre will be updating the website more frequently in future.

Recently Opened Green waste composting Facilities in Ireland

- ▶ GreenKing Composting, Wicklow
- ▶ Bandon, Cork County Council
- ▶ V and W Recycling, Dundalk

Next Issue of the Cré newsletter

- Cré Composting Facility Operators Course
- Cré and the European Compost Network, European Conference on Composting, Dublin Castle 19th & 20th February 2007

If you have any items of composting news please email them to info@cre.ie