

International Composting Conference Dublin Castle, 19-21st Feb 07

**“Sustainable Use of Biomass: in Soil or as an Energy Source”
including a Workshop on Brown Bin Collection Experiences in Europe**

Keynote Speakers

- ▶ Luca Marmo of European Commission Environment Directorate General will give a presentation on the "Thematic Strategy on Soil Protection"
- ▶ Minister Dick Roche TD. Environment, Heritage and Local Government
- ▶ 2 days with over 33 presentations!

Presentations on:

- ▶ Biomass, biowaste and bioenergy in the Europe
- ▶ Status of composting in Ireland in 2006
- ▶ An overview of different collection schemes and keys to efficiency
- ▶ Cost assessment of separate collection schemes
- ▶ High quality compost and use as a peat replacement
- ▶ Benefits of compost and biomass use
- ▶ Use of compost in agricultural land

Workshop

- ▶ Workshop on brown bin collections in Europe

Study Tour

- ▶ Tour of two composting sites and bagging facilities

Social Evening in Guinness Storehouse

- ▶ Tour of the visitor centre,
- ▶ Drink reception, buffet meal
- ▶ Traditional Irish Music



Organised by Cré and the European Compost Network

Thanks to the main sponsors;



**Conference webpage
www.cre.ie/dublin2007**

New Dedicated Cré Office in Business Innovation Centre, Sligo

Cré has moved into its first dedicated office in the Business Innovation Centre (www.itsbic.ie) on the Institute of Technology, Sligo Campus. The New Address for Cré is;

**Business Innovation Centre
Institute of Technology Campus
Ballinode, Sligo**

**Tel: 046 9564005
Email: percy@cre.ie**

Newsletter sponsored by



Inside issue 14:	Page
International Composting Conference	1
New Cré Office	1
Compost Standard Research Project	2
Nitrate & Phosphate Research projects	2
Equipment Themed Meeting	2
Two New Compost Facilities	2
Cré – Operators Training Course	3
Thematic Strategy on Soil	3
ABP Working Group meeting	3
Long Term use of Compost in Agricultural	4
WRAP Capital Programme	4
EPA Compost Factsheet 2005	4
Cré Events in 2007	4

It is widely recognised that market development is a key element in the development of the composting industry in Ireland. A key element in market development is the need for a quality standard for compost. Cré will develop a draft industry compost quality standard for source separated biodegradable municipal waste derived compost in an ERTDI (Environmental Research Technological Development and Innovation Programme) research project funded by the Environmental Protection Agency. Cré gratefully acknowledges funding from the EPA.

The project proposes to develop a desktop draft standard in consultation with the composting sector (producers and users) and regulators. At this stage, the project steering committee had its first meeting and includes representatives from the Market Development Group, Department of Environment, Heritage, and Local Government, Environmental Protection Agency, Department of Agriculture and Food, National Standards Association of Ireland and Cré.

The project will conduct a desktop evaluation and statistical analysis of compost quality results based on compost laboratories databases.

When the results are statistically analysed, the average compost values of the database will be determined for green waste and biowaste compost.

This will be followed by a technical appraisal of published compost quality standards from different countries in consultation with organisations in Europe who have developed compost standards already. At the end of this process a first draft standard specification for compost in Ireland will be developed.

There will be extensive consultation of the draft standard with all stakeholders including users, producers, and regulators through two workshops. After each workshop, the draft standard will be amended to produce a final standard. The project started in September 2006 and will finish in May 2007.

This project will be conducted by Dr. Munoo Prasad (Head of the Cré Technical Committee) and Percy Foster M.Sc. (Executive Administrator) of Cré – Composting Association of Ireland Teo.

This project is funded by the Environmental Protection Agency's ERTDI (Environmental Research Technological Development and Innovation Programme) Programme.

Research on the Availability of Nitrate and Phosphate from Compost

The Nitrates Directive was implemented in Ireland in December 2005 under SI 788 of 2005. It was revised and the new amendments are under a new statutory instrument 378 of 2006. The SI 378 of 2006 was passed into Irish law on August 1st 2006 and supersedes SI 788 of 2005.

In the old SI 788, the availability of nitrate and phosphate was not acknowledged / mentioned. In the new SI 378 of 2006 (page 12, Nutrient Management part 3, 15 (4)) the availability of nitrate and phosphate from compost has been given the following standing;

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

This SI 378 of 2006 has given the availability of nitrate and phosphate from compost the same as cattle manure. From an initial review, there would appear that this statement is not true.

However the 'default mechanism' in which a compost producer can agree with the Local Authority / Environmental Protection Agency on the availability from compost is a positive option for the composting sector in Ireland. To avoid the situation of conflicting 'agreed figures' Cré is proposing to lead these two small scale projects which will review all scientific publications available and will develop a 'Standard Reference Document' for the Composting Sector, Local Authorities and the Environmental Protection Agency.

The projects;

- ▶ A Literature Review on the Availability of Nitrate from Compost in Relation to the Nitrate Regulations SI 378 of 2006
- ▶ A Literature Review on the Availability of Phosphate from Compost in Relation to the Nitrate Regulations SI 378 of 2006

will be conducted by Munoo Prasad and Percy Foster.

The grant aid for these projects was from the Environmental Protection Agency's ERTDI Programme. This grant is funded by the Government under the National Development Plan.

Two New Composting Facilities

Michael Dolan of Johnstown Recycling has recently opened his In-vessel composting facility outside Mullingar, Co. Westmeath. The facility has a waste permit from Westmeath County Council and will compost up to 2,100 tonnes of food waste and green waste per year. This is the first compost facility in the midlands and will be using the Celtic Composting 'Tunnel' system. Michael can be contacted at 086 2599165.

fully enclosed compost facility at Ballynalorgan, Kilmainhamwood, Kells, Co. Meath. The facility is licensed by the EPA (Licence W0195-01) and can accept 20,800 tonnes per annum of non-hazardous biodegradable waste for composting. The facility uses the McGill system of forced aeration static pile. According to the facility manager Tom Mc Donnell "the fully computerised aerated system is operating well". Tom Mc Donnell can be contacted at 086 8563431.

Thorntons Recycling has just completed construction of their new

Themed Meeting Equipment – Shredders, Turners, Mixers & Screens



Photo of Machinery in Hotel Car Park

A Cré Themed Meeting on Equipment – Shredders, Turners, Mixers, Screen and Bagging was held on 18th October in Marriott Hotel Enfield, Co. Meath. The day included trade stands in the hotel from the various suppliers, followed by presentations from compost operators on their experiences using various types of equipment. After lunch there was a large display of machinery in the hotel car park of shredders, screens and turners.

Presentations from;

- ▶ Overview and Explanation of Shredders, Turners, Mixers and screens (Craig Benton – Compost and Recycling Consultants Ireland)
- ▶ Experiences with Screening and Compost Bagging Equipment (Caolan Woods, Natural World Products)
- ▶ Experience Using Three Different Types of Straddle Turners (Stephen Griffin, CTO Greenclean Environmental Solutions)
- ▶ Experiences using Shredders (high & low speed), Screens (Star, Trommel & Finger), Tub Grinder and Mixers. (Martin Eves, Envirogrind)
- ▶ Update on Cré Activites, Percy Foster, Cré

Cré – Institute of Technology Sligo – FÁS Accredited Compost Operators Training Course

Cré has been examining the development of this course for an extended period of time. To have the best possible course, Cré has formed a partnership with Institute of Technology Sligo and FÁS. The course is aimed at operators of composting sites on how to compost properly. Already there is a huge interest from operators but also from people who want to learn about composting. Cré formed a course development steering committee with representatives from all stakeholders in the composting sector, from regulators, compost facility managers, consultants and training organisations. This spectrum will ensure that the course development will reflect the needs of all involved in the composting sector.

Composting Operator Training Course Content

- ▶ Definitions and Biology of Composting
- ▶ Composting Process
- ▶ Composting Technologies
- ▶ Process Control
- ▶ Potential Environmental Impacts & Environmental Management
- ▶ Compliance with Regulatory Framework
- ▶ Health and Safety
- ▶ Facility Maintenance
- ▶ Compost Uses and Marketing
- ▶ Community Relations

Course Steering Committee includes Representatives from; Department of Agriculture and Food, Department of Environment, Heritage and Local Government, Environmental Protection Agency, Composting and Recycling Consultants Ireland, Golder Associates, Veolia Environmental, Galway City Council, Carlow County Council, Institute of Technology, Sligo, Fás & Cré.

Animal by-Product Approved Composting Sites

Congratulations to the first composting sites to be approved by the Department of Agriculture and Food under the Animal by Product Regulations.

	Approval Number
Envirogrind, Donegal	COMP – 7
Milltown CTO Greenclean/Greenstar, Tipperary	COMP – 15
Waddock Composting, Carlow	COMP – 16
Greenstar, Silliot Hill	COMP – 9
Waterford City Council, Kildarey	COMP- 5

Animal by-Product Working Group 1st Meeting ABP Compost is Allowed on Pastureland

The Department of Agriculture (DAF) held its first meeting of the 'ABP working group' on 1st December. Cré, Irish Bioenergy Association and Bord Iascaigh Mhara participated in this working group. The working group held a productive meeting with various points discussed. One of the main points DAF explained is that they will allow catering waste derived compost to be spread on pastureland. This comes with conditions that ruminant animals

Accreditation

The course is accredited as a 'Single Subject Certificate' to HETAC (Higher Education Training and Awards Council - www.hetac.ie). HETAC is Ireland's qualifications awarding body for third level education and training institutions. You may have noticed their television ad recently.



Course Details

The course will last 6 days, comprising three blocks of 2 days over a period of time. It will be taught in classrooms and there will be site visits to a large green waste composting facility (windrow technology), a small green waste composting facility and food waste composting facility (In-vessel / Animal by Product Facility). The students will have an exam after each two day session (days 2, 4 & 6), write site visit reports and other types of reports. The first and second block will be in Enfield, Co. Kildare, followed by Athy, Co Kildare. The course will be limited to a maximum of 30 students per course. The course will be provided and managed by Institute of Technology, Sligo on Cré's behalf.

Cost

Grant aid for the course cost is possible and Cré is investigating this possibility. The final course costs will be announced soon.

At the time of going to press, there have already been 23 enquires about the course. The course manuals are in the latter stage of development and once they are completed, the first course is expected to start in Feb/March 2007. If you would like to learn further details on the course or would like to provisional book a place please contact Percy Foster (percy@cre.ie).

Thematic Strategy on Soil Protection

The European Commission has adopted the Thematic Strategy on Soil Protection. The strategy promotes the replacement of organic matter back to soils. Compost can play a huge role in replacing organic matter back to soils, particularly on Irish arable land. Full details on <http://ec.europa.eu/environment/soil/index.htm>

Animal by-Product Conference, Stuggart

Percy Foster represented Cré at the recent ABP conference in Stuggart, Germany. The proceedings are being forwarded electronically to Percy, who will distribute this information to Cré members.

Representing Irish Composters in Europe

Percy Foster, Executive Administrator of Cré represented the Association at the European Compost Network (ECN) fourth annual meeting in September in Weimar Germany. The meeting was in the evening time of the ORBIT conference, which Percy was attending as part of the funded compost standards research project. The ECN is a collaboration of partners working together to promote sustainable practices in composting, anaerobic digestion and other treatment procedures for the treatment of organic residues across Europe. It aims to address the needs of both practical operators and decision makers. The ECN was set up as a way for composters across Europe to share technical information and practical experiences with like-minded groups and to promote the composting industry to policy makers in Brussels. The ECN holds regular workshops and seminars, often in partnership

with other organisations, such as Cré which is hosting the conference in Dublin February 2007. These meetings aim to share information and to discuss forthcoming issues of interest to composters across Europe. Of increasing importance is ECN's presence in Brussels, where it acts in partnership with other organisations to raise awareness of bio-waste management and to lobby the European Commission to introduce measures to promote composting. Cré, as part of the Network with other like-minded organisation part of the ECN, has been calling for changes to the Waste Framework Directive during its revision. The 'Biowaste coalition' has been calling for strategic drivers to enable long-term investment in biological treatment capacity. Support has been gained for this from Germany, Austria, Spain and Portugal but unfortunately not from Ireland.

Long Term Effect on Use of Compost on Agricultural Land in Germany



Photograph shows L to R, Percy Foster Cré, Wim Auweele (Vlaco Belgium), Munoo Prasad, Cre Technical Committee, Josef Barth (ECN), Dr. Kluge (Agricultural Research Station), Gerry Bird OCAE Consultants, John O'Neill (Department of Environment, Heritage and Local Government), Florian Amlinger (Compost Consultancy and Development, Austria) On the opposite side of the camera was David O'Connell (OCAE).

The use of compost on agricultural land is an important area to be developed in Ireland, which is a cornerstone to the development of the composting sector. Cré and European Compost Network organised an informal discussion on this topic, aimed at educating those involved in this area in Ireland. The main discussion was based on long term research done by Dr. Kluge on 5 different crop trial sites around Germany over a 11 year period.

Florian Amlinger from Austria also discussed the effect of compost on land. Some of the main findings of Dr. Kluge was organic matter content of soils increased around 1% and that nitrate is slowly available from compost. The meeting was organised on one evening of the Animal by Products Conference in Stuttgart.

Even a Little Capital Grant Support helps Boosts Composting Capacity

Composting capacity in the UK is set to receive a 50,000 tonne per year boost thanks to two new projects funded by WRAP (the Waste & Resources Action Programme). Vital Earth (Derby) Ltd and J M Clarke & Son both applied to WRAP's 3rd Organics Capital Support Programme for funding to develop and expand their composting facilities in Derbyshire and Leicestershire respectively. Work on the first, a £2.4 million project for the construction of a new in-vessel composting facility, is now almost complete at the site of a disused airfield in Ashbourne, Derbyshire. The facility was supported by £507,000 of WRAP funding. The new facility will provide an additional composting capacity of 40,000 tonnes per year, bringing the total annual in-vessel capacity currently supported by WRAP's Organics Capital Support Programmes to around 120,000 tonnes per year. In another project, J M Clarke & Son have received capital support to extend their existing windrow composting operation that will increase UK composting capacity by a further 10,000 tonnes per

year over the project period of five years. Supported by £107,247 of WRAP funding towards the total £405,340 cost of the project, the extension of J M Clarke & Son's facility will include a new composting plant and the construction of concrete pads and walls, doubling the site's processing capacity. The expanded facility, expected to be commissioned this month, will enable Clarke's to take more garden waste from Kettering and Corby district councils. Furthermore, the company will be seeking certification to the PAS 100:2005 specification and will initially supply certified compost to the agricultural market. Richard, Swannell, Director of Market Development - Organics, said: "We are delighted to be supporting these two projects, which together represent a significant step towards meeting our challenging target of increasing the UK's processing capacity for biodegradable municipal waste by 450,000 tonnes per annum by March 2008."

Note from Percy, Cré

Capital Grants for composting sites can make a huge difference in delivering composting capacity, as shown in the UK. I was recently talking to a compost producer who received money from a previous WRAP capital programme. This compost producer felt that without the support from WRAP, his composting site would not have been built. The grant aid from WRAP enabled this compost producer to secure a loan from his bank manager to fund the construction of the composting site. If a similar scheme was available in Ireland for the private sector, I would predict that there would be more facilities established in Ireland. Last October I was contacted by a consultant from the UK, who had a client who wanted to invest a significant amount of money into the construction of In-vessel composting facility in Ireland. The consultant contacted me to find out what grant aid is available and when I told him there is none for private sector, he thought that it would be unlikely that his client would invest in a compost site in Ireland. – ***This is a missed opportunity to help meet our landfill diversion targets. If capital grants were available today for the private sector to build new compost sites, would this give them an unfair advantage to existing private sites, who were built without capital grant aid ?? Would a solution in Ireland be that any compost site (public & private) who produces a high quality compost that meets a compost standard (in development) be rewarded X Euros per tonnes ??? . This scheme could use the model used by REPAK for plastic. In this way we are making an incentive for facilities to produce good compost and reward them for their efforts. I welcome your views. Percy Foster***

EPA Compost Facilities 2005 Factsheet – www.epa.ie/OurEnvironment/Waste/NationalWasteReport/

The EPA conducted a survey of the composting infrastructure in 2005. Since the survey was conducted there are now 44 composting sites (Oct 2006). The main findings of compost facilities operating in 2005 were;

- ▶ 39 composting facilities were in operation. The compost facilities can be broadly split into two categories, facilities that produce a good quality compost substrate for sale to mushroom growers, and waste management facilities that make compost from organic waste.
- ▶ The total licensed and permitted capacity of the facilities surveyed was 354,100 tonnes. Of this, the mushroom composting facilities account for 126,950 tonnes.
- ▶ Mushroom composting facilities employ a combination of windrow and in-vessel technology and in 2005. They composted 123,766 tonnes of manure and gypsum waste.
- ▶ The total tonnage of waste composted at the surveyed waste management facilities was estimated to be 147,585 tonnes in 2005 (65% of available licensed capacity)
- ▶ The majority of waste composted at the surveyed waste management facilities was green waste and household organic waste, an estimated 82,693 tonnes in 2005.
- ▶ The remaining waste composted was municipal and industrial sludges (28,888 tonnes), kitchen and canteen waste (4,207 tonnes).
- ▶ 60% used in-vessel technologies and the remaining 40% used windrow technology.
- ▶ Almost 55% of the compost produced by waste management facilities was used in landscaping activities. The remainder was used as landfill cover, mainly in remediation and capping activities.

Cré Events in 2007

- ▶ January – Workshop for Compost Producers on Compost Standard Research Project
- ▶ February – International Composting Conference in Dublin Castle, 19th to 21st
- ▶ Feb/March – Starting of the Cré-IT Sligo- FÁS Training Course
- ▶ March – Themed Meeting for all on Compost Standard Research Project
- ▶ May – Themed Meeting – Topic to be confirmed
- ▶ June – Cré AGM & Election of Officers
- ▶ September -Themed Meeting – Topic to be confirmed
- ▶ December – Themed Meeting on Home Composting