

Ireland & Northern Ireland

2015 Guide to Composting and Anaerobic Digestion



**Composting & Anaerobic Digestion
Association *of* Ireland**

Cré is a non profit association of public and private organisations, dedicated to growing the biological treatment sector. Cré supports the production of high quality outputs, assists the delivery of Government waste diversion and bioenergy targets, and promotes the creation of sustainable indigenous jobs.

Who Produces the Guide?

The 2015 Guide to Composting and Anaerobic Digestion is produced and edited by the Cré – Composting and Anaerobic Digestion Association of Ireland.

What Does the Guide Cover?

The Guide lists information and contact details of organisations from the Ireland and Northern Ireland supplying services, goods and members of Cré. These include local authorities, consultants, compost facility operators, anaerobic digestion operators, waste management companies, trade and education institutions.

The Cré Team

Board of Directors

- ▶ Dearbháil Ni Chualain (Bord na Mona Horticulture)
- ▶ David McDonnell (Green Gas AD Plant)
- ▶ Fiacra Quinn (ELV Environmental Services)
- ▶ Martin Eves (Envirogrind)
- ▶ Munoo Prasad (Compost Research & Advisory)
- ▶ Patrick O'Toole (O'Toole Composting)
- ▶ Tim Duggan (Enrich)
- ▶ Maurice Cremin (Cremin Farm Compost)

Technical Committee

- ▶ Dearbháil Ni Chualain (Bord na Mona Horticulture)
- ▶ Munoo Prasad (Compost Research & Advisory)
- ▶ Sam Bowden (Acorn)
- ▶ Brian Sheridan (Odour Monitoring Ireland)
- ▶ Tony Breton (Novamont)

Public Relations Committee

- ▶ Tony Breton (Novamont)
- ▶ Patrick O'Toole (O'Toole Composting)
- ▶ Paul Mooney (Paul & Bronwyn Mooney)

Health and Safety Committee

- ▶ Sam Bowden (Acorn)
- ▶ Michael Whelan (Bord na Mona)
- ▶ Denis O'Sullivan (Panda)

Anaerobic Digestion Committee

- ▶ David McDonnell (Green Gas AD Plant)
- ▶ Morgan Burke (Stream Bioenergy)
- ▶ Micheal Geary (FLI)
- ▶ Alan Reynolds (Greenfield Ventures)

Chairman - Martin Eves

Treasurer - Tim Duggan

Chair of the Technical Committee -
Munoo Prasad

Chair of the Anaerobic Digestion Committee - David McDonnell

Executive - Percy Foster

PR officer - Lee-jane Eastwood

W: www.cre.ie

T: 00 363 (0) 86 8129260

E: info@cre.ie

Disclaimer

While steps have been taken to ensure its accuracy, Cré cannot accept responsibility or be held liable to any person for any loss or damage arising out of or in connection with this information in this directory being inaccurate, incomplete or misleading. The listing or featuring of a particular product or company does not constitute an endorsement by Cré and Cré cannot guarantee the performance of individual products or materials. All rights reserved. Reproduction in whole or part is prohibited without prior written approval from Cré.

Cré – Composting & Anaerobic Digestion Association of Ireland, P.O. Box 135, Enfield, Co. Meath, Ireland t. 086 812 9260 e: info@cre.ie

Food Waste Issues?

Problem Solved

Thorn Environmental Limited is Ireland's largest supplier of biodegradable and compostable films and sacks. Thorn has put together an award winning solution to the waste separation problem. The bin and bag system enables the user to fully comply with all HSA and HACCP guidelines.



The Bag

Thorn's award winning earth2earth compostable range of bags include a specially designed bag for use in their brown kitchen pedal bin.

- The bag is water proof and heat resistant to 75 degrees (unlike others)
- Superior strength and tear resistance
- Ivory Clear bags with eye-catching green motif
- Various stock sizes available, and specials on request
- EN13432 certified



The Bin

Thorn's 45 Litre brown pedal bin when filled near the top will ensure that the user does not exceed 20kg lifting restriction. This means that users can empty the bin the fewest times possible without exceeding weight restriction. Reducing the amount of bags used and waste spilled.

- Hands-Free Pedal operation
- Will contain spillage if necessary
- Easy clean
- Specially designed to hold the maximum lifting weight without exceeding.
- Fully HSA and HACCP compliant



For more information please contact:

Thorn Environmental Limited: (01) 8615001. info@thorn.ie

Foreword from our Chairman

Dear Cré Members,

Welcome to the 2015 edition of the Cré Guide to Composting and Anaerobic Digestion.

Among other success stories, Cré was prominent in securing legislative changes in the Nitrate and EU Animal By Product Regulations which will be of major benefit to our sector into the future.

This year, Cré has developed a work plan with a focus on two primary issues, (1) Dramatic increase in the presentation levels of Brown Bin and other Organics, and (2) Development of new support mechanisms for Electricity, Heat and Biomethane.

It saddens me to report that in spite of years of hard work developing strategies and infrastructure for the processing of organics, recent data clearly shows a severe drop in the percentage of Brown Bin waste being processed in Ireland. This coupled with other competitive challenges is putting the current infrastructure at grave risk not to mention the sustainability of jobs into the future.

It is extremely important that a more global view and longer term strategy must be developed by all stakeholders so that we can reverse the current trends, create a sustainable plan and develop investment potential for the future.

To this end, the Cré Board and Executive continue to develop a closer working relationship with our colleagues in IWMA and the inaugural meeting of a new working group is set to take place in the coming weeks. Similarly, Cré and Senior Management of the Irish Bioenergy Association of Ireland have been working very closely together in the form of a joint Anaerobic Digestion Policy group. This forum has been very successful and we sincerely thank those involved for their input and effort.

Recently Fiacra Quinn stepped down as Treasurer of Cré but is still remaining on the Board. Fiacra has played an important role over the last 11 years in this voluntary role. On behalf of members, I wish to thank Fiacra for all his efforts in managing the finances of Cré.

In 2014, Lee-Jane Eastwood completed an internship with Cré which covered public relations. She is now working part time on Cré activities and we welcome her to the team.

On your behalf and that of the Board of Directors, I would like to extend a sincere thank you to our very capable executive Percy Foster whose continued commitment and dedication is an inspiration to us all.

Last but by no means least; I would like to thank you our members for your continued support to me and to the Board and Executive in these challenging times. We strive to do what is best for the sector as a whole, reflecting the views of all stakeholders. May I take this opportunity to wish you all a very successful year ahead.

Is mise le meas

Martin Eves
Chairman of Cré

2014 Association Report

We would like to take this opportunity to update you on the work which has been carried out on behalf of Cré Members in 2014.

ANIMAL BY PRODUCT REGULATIONS

Cré had a meeting with the European Commission and was successful in securing changes to the EU ABP legislation for exemptions in marketing compost/digestate.

NITRATE REGULATIONS

Cré successfully lobbied to get the Nitrate Regulations changed to reflect the actual true availability of phosphorus from compost/digestate. This now means that compost in particular can be applied at a higher rate, contributing many beneficial properties to soils.

FOOD WASTE/WASTE POLICY

BROWN BIN.IE

The Department of Environment, Community and Local Government (DoEHLG) and Cré co-funded the development of a national household



brown bin education programme. The national education programme consists of a website (brownbin.ie), YouTube video on how to use the brown bin, a set of frequently asked questions (FAQs), electronic standardised instruction leaflets on using the brown bin and electronic contamination tag.

Cartoon on How to Use the Brown bin

<https://www.youtube.com/watch?v=xMGXcfw-E0k>

Environment (Miscellaneous Provisions) Bill

Cré has successfully lobbied the DoEHLG to include provisions on fixed penalty notices to householders who do not use the brown bin or who contaminate it.

Brown Bin Advisors

Based on the report by Cré last year, four local authorities have taken the initiative to hire eight interns as brown bin advisors in Counties Cork, Meath, Wexford and Sligo. Cré organised a training course for brown bin advisors.

Study Tour for DoEHLG Staff

Cré organised a one day trip for five staff in the DoEHLG to visit Enrich's composting sites.

BIOENERGY STRATEGY

Cré have been actively lobbying the Department of Communications, Energy and Natural Resources (DCENR) for the establishment of an Anaerobic Digestion Group, comprising Government Departments and key industry bodies, to develop new supports for anaerobic digestion. Cré organised a private tour of Green Gas AD plant for Minister O'Dowd. Cré also had two meetings with the DCENR to discuss anaerobic digestion matters.

SEWAGE SLUDGE

The Oireachtas Joint Committee on Environment, Culture and the Gaeltacht, invited Cré to address the Committee on the topic 'The Management of Sewage Sludge' at its meeting on 28 January 2014.

INDUSTRIAL EMISSIONS DIRECTIVE

Cré is a member of the Technical Working Group for the review of the Waste Treatment Industries BREF (Best Available Techniques reference document).

PROMOTION OF THE SECTOR

Taoiseach Enda Kenny Supports AD-Composting Sector

An Taoiseach Enda Kenny very kindly recorded a short video message for the delegates at AD Europe 2014 conference underlining his support for the development of anaerobic digestion/composting plants. You can download the Taoiseach's message at this link:

<http://www.youtube.com/watch?v=HhjzggOnDnA>

EVENTS

AD Europe 2014

AD Europe 2014 had 193 delegates from 22 countries attending from around the world. Based on a Fáilte Ireland study, it was estimated that the total financial value to the Irish economy of international conference delegates during their attendance at the AD conference was approximately €140,000. Minister Fergus O'Dowd was the keynote speaker.

European Compost Network

Cré hosted the ECN board meeting and the ECN European Policy working group in Dublin.

Members Meeting

A members meeting was organised in June.

Cré Annual Conference

The annual Cré conference was held in September with 145 delegates.

IRBEA- CRÉ – ANAEROBIC DIGESTION POLICY GROUP

IrBEA and Cré, while keeping their existing functions, have teamed up and formed a new anaerobic digestion policy working group. "The IrBEA- Cré Anaerobic Digestion Policy Group" will be the new "voice for the industry on anaerobic digestion policy during the consultation period of the draft Bioenergy Strategy".

REPORTS/PUBLICATIONS

- ▶ Cré Newsletters x 5
- ▶ 2014 Guide to Composting and Anaerobic Digestion in Ireland
- ▶ Compost and Anaerobic Digestion 2014 Market Report

SUBMISSIONS

The following submissions were prepared by Cré:

- ▶ The Regulation of Household Waste Collection – June 4
- ▶ The Regulation of Household Waste Collection – January 31
- ▶ Type 8 Inventory Comments- December 19
- ▶ Draft inventory of the Regulatory Controls on MBT/Type 8 Plants – September 4
- ▶ Draft Guidance Document for Type 8 Plants – September 4
- ▶ Preparation of Low-Carbon Roadmap for Transport – February 7
- ▶ Draft Inventory of Regulatory Controls on MBT/Type 8 Plants – March 31
- ▶ Strategic Environmental Assessments on the Waste Management Plans – July 4
- ▶ Consultation on Waste Collection Permit Conditions – Jan 7 2015

HEALTH AND SAFETY FACTSHEET

Cré worked with the Health and Safety Authority to produce a factsheet on safety in the compost sector

MEMBERSHIP

In 2014, Cré became an affiliated member of the Small Firms Association. It remains a member of the European Biogas Association and the European Compost Network and is represented on the Board of Directors of the European Compost Network.





Landia®

GasMix™

Anaerobic Digester Mixing System

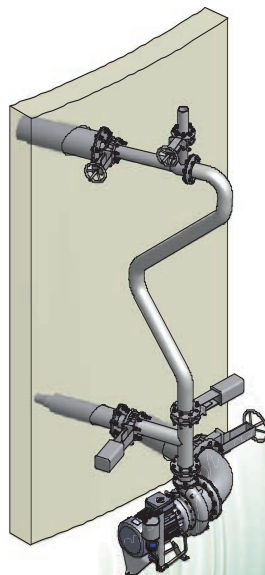


INCREASED METHANE PRODUCTION

IMPROVED DIGESTER MIXING EFFICIENCY

IMPROVED HEALTH AND SAFETY CONDITIONS

GasMix™ systems are ideally applied in anaerobic digesters containing sludge from wastewater treatment plants, by-products from food processing plants, organic household waste and any other waste or sludge containing decomposable organic material.



Landia (UK) Ltd.
Waymills Industrial Estate
Whitchurch
Shropshire SY13 1TT

Drilling and Pumping Supplies Ltd
Newtownards. N.I
02891818347

Tel.: (01948) 661 200
Fax: (01948) 661 201
e-mail: info@landia.co.uk
www.landia.co.uk

MORE INFO: WWW.LANDIA.CO.UK/MIXERS/GASMIX

CRÉ EVENTS 2015

EVENT	DATE	LOCATION
HACCP Training Course	28 January	Dublin
Certificate in Compost Facility Operation	4, 5, 11, 12, 25 & 26 February	Dublin, Kildare & Meath
Biogas District Heating Training Course	23 February	Dublin
Site Tour to Anaerobic Digestion Plant	To be confirmed	
Event with Bord Bia Origin Green Members	To be confirmed	
Annual Meeting	28th April	Killeslin, Portlaoise
Cré Annual Conference & Industry Awards	1st September	Killashee Hotel, Naas



Composting & Anaerobic Digestion
Association of Ireland

National Composting and Anaerobic Digestion Conference

1st SEPTEMBER 2015
Killashee House Hotel,
Naas, Kildare

The Annual Conference of Cré in September in the Killashee House Hotel is an event that anyone involved in the waste, composting and anaerobic digestion sectors should not miss.



INSTITUTIONAL

Irish Prison Service

Building Services Division, Unit 2, Airways Industrial Estate, Dublin 17

Contact: Derek Chambers

t. 01 8165223 f. 01 8425731

e. dpchambers@irishprisons.ie

w. www.irishprisons.ie

The mission of the Irish Prison Service is to provide safe, secure and humane custody for people who are sent to prison. The Service is committed to managing custodial sentences in a way which encourages and supports prisoners in their endeavour to live law-abiding and purposeful lives as valued members of society.

Institute of Technology Sligo

Department of Environmental Science, Ballinode, Sligo

Contact: Billy Fitzgerald

t. 071 915 5284 f. 071 914 6802

e. fitzgerald.billy@itsligo.ie

w. www.itsligo.ie

The Department of Environmental Science offers a number of courses at Higher Certificate, Bachelors Degree (Ordinary and Honours), Postgraduate Diploma and Masters in the area of Environmental Science/Management and Occupational Safety and Health on a part-time and full-time basis and Applied Archaeology.

IT Sligo provides accreditation for the "Certificate in Compost Facility Operation" (Special Purpose Award, Level 6, 10 credits) which is run in association with Cré and FAS. The course provides training for operators, managers and regulators with the practical knowledge on how to compost properly, how to produce a high quality compost product and how to be compliant with legal requirements. The Department is also engaged in research at MSc and PhD level. Specialised accredited courses can be developed to suit a client's needs and delivered on a full-time, part-time or a distance-learning basis.

QUESTOR Centre, Queens University

Contact: Dr R. Elaine Groom

e: e.groom@qub.ac.uk

t: +44 (0)28 9097 5577 f: +44 (0)28 9066 1462

w: http://questor.qub.ac.uk/

CONSULTANT I

Compost/AD Research and Advisory (IE/CY)

8A Woodlands, Naas, Co. Kildare

Contact: Munoo Prasad

t. 35345 948712 m. 35386 601 2034 (m.357 99901864)

e. munooprasad@yahoo.com

Dr Munoo Prasad was Chief Scientist in Bord na Móna up to 2006 and Group leader, New Zealand Ministry of Agriculture till 1991. Dr Prasad has carried out a life time of research on composting on a wide range of organic waste and product development from compost. He is also a specialist in soils, peat as growing medium and plant nutrition. His research led to the facilities for composting of 100,000 m³ of organic waste primarily as a peat diluent and 60,000 m³ of bark compost as a growing medium. He has been involved in five EPA funded research projects and two Rx3 (Department of Environment) AD project. He is associated with a number of national and international organisations such as the NSAI, CEN, Orbit, Teagasc (2000-2003, 2008 to present), IRCSET (2001-2006) Inst. of Technology, Carlow and Cyprus Research Agricultural Research Inst, Nicosia. He is a Reviewer of a number of leading scientific journals of waste management and horticulture. He is now available for research and consultancy in his field of expertise.

Duncan Laurence Environmental Ltd

Coolnagee, Forth Mountain, Wexford

Contact: Duncan Laurence

t. 053 9147709

e. duncanl@duncanlaurence.com

Duncan Laurence Environmental Ltd specialises in Irish and EU environmental and planning legislation, waste policy and regulatory compliance issues. Established in 2000, it is centred on Dr Duncan Laurence's 20+ years of experience in waste management, which includes working as a regulator in the UK and also for the Environmental Protection Agency in Ireland.

Larchmont Consulting

Grove Avenue, Blackrock, Dublin

Contact: Jack O'Keefe

e: jackokeefe@larchmont.ie t: 086-2528572

Larchmont Consulting is a financial consultancy company whose focus is on the Renewable Energy Sector. It is comprised of professional advisors who have direct experience in structuring projects, Project Management, Due Diligence, Investment Appraisal, advice on funding of projects as well as fund raising for specific projects. We provide;

- Critical due diligence to ensure that the financial feasibility and project plan is robust and achievable.
- Liaison with promoters, EPC and O+M contractors, technical specialists, lawyers and funders.
- Negotiating with bankers, funders and investors.
- Investigation and analysis of projects on behalf of promoters, funders and investors.
- Fund raising for individual projects.
- Cashflow preparation and financial analysis.

M.F. Dineen & Co. Ltd.

Clohan, Ironmills, Killarney, Co. Kerry

Contact: Michael Dineen

m: 087 8236279 t/f: 064 7754983

e. michael.dineen@mfdineen.com

w. www.mfdineen.com

M.F. Dineen & Co. Ltd. (MFD) was founded in 2006 by Michael Dineen and is a chartered engineering consultancy. MFD is based in Killarney; however, the company's client base extends throughout the country. MFD provides services including: planning & environmental consents, pre-contract and contract project management, cost planning, procurement & tender management, geotechnical analysis, value engineering, environmental impact assessment including full EIS, waste management advice, and a broad scope of other specialist technical advice & reporting. MFD projects include a bio-energy facility at Galmoy Mines incorporating AD with subsequent composting of digestate. Further details are available on www.mfdineen.com

CONSULTANT II

Eversheds

One Earlsfort Centre, Earlsfort Terrace, Dublin 2

Contact: Mark Varian

t. 01-6644200

f. 01-6644300

e. mvarian@eversheds.ie w. www.eversheds.ie

Eversheds O'Donnell Sweeney is a full service commercial law firm with a business-like approach. Based in the heart of Dublin's commercial district, our practice focuses on supporting the business growth and expansion of our clients. We advise indigenous owner-managed companies as well as international and multinational companies, banks, financial institutions and public organisations.

We work with some of Ireland's largest, most successful and progressive companies as well as many exciting and innovative smaller companies. What is really important to us is that every client receives personal attention, dedicated service and the most appropriate integrated advice. As service providers to the business community and to the public sector, we believe we can add greatest value where our advice is grounded in a business view. Our association with Eversheds International means we can provide a seamless service right across Europe, Asia, Africa and the Middle East. At local or international level, we aim to help all our clients in achieving their commercial objectives.

McCarthy Keville O'Sullivan Ltd.

Block 1, G.F.S.C. Moneenageisha Road, Galway.

t. (091) 73 56 11

f. (091) 77 12 79

e. info@mccarthykos.ie w. www.mccarthykos.ie

McCarthy Keville O'Sullivan Ltd. is a professional consultancy offering an extensive range of Planning, Environmental and Project Management services. Our large multi-disciplinary team of experienced professionals have the necessary skills and expertise to successfully manage the most complex of projects. We respond promptly to their ever-changing needs by delivering a cost-effective, dynamic and quality-driven service, on time and within budget. We provide a wide range of services to both public and private sector clients. Our public sector experience spans projects completed on behalf of Government Departments, Local Authorities and State Agencies. Our services to private sector clients cross a wide range of industries, including: energy, construction, transport, tourism, commercial and residential development, education, healthcare, waste management and leisure.

Odour Monitoring Ireland

Unit 32 De Granville Court, Dublin Road, Trim,
Co. Meath

Contact: Dr Brian Sheridan

t. 046 943 7922/086 855 0401

e. info@odourireland.com

w. www.odourireland.com

Odour Monitoring Ireland Ltd provides fully compliant EPA monitoring in accordance with EPA requirements. Our INAB accredited stack testing affiliated company can provide a full range of accredited stack testing in accordance with EPA requirements. In addition to these requirements, we can provide a full range of services in compost / AD system odour control design and troubleshooting to include chemical scrubbing, biotrickling filtration, biofilter, carbon filtration, RTO odour control system. We are fully versed in all aspects of process design of such systems and have been involved in many projects throughout Ireland and UK. Our services include initial process and concept design, process specifications, tendering, value added engineering and contract implementation. As we have a full understanding of the measurement of odours, dispersion of odours and abatement of odours, we can provide with confidence a full turnkey package for the client.

CONSULTANT III

Fehily Timoney & Co

Unit 16, North Park Offices, North Park, Dublin 11

Core House, Pouladuff Road, Cork, Co. Cork

Contact: Bernadette Guinan/Derek Milton

t. 01 658 3500 f. 01 658 3501

e. bernie.guinan@ftco.ie e. derek.milton@ftco.ie

w. www.fehilytimoney.ie

Fehily Timoney & Company (FTC) is a multidisciplinary consultancy specialising in the delivery of complex projects for clients, both in Ireland and internationally. We offer a total project management solution, acting as consultants from initial project planning and feasibility through to detailed design, construction supervision, commissioning and handover.

FTC's knowledge of biowaste management and treatment derives from the experience gained as one

of Ireland's leading solid municipal waste consultants. FTC has considerable capabilities in the management and utilisation of material of biodegradable origin. Biowaste, biosolids and biomass are materials that display great potential as an energy source or beneficial land additive. FTC can assist you in the most effective means of gaining the maximum resource potential from materials of this nature. We employ scientists and engineers who are experts in an array of engineering and environmental disciplines. This breadth of expertise enables us to offer our clients a complete service for the development of composting, anaerobic digestion (AD) and mechanical biological treatment (MBT) facilities, as well as conventional and advanced thermal treatment technologies and in non-biowaste applications, including energy crops.

RPS Group

West Pier Business Park, Dún Laoghaire, Co. Dublin

Contact: Conor McGovern

t. 01 468 2900 f. 01 462 0814

e. conor.mcgovern@rpsgroup.com

w. www.rpsgroup.com/ireland

RPS is a leading planning, environmental, engineering and communications consultancy, employing 4,750 staff internationally, with over 650 talented people on the island of Ireland in offices in Dublin, Cork, Galway, Belfast, and Letterkenny. RPS offers consultancy services to public and private sector clients, in all aspects of waste and resource projects including site selection, facility design and planning, EIS, procurement management, licence/permitting applications and compliance, resource market development and public consultation. RPS has assisted clients on waste and resource projects including waste prevention, reuse, recycling, composting, anaerobic digestion, waste-to-energy, MBT, landfill and novel technologies.

SLR Consulting

7 Dundrum Business Park, Windy Arbour, Dublin 14

Contact: Derek Luby / Conor Walsh

t. 01 2964667 f. 01 296 4676

e. dluby@slrconsulting.com

e. cwalsh@slrconsulting.com

w. www.slrconsulting.com

SLR is a leading international environmental consultancy with offices in Ireland, the UK, the US, Canada and Australia. SLR has over 30 professional staff based in Ireland at its Dublin and Hillsborough

offices. The company specialises in waste management strategy and technologies and provides consultancy services to all the major waste management firms in Ireland and the UK as well as to many local authorities and government bodies. SLR is currently assisting a number of Irish companies with development of composting, AD and MBT facilities.

LOCAL AUTHORITIES

Carlow County Council

County Buildings, Athy Road, Carlow, Co. Carlow

Contact: Fionnghuala Ryan

t. 059 9136240 f. 059 9138098

e. fryan@carlowcoco.ie w. www.carlow.ie

Carlow County Council is responsible for the administrative area of County Carlow, excluding Carlow town. The Council is responsible for the planning, design and construction of many important infrastructures. These include roads, water supply, drainage facilities and certain social and quasi-social services, such as housing, fire stations, libraries, and burial grounds. It is the custodian of the environment and through its planning and environment policies seeks to enhance the county while protecting its unique character and atmosphere. It plays an active role in the development of the county's industrial, business, social, arts, heritage and cultural affairs.

Cavan County Council

Courthouse, Cavan, Co. Cavan

Contact: Conor Craven

t. 049 437 8410 Ext. 8416

f. 049 433 2299 e. ccraven@cavancoco.ie

w. www.cavancoco.ie

Dublin City Council

Engineering Department, Waste Management Services, Civic Offices, Wood Quay, Dublin 8

Contact: Sandra Smith (brown bin service)

e. sandra.smith@dublincity.ie

t. 01 222 4562 f. 01 454 4830

w. www.dublincity.ie and www.dublinwaste.ie

In September 2006, Dublin City Council introduced a pilot kerbside collection of organic waste to 8,000 households. This was the first phase of the implementation of the National Biodegradable Waste Strategy in the city and helps to achieve targets set out in the Waste Management Plan 2005-2010. The next phase of the rollout began in

February 2008 and to date 105,000 householders across the City have been provided with a brown bin and kitchen caddy for the collection of household organic waste and garden waste. Prior to the commencement of the collection service, each householder received a notification letter stating that they shall be receiving a new brown bin within the forthcoming days, the collection days and the charging system. Each household was also provided with an information leaflet detailing the types of waste accepted in the Brown Bin (please see attached) Furthermore, in 2008 8,287 tonne and in 2009 16,129 tonne of organic material was diverted from landfill as a result of householders using their brown bin.

Dún Laoghaire- Rathdown County Council

County Hall, Dun Laoghaire, Co. Dublin

Contact: Michael Whelan/Margaret Coles

t. 01 205 4700 f. 01 205 4736

e. mwhelan@dlrcoco.ie e. mcoles@dlrcoco.ie

w. www.dlrcoco.ie

Donegal County Council

The Kube, Magheranan, Letterkenny, Co. Donegal

Contact: Suzanne Tinney/David Friel

t. 074 91 76276 / 074 91 76274 f. 074 91 61304

e. suzanne.tinney@donegalcoco.ie

e. dfriel@donegalcoco.ie w. www.donegalcoco.ie

Fingal County Council

P.O. Box 174, County Hall, Swords, Fingal, Co. Dublin

Contact: Alain Kerveillant

t. 01 890 5000

w. www.fingalcoco.ie

Meath County Council

Environment Section, County Hall, Railway Street,

Navan, County Meath

Contact: Declan Grimes/Peter Brady

t. 046 909 7000 f. 046 909 7001

e. dgrimes@meathcoco.ie

e. pbrady@meathcoco.ie

w. www.meath.ie

Tipperary County Council

Emmet Street, Clonmel, County Tipperary.

Contact: Anne Peters

t. 052 6126149

f. 052 6134391

e. anne.peters@tipperarycoco.ie

w. www.southtippcoco.ie

Westmeath County Council

Environment Section, Aras an Chontae,
Mullingar, County Westmeath
Contact: Greg Duggan
t. 044 933 2226 f. 044 938 4239
e. gduggan@westmeath.ie
w. www.westmeathcoco.ie

All households in County Westmeath which have a regular kerbside refuse collection service, whether Council or private operator, are served by a two-bin system, with separate collections of recyclable materials and residual waste, paid for by a tag/pay-as-you-throw system. The majority of households in Westmeath are served by the Council, through a private contractor operating under Contract to the Council. The Council currently operates a pilot organic brown bin waste collection scheme, serving approximately 1,000 houses in Mullingar, with the collected material being treated at Johnstown Recycling, an in-vessel composting facility in Mullingar. It is planned to extend the collection of organic waste in 2009, in line with the objectives of the Midland Region Waste Management Plan.

Wexford County Council

Environment Section, County Hall, Wexford
Contact: Rory O'Mahony
t. 053 9196313 f. 053 9196045
e. postmaster@wexfordcoco.ie
w. www.wexfordcoco.ie

Private operators are providing a segregated household waste collection to more than 10,000 householders (2013) in County Wexford. An education awareness campaign will take place in Wexford and Enniscorthy Towns in 2014 as the Household Food Waste regulations impose obligations on householders and waste collectors in these towns and we will work closely with both to ensure compliance.

Wexford County Council actively promotes home composting and has trained 40 volunteers in composting and food waste prevention through the Master Composter training programme. 8 villages now compost their green waste and promote food waste prevention through their Tidy Towns Committees. Wexford County Council's enforcement staff is actively enforcing the commercial food waste regulations.

PROCESSOR I

Athchúrsáil Árann Teoranta

Eochail, Inis Mór, Oileáin Árann, Cuan na Gaillimhe.
Contact: Gerry Mullin
e. athchursailarann@hotmail.com
w. www.aranisland.com
t. 099 61949 f. 099 61900

Athchúrsáil Árann Teoranta is a small recycling company set up by Comharchumann Forbartha Árann and Galway County Council. Athchúrsáil Árann Teoranta provides waste management to the three Aran Islands, and have received approval to operate a composting facility on Inis Mór to comply with the Animal by Product regulations (COMP 19). Contact Gerry Mullin. 0872663419.

Clare County Council

Environment & Emergency Services Directorate Áras Contae an Chláir, New Road, Ennis, Co.Clare
Contact: Maeve Ryan
t. 065 6846359
e. mryan@clarecoco.ie w. www.clarecoco.ie

Environment & Emergency Services Directorate incorporates green waste composting at the Central Waste Management Facility, Ballyduff, Beg Inagh, County Clare. Site telephone number 065 6836960. Fax: 065 6836959

Cremin's Farm Compost

Coolaleen, Broadford, Charleville, Co. Limerick
Contact: Maurice Cremin
t. 063 84292 / 087 130 7621
e. mgcremin@eircom.net

Green King Composting

Coolbeg, Co. Wicklow
Contact: Paddy King/Ian Browne
t. 0404 62422 f. 0404 68846
e. paddy@greenking.ie e. ian@greenking.ie
w. www.greenking.ie

Green King Composting operates a composting facility at Coolbeg, County Wicklow. The green waste received comprises of wood wastes generated by the King Tree Service tree surgery business, garden; park waste produced during improvement, and maintenance works by landscape gardeners; grass and

shrub trimmings produced by individual householders, and timber and wood waste recovered during construction and demolition works. The composting operation involves pre-treatment to shred and mix the green waste, composting in open windrows, maturation and post-treatment to remove impurities. The finished product is suitable for horticultural and agricultural use.

Limerick County Council

County Hall, Dooradoyle, Limerick

Contact: Diarmuid Sheehy

t. 061 496 402 **f.** 061 496 008

e. dsheehy@limerickcoco.ie

Limerick County Council has built a purpose-built open windrow facility for the production of compost material at Mungret, Co. Limerick. This is located beside the recycling centre. The equipment located at this facility includes a mulcher, a turner and a trommel. The operation commenced in 2005 and it has been found to have grown every year since. With the current operation, all green waste is taken from the three recycling centres at Mungret, Kilmallock and Newcastle West.

Marine Harvest Ireland

Kindrum, Letterkenny, Co. Donegal

Contact: Catherine McManus

t. 074 91 59 071 **f.** 074 91 59 077

e. catherine.mcmanus@marineharvest.com

w. www.marineharvest.com

Marine Harvest Ireland is a fully integrated salmon farming, processing and sales company which produces Premium and Organic Atlantic salmon under the brand names *Donegal Silver* and *The Organic Salmon Company*. The company employs 265 staff in its breeding, hatching, on-growing, processing and sales facilities.

Paul Mooney

Kealstown, Maynooth, Co. Kildare.

Contact: Paul Mooney

e. Paulmooney1218@gmail.com **t.** 087 2350425

Paul and Bronwyn Mooney operate a composting and recycling facility near Maynooth, Co. Kildare.

Sligo County Council

Environment Section, County Hall, Riverside, Sligo

Contact: Pete Murtagh

t. 071 911 1460 **f.** 071 911 1924

e. pmurtagh@sligococo.ie

w. www.sligococo.ie

Sligo County Council, in a partnership with Ballisodare Community Development Association, operates a green waste composting facility at Young's Quarry, Ballisodare, Co. Sligo.

Terralift Ireland Ltd

18 The Grove Market Deeping, Peterborough, PE6

8AW, United Kingdom

Contact: W. Rex Kimberley

t. 00 44 1778 380 005

f. 00 44 1778 348 835

e. rex.kimberley@terralift.ie

Terralift specialises in organically built fertilisers for the sports turf market with production facilities in Ireland, Australia and China. In sourcing raw-material needs each facility engages in the composting of manures and vegetable matter. The company holds the rights to a closed vessel thermophilic digestion plant, the first of which is located at our Castleblayney, Co. Monaghan facility. This thermophilic digestion plant has been designed to accept catering and brown bin waste. The technologies incorporated in the new plant will clear incoming waste of contaminants and bio-convert the organic content to mature compost in 76 hours.

V & W RECYCLING

Newry Road, Dundalk, Co. Louth

Contact: W. Martin

t. 042-9329200

w. www.vandwrecycling.ie

V & W Recycling operate a state-of-the-art Recycling Centre in Dundalk, Drogheda and Ardee. Each recycling centres Green Waste is composted in V & W Recycling's Composting Plant producing a very high grade, totally organic compost.

PROCESSOR II

Barna Waste & Recycling

Carrowbrowne, Headford Road, Galway

Contact: Damien Monaghan (Compost Manager) /
Sean Curran (Managing Director)

t. 091 771 619 f. 091 771 735

e. dmonaghan@barnawaste.com

e. scurran@barnawaste.com

w. www.barnawaste.com

Barna waste is a Galway based company servicing all five counties in Connacht. Our Headquarters is strategically located approximately 4 miles outside of Galway City. The site is EPA licenced and ISO14001 accredited. It includes a composting facility licenced to process up to 20,000 tonnes annually to a European Standard. We are currently going through validation from the Department and Agriculture Fisheries and Food. Transfer stations also located in Ballaghaderreen (Roscommon), Athlone (Westmeath) and Drumshando (Leitrim). Barna accepts domestic and commercial food waste. Barna has a full range of commercial / domestic waste and recycling services, domestic/commercial/construction skip hire, sludge and sewerage services.

CTO Environmental Solutions Ltd

Rostellan, Middleton, Co. Cork

Contact: Aidan Stafford

t. 021 4652139/087 997 7022

f. 021 4652175 e. ctoenv@eircom.net

- Compost site operators accepting greenwaste and a selection of source segregated waste in Rostellan
- Compost sales
- Consultancy service
- Shredding contracting
- Screening contracting: compost and soil
- Timber and greenwaste shredding
- Waste timber accepted at Midleton Skip Hire Facility in Midleton Cork

Custom Compost

Ballyminaun Hill, Gorey, Co. Wexford

Contact: Mark Walsh

t. 053 942 1777 f. 053 942 1059

e. info@walshmushrooms.ie

w. www.walshmushrooms.com

Custom Compost is the composting operation of the Walsh Mushroom Group. It is the single biggest and most advanced mushroom composting facility in Ireland or the UK and has been in business since 1979. Agricultural Supply Co. (Fairford) Ltd is also a part of the Walsh Group and is already PAS100 compliant for its green waste composting. It is also involved in waste compost consultancy. The Walsh Group is developing the waste composting arm of its business and with its considerable facilities and decades of management experience is excited about opportunities therein.

Envirogrind Ltd

Donegal Road, Pettigo, Co. Donegal

Contact: Martin Eves

t. 071 986 1772 f. 071 986 1731

e. info@envirogrindltd.com

w. www.envirogrindltd.com

First established in 1997 as a Wood & Green Waste Facility, Enviro Grind Ltd operate an ABP approved Category 3 In-Vessel Composting Facility and provide an Organic Waste Collection Service, suitable for the kitchens/canteens of large institutions, the hospitality industry and food retailers. Acceptable feedstock includes by-products/residues from the Catering Industry, Pre & Post Food Processing, Fish & Shellfish Processing, some sludge material and Green/Garden & Park waste. Enviro Grind also process wood & gypsum residues. Our product range includes Bark & Coloured Mulches, Compost, Top Soil & Growing Mediums blended to customer requirements. We also supply Agricultural/Equestrian Bedding Chips. Delivery is available countrywide and Trade Enquiries welcome. Suppliers of ERGS Gypsum Recycling Solutions.

'Environmentally friendly products from wood and organic residues'

Galway City Council

City Hall, College Road, Galway

Contact: Ronan O'Reily

t. 091 536463 **f.** 091 568146

e. ronan.oreily@galwaycity.ie

w. www.galwaycity.ie

Local authority involved in provision of waste services including centralised composting facility at Carrowbrowne. The facility got its Department of Agriculture, Fisheries and Food ABP licence on the 1st July 2009.

GreenGas AD Plant

Dunmoylan, Shanagolden, Co. Limerick

Contact: David McDonnell/Darina Hannan

t. 069 60404 **f.** 069 60405

e: david@greengas.ie **e:** darina@greengas.ie

w. www.greengas.ie

GreenGas AD Plant is a farm based anaerobic digestion facility. Located outside Shanagolden in Co. Limerick adjacent to the family farm, GreenGas AD Plant processes dairy and poultry manure and imported feedstock such as food waste and dairy sludge. The biogas produced in the anaerobic digestion process is used as fuel in a CHP Unit. The resultant electricity produced is sold to the national grid and the heat generated is recycled for heating use in both Plant and the nearby poultry enterprise. The processed digestate is used on local farmland as a high quality eco fertiliser.

Ormonde Organics

Killowen, Portlaw, Waterford.

Contact: Martin Morrissey/Michael Murphy

t. 056 883 0300 **f.** 056 883 0310

e. mmurphy@ormondeorganics.ie

w. www.landorganics.ie

The Ormonde Organics Group is Ireland's largest and leading organics and sludge management company. Ormonde Organics operates under two brand names, *Ormonde Environmental* and *Land Organics*. We have our own in-house team of environmental scientists who are experts in this area. This combined with our extensive range of environmental and land-spreading equipment and knowledge means that we offer a leading-edge service which is fully compliant with all

national and EU legislation. Land Organics provides a cradle to grave services for the following: land spreading of organic waste to agriculture or industrial crops, land remediation or restoration of tailings ponds, lime stabilisation and composting. We work closely with each customer, creating a tailored solution to meet their requirements.

M&T Plant Hire Ltd

Davidstown Enniscorthy, Co. Wexford

Contact: Liam O'Neill/ Pat Redmond

t: 0539247770 **f:** 053 9247951

e: loneill@mtplanthire.ie

e: predmond@mtplanthire.ie

w: www.mtplanthire.ie

M&T Plant Hire Ltd., a wholly owned local Irish company, was founded by Tom Murray in 1980. Initially the company was set-up to hire out waste water treatment equipment. From small beginnings, the company quickly grew by diverging into various other specialist areas from drain cleaning, sludge transportation, CCTV surveying and there new compost facility in Co. Wexford. Today over 20 people are employed by M&T, mainly based out of the head office in Davidstown, Enniscorthy, Co. Wexford with offices also in Carlow and Waterford. We provide a committed service in Wexford, Waterford, Carlow, Kilkenny and Wicklow.

PROCESSOR III

Acorn Recycling

Ballybeg Composting Facility, Littleton,

Co. Tipperary

Contact: Ronan Beasley/ Sam Bowden

t. 0504 33721 **f.** 0504 33703

e. ronan@acornrecycling.com

e. sam@acornrecycling.com

w. www.acornrecycling.com **w.** www.aqssolutions.ie

Acorn Recycling operates a 35,000 tpa multiwaste composting facility managing brown bin, commercial and other organic wastes under EPA and DAFF licences. Under AQS Environmental Solutions the company carries out specialised drainage and industrial services across all industrial sectors throughout Ireland.

McGill Environmental Systems (Irl) Ltd.

Coom, Glenville, Co. Cork

Contact: Niall Carroll

t. 021 4880945 **f.** 021 4880961

e. ncarroll@mcgillcompost.com

w. www.mcgillcompost.com

McGill operates three state-of-the-art Composting Facilities in Cork and Waterford which are EPA licensed and Local Authority Permitted to process in excess of 40,000 tonnes per year. One of the Cork facilities, at Glenville, is also permitted by the Department of Agriculture, Food and the Marine to process Animal By-Products (ABP). The company currently specialises in the composting of non-hazardous industrial and sewage sludge's, and other non-hazardous biodegradable materials. The company also biologically treats organic fines, which have been mechanically separated from municipal waste, in order that they can then be sent to landfill without the environmental risk associated with untreated municipal waste.

Miltown Composting

Miltownmore, Fethard, Co. Tipperary

Contact: Derry Murphy

t. 052 6130815/087 4125625

e. derry@miltowncomposting.ie

Miltown Composting is approved to treat Animal By-Products by DAFF and is licensed by the EPA to treat 24,500 tonnes per annum. We specialise in producing high grade compost from source, separated brown bin and industrial sludge's, which is then used by local farmers and landscapers as an organic fertilizer/soil conditioner. We also treat Organic Fines which have been mechanically separated from the household black bin, enabling it to be land filled without creating harmful landfill gases whilst helping landfills reach their biodegradable waste to landfill targets. We also offer contract timber and green waste shredding and compost turning services.

OD Agri Ltd

Ballyboe, Kilsheelan, Clonmel, Co. Tipperary

Contact: Patrick O'Donnell

t. 052 33293/087 233 3429 **f.** 052 33867

O'Toole Composting Ltd

Ballintrane, Fenagh, Co. Carlow

Contact: Patrick O'Toole

t. 086 264 7990/059 914 8984

e. patrick@otoolecomposting.ie

w. www.otoolecomposting.ie

O'Toole Composting Ltd provides a specialist composting service for all food and organic wastes for all sectors of industry which include food production companies, waste contractors, Local Authorities, hotels, restaurants and canteens. We specialise in management of bulk food and organic waste recycling using our purpose built in-vessel tunnel composting facility in Carlow. Our facility has an Animal-By-Products licence from the Department of Agriculture, Fisheries and Food. We can provide all transport and staff training necessary to maximise full capture of all biodegradable waste.

Waddock Composting Ltd

Kilmaster, Carlow.

Contact: Barry Waddock

t. 087 7489737/0599163596 **f.** 059 916 3597

e. barry@waddockcomposting.ie

Waddock Composting has been operating an in-vessel composting facility at Killmaster, County Carlow since 2005. We accept up to 24,900 tonnes of non-hazardous biodegradable material such as catering waste, food factory waste, brown-bin foodwaste, brewing extracts green/garden & park waste and sludge for composting in a purpose built state of the art facility. The end product is a high quality compost which is utilised by local farmers, landscapers and gardeners. This facility has an Animal-By-Products Permit from DAFF (Department of Agriculture, Fisheries and Food) and is permitted by our Local Authority.

PROCESSOR IV

Bord na Mona Drehid Compost Facility

Killinagh Upper, Carbury, Co. Kildare

Contact: Michael Storan

t. 045-439472 086-8151443 **f.** 045-439489

e. michael.storan@bnm.ie

Bord na Mona Resource Recovery operates a modern state of the art tunnel composting facility at Drehid, Carbury, Co. Kildare. The facility, which has been in operation since January 2012, is licensed by the EPA and Department of Agriculture, Food & the Marine to accept 25,000 tonnes per annum of non-hazardous biodegradable materials. Our technology optimises all aspects of the composting process which results in a high quality compost end product.

Enrich Environmental Ltd

Larch Hill Stud, Kilcock, Co. Meath

Contact: Tim Duggan/Kevin McCabe

t. 01 6103672

e. Info@enrich.ie **w.** www.enrich.ie

Enrich is an award winning composting facility and product manufacturer. At Enrich we operate two composting processes, each managed by our experienced team. The first process is a cost-effective solution to handling green material in an open windrow system. The second is our in-vessel composting plant that employs state of the art technology to compost organic material. Enrich has being accredited with NSAI IS441 certification for the compost that it produces for landscape and gardening projects, land remediation and enhancing sports turf surfaces. In addition to our composting processes, Enrich now has a soil advisory service to assist clients with technical aspects of soil health and management. This service looks at key aspects of soil and tailors a program that can be used to restore or enhance a soils potential, for areas such as sport turf, grassland, commercial agriculture, and horticulture and land remediation are covered. See website for more information about our products and services. *"Healthy Soil – Healthy Plants – Health People"*

Thorntons Recycling Ltd

Kilmainhamwood Compost, Ballynalurgan,

Kilmainhamwood, Kells, Co. Meath

Contact: Sean Campbell

m. 086 8563431 **f.** 01 623 5131

e. sean@thorntons-recycling.ie

w. www.thorntons-recycling.ie

Kilmainhamwood Compost, part of the Thorntons Recycling Group, is the largest fully enclosed composting facility in Ireland. The facility has just completed at the end of 2013 a new expansion phase which will allow the facility to accept a total of 40,000 tonnes of non-hazardous biodegradable material such as catering waste, green waste, brown-bin food waste and sludge for composting. It is a key component of the Northeast Waste Management Plan helping the north-east region to reach its reduction of biodegradable waste to landfill and recycling targets. The facility is licensed by the EPA, W0195-02 and Department of Agriculture, Comp-6.

The main feedstock for the facility is household Brown Bin and commercial Brown Bin/catering waste. The incoming feedstock goes through a composting/transformation stage over a period of 8 to 9 weeks to produce quality compost which is used as an organic fertilizer/ soil conditioner in commercial farming and landscaping.

Kilmainhamwood Compost also provides a delivery and spreading service for the end-user if required. In 2013 the addition of a 450Hp self propelled spreader to the fleet was a great benefit to getting compost spread within the short spreading period. In 2007, the facility was accredited with ISO 14001, ISO 9001, and OHSAS 18001.

PROCESSOR V

Bord na Móna

Main Street, Newbridge, Co. Kildare

Contact: Dearbháil Ní Chualáin

t. 045 439 520 f. 045 433 240

e. dearbhail.nichualain@bnm.ie w. www.bnm.ie

Bord na Móna's mission is to be Ireland's leading environmentally responsible integrated utility service provider encompassing electricity, heating solutions, resource recovery, water, horticulture, and related services. Our Kilberry composting facility in Kildare is central to our peat dilution strategy. The site is licensed to manage 96,000 tonnes of greenwaste, by-products from wood processing, brewing and other similar biomass. We are fully EPA compliant and generate some of the very best composted material in the industry. We will, with the assistance of our Research and Development department, continue to investigate new materials as potential additions to our current intake and to develop world-class innovative outputs. We are happy to facilitate our Cré colleagues with any analysis which they may require in this area.

Natural World Products Ltd

91 Moy Road, Portadown, Co. Armagh BT62 1QW

Contact: Caolan Woods

t. +44 2838 353 555 (Rol 048 38 353 555)

f. +44 2838 353 556 (Rol 048 38 353 556)

e. caolan.woods@nwp-recycle.com

w. www.nwp-recycle.com www.roseylee.com

Natural World Products (NWP) was established in 1989 by Brendan Woods. NWP has been recycling green waste for Local Authorities in Northern Ireland and from the Republic of Ireland during this period to produce good quality compost under the brand name *Rosey Lee*. NWP has become the first compost producer in Northern Ireland to achieve certification from The UK Composting Association to BSI PAS 100, the quality standard for the composted materials. BSI PAS 100 allows composted products to be used with confidence and NWP certification demonstrates that

good quality products have been manufactured from the resources which would otherwise have been consigned to landfill. This certification reaffirms to our customers that NWP can deliver a consistently high-quality product which is also environmentally friendly. *Rosey Lee* is dedicated to converting organic green residues into valuable, natural gardening products.

FARMER DEVELOPING ANAEROBIC DIGESTION

Green Generation

Gorteen, Nurney, Co. Kildare

Contact: Billy Costello/Bill Corcoran

e. billy@costello5.com

e. billcorcoran01@gmail.com

t: 087 2525231

Greenfield Ventures

Gillstown, Garlow Cross, Navan, Co. Meath

Contact: Alan Reynolds

e. alanreynolds3@gmail.com t.: 0876312095

Sandford Energy Ltd

Sandford, Causeway, Co. Kerry

Contact: Timothy Leahy/Kevin Leahy

e. timothyjleahy@eircom.net t.: 0871380699

TRADE

Celtic BioEnergy

Gearagh Road, Ballinacurra, Midleton, Co. Cork

Contact: Andrew Walsh

t: 021 462 1721 f: 021 462 1725 m: 086 3872139

e. awalsh@celticbioenergy.com

w: www.celticbioenergy.com

Celtic BioEnergy provides comprehensive engineering and consulting services to the anaerobic digestion and composting industry. The company offers dry and wet fermentation technologies in addition to in-vessel and aerated static-pile composting systems depending on the type of material to be processed and the size of the facility. CBE is the sole and exclusive representatives of Bioferm Viessmann and Krieg & Fischer in Ireland and the UK. CBE can design, design/build or

design/build/operate composting or biogas sites and has the ability to finance its projects.

Clarke Energy

Unit 7, Newtown business park,
Newtownmountkennedy, Wicklow
Contact: John Curley, Toni Pedder
t. 0879804002
e. john.curley@clarke-energy.com
e. Toni.Pedder@clarke-energy.com
w. www.clarke-energy.com

Clarke Energy is the authorised distributor and service provider for GE Energy's Jenbacher gas engine in Ireland. The Island of Ireland including both the Republic and Northern Ireland is managed from Clarke Energy's dedicated Irish operation in Newtownmountkennedy, County Wicklow. Clarke Energy is committed to delivering high quality installations and to providing reliable, accountable, long term maintenance support for your generation equipment. GE Jenbacher gas engines can be applied to a variety of gases including biogas, sewage, landfill gas, syngas and natural gas. Our extensive experience includes an installed and commissioned base of over 2,750MW worldwide.

Down2Earth Materials

C/o STP, Unit 17 & 18, City Link Park, Forge Hill,
Kinsale Road, Cork, Ireland.
Contact: John Lynch/Peter Synnott
e: jlynch@down2earthmaterials.ie
e: psynnott@down2earthmaterials.ie
t: 00353 (0) 21 4311842 f: 00353 (0) 21 4311869
w: www.down2earthmaterials.ie

Down2Earth Materials have won the Repak 2014 Sustainable Packaging Award for our range of certified compostable catering disposables. We also won Cre's Outstanding Contribution to the sector Award in 2013. Our products will turn back into soil in a short period of time (typically 6-8 weeks) when they are commercially composted in the appropriate conditions. They are derived from either starch (corn, cassava or potato) or plant fibres. Low Carbon Organics Recycling means we think RESOURCE, NOT WASTE. Our environmental criteria is COMPOSTABLE. Our products are certified to EN13432 European Standard and we continually work with Irish Composting Facilities. Our products can be placed in with Food Waste and commercially composted here in Ireland supporting

local and Irish jobs. The end result is Compost which is a valuable resource! This eco perfectionism means that our clients and consumers trust DOWN2EARTH to supply the most sustainable packaging in Ireland.

earth 2 earth®

A registered brand of Thorn Environmental Ltd,
Unit 501 Northwest Business Park, Ballycoolin
Dublin 15
Contact: Myles Thorn/ Adam Thorn
t. 01 8615001 f. 01 8615002
e. myles@thorn.ie e. adam@thorn.ie
w. www.earth2earth.com w. www.thorn.ie

Ireland's leading Supplier of Compostable and Biodegradable products under its registered brand name of earth2earth® and its registered trading names of down 2 earth, down to earth and earth to earth.

Often copied but never bettered. Our EN13432 modified polyester/PLA films and food waste sacks are class leading in strength, water resistance and the ability to take hot liquids.

Our food waste sacks are the industry leader and are most suitable for commercial applications.

Other products include Paper sacks, Refuse sacks and Recycling sacks. Our ranges include Compostable, Biodegradable, Oxo-degradable, Recycled and Low Co2.

All our products are for Industrial / Commercial use and are designed to a high standard of functionality, meeting the highest international standards.

EDINA Ltd

Delaire House, Unit 4 Swords Business Park
Swords, Co. Dublin
Contact: Colin McKibbin/ Cathal Longwill
t. 01 882 4800 f. 01 830 7422
e. colin-mckibbin@edina.eu
e. cathal-longwill@edina.eu
w. www.edina.eu / www.edina.ie

Edina has over 25 years experience installing power generation in Ireland. Edina is the leading supplier of Biogas fuelled CHP plants, offering the most efficient and reliable products in the marketplace. Edina's vast experience ensures world class customer care and product support. Local market knowledge ensures compliance with all relevant standards, licenses and regulations, ensuring a trouble-free project for the developer.

FLI Group

c/o Six Cross Roads Business Park, Carriganard,
Waterford

Contact: Chris Long

t. 051 353 190

e. chris.long@fli-energy.com

w. www.fli-energy.com

FLI Energy is a leading contractor in the construction of Anaerobic Digestion plants in the UK and Irish markets with particular expertise in EPC delivery including both CHP and biomethane upgrade systems. Our plants are designed to be efficient, economic and flexible, capable of processing a wide variety of organic feedstock inputs.

IAS Laboratories

Unit 4, Bagenalstown Business Pk, Bagenalstown,
Co. Carlow

Contact: Ruth Clinton, Denise Reilly

e. ias@iaslabs.ie e. dreilly@iaslabs.ie

w. www.iaslabs.ie t. 059 9721022

IAS Laboratories are a soil and compost testing laboratory. They provide testing such as heavy metals, respiration activities, nutrients and much more for a range of compost facilities and ad plants. IAS Laboratories are an accredited laboratory and provide a first class testing service.

Contact Ruth Clinton ias@iaslabs.ie or 059 9721022

Landia (UK) Ltd.

Waymills Industrial Estate, Whitchurch Shropshire,
SY13 1TT Contact: Hugh Vaughan

t: 00441948661200 f: 00441948661201

e: info@landia.co.uk w: www.landiaeworld.com

Landia are manufacturers of high quality biogas equipment which consists of heavy duty chopper pumps which were invented by Landia back in 1950, submersible mixers, wall mounted mixers, digester gas mixing systems, high pressure pumps and pasteurizers. All proven for durability in the AD market over the last twenty plus years, full after sales and support available for both the UK and Ireland. We also have a full range of waste water equipment including Anoxic mixers and recirculation pumps of which we have over 100 installed at Ringsend Sewage Treatment works, Dublin.

MacMachinery

Ballybegly, Newtowncunningham, Co. Donegal

Contact: Gerard McFadden

m. 087 2494908 t. 074 915 6708

f. 074 915 6709 e. info@macmachinery.com

w. www.macmachinery.com

MacMachinery is a well established company distributing high quality machinery and equipment in the Energy, Environmental, Material Handling and Recycling industries. MacMachinery represents some of Europe's leading equipment suppliers including; Doppstadt, Machino, Hein Lehmann, Neuenhauser, Presona and Sennebogen, Stadler. A selection of the product range available from MacMachinery includes air separators, balers, ballistic separators, composting equipment, chippers, crushers, disc screens, grinders, linear screens, material handlers, mixers, scrap re handlers, shredders, star screens, stretch deck & flip flop screens, trommel screens, turners, optical sorting equipment, waste sorting systems, and waste shredders. MacMachinery also now provide a selection of Kinshofer attachments and SY-KLONE air cleaning products.

Novamont

Via Fauser 8, Novara, Italy. 28100

Contact: Tony Breton/Christian Garaffa

e. Tony.breton@novamont.com

e. Christian.garaffa@novamont.com

w. www.novamont.com

t. +44 7876200934 f. +44 8000664525

European Inventor of the Year 2007, Novamont SpA is a world leader in the development and manufacture of bioplastics for a range of applications called Mater-Bi®. Mater-Bi® is a family of completely biodegradable and compostable materials which contain renewable resources of agricultural origin e.g. GM free starch and vegetable oils. Mater-Bi® is available in a range of grades each developed for the specific demands of a different application e.g. carrier bags, kitchen caddy liners, garden waste sacks and cutlery. All grades of Mater-Bi® are certified as biodegradable and compostable, according to the leading international standards, e.g. EN13432.

Nova Q Ltd

Unit B21, KCR Estate, Kimmage, Dublin 12, Ireland.
Contact: Julian Beatty (Managing Director)
t. 01-2542276 / 086 8207512
e. innovation@nova-Q.ie w. www.nova-q.com

Nova Q Ltd is an innovative environmental solutions provider to the waste treatment industries with a particular strength in odour prevention and bio-augmentation. Our products prevent the build-up of ammonia and sulphur based odours in composting, AD, waste water treatment and landfill. Additionally, we can increase the speed of composting with our unique, award winning consortium of bacteria. These products are effective both on compost and the biofilters, as well as reducing leachate generation. In AD we have several new technologies that can be applied as a unit or on a modular basis throughout the process, with particular capabilities in gas purification and digestate treatment. Through electro-chemical oxidation we are also bringing to the market a new range of oxidants that are effective in cleaning and sanitizing compost and waste transfer facilities. Nova Q Ltd was awarded the Organics Recycling Suppliers Award at the 2013 Cré Industry Awards

Panford Ltd (Redwood Systems)

Parkway Building, Whitestown Industrial Estate, Tallaght, Dublin 24
Contact: Monique O'Brien, Fergus O'Brien
e. monique@panford.com e. fergus@panford.com
w. www.panford.com t. 01 4596756 f. 01 4610452

Redwood Systems has over 50 years experience in air movement technology. We provide custom engineered solutions to your process operation, designed to match your exact requirements. In addition to designing and supplying individual fans, we design and supply turnkey systems covering areas such as cooling, heating, curing, drying, ventilation, pneumatic conveying, dust, fume and odour control, noise attenuation and process control systems to name a few. We design, manufacture and supply complete composting systems including trommel screeners. All customer enquiries are handled by technically qualified field engineers, who will correctly ascertain your requirements and design a system to achieve these requirements while at all times being conscious of restraints. Our control systems can be from basic

manual control up to full computer monitoring and data trending, incorporating web access to monitor the system with any pc with web connection, and sms txt service. A large part of the work undertaken would be full systems from design stage through to commissioning and we can offer a complete package for product drying, cooling or curing and have an extensive knowledge base spanning a wide range of industries.

Veldeman Structure Solutions

Industrieterrein Vostert 1220,
3960 Bree - Belgium
Contact: Caroline Smeets
t. +32 89 47 31 31 f. +32 89 47 37 77
e. caroline.smeets@veldemangroup.com
w. www.veldemangroup.com

Veldeman Structure Solutions is a supplier of premium structures with a membrane cover, which are used in the environmental sector on a temporary or permanent basis as composting facility, biogas plant, digestion plant, waste management facility, segregation plant etc. The buildings are made of non-corrosive materials and are completely sealed to keep the odor inside and to control the interior environment. Their translucent roof membrane provides natural lighting and reduces operating costs. The structures can be quickly erected and assembled with little to no foundation requirements. Thanks to the modular system, they can be expanded and/or relocated easily.

Xergi Ltd.

823 Salisbury House, 29 Finsbury Circus, London, EC2M 5QQ
Contact: Jorgen Fink
e. jfi@xergi.com t: +44 (0) 1483 600098
w. www.xergi.com

Xergi Ltd is a subsidiary of the Danish company Xergi A/S, with over 20 years of experience in the Biogas Industry. As a Turnkey company Xergi offers full project support including feasibility, design, planning, construction and commissioning including compliance with country specific regulations. As a progressive business Xergi invests heavily in R&D having the world's largest test facility at the University of Animal Science at Foulum in Denmark. 'Delivering on Expectations' is

the driver behind top quality design and components used extensively throughout the whole supply chain, this reduces long-term O&M costs while optimising returns on invested capital. In-house delivery of 21st century operation and control is the heart of a Xergi plant allowing for remote monitoring from anywhere in the world.

CORPORATE NON-PROCESSOR

Clean Ireland Recycling

Creagh, Kilrush, Co. Clare
Contact: Michael O Donoghue/Paddy Hedigan
t. 065 905 9092 f. 065 905 9330
e. modonoghue@cleanirl.com
e.phedigan@cleanirl.com w. www.cleanireland.ie

Clean Ireland Recycling is a waste management company based in Creagh, Kilrush, Co. Clare providing a full range of waste management services to both domestic and commercial customers. Clean Ireland Recycling has built up a strong reputation for the provision of legally compliant and cost-effective waste management services. With a strong focus on technology, Clean Ireland Recycling was one of the first waste management companies in Europe to introduce the wheelie bin (Big Ben Bins) for the collection of non-hazardous waste. Clean Ireland Recycling investment in waste management technology reflects our commitment to the environment and to our staff of over 60 and our desire to provide the most compliant and professional waste management service.

Foyle Meats

Lisahally, Campsie BT47 6TJ
Contact: Nigel McLwaine /Terry Acheson
t. +44 28 7186 0691 (Rol 048 7186 0691)
f. +44 28 7186 0700 (Rol 048 7186 0700)
e. nigelmc@foylefoodgroup.com
e. terrya@foylefoodgroup.com
w. www.foylefoodgroup.com

The Foyle Food Group is a meat-processing group which process 180k of cattle and 400k of lambs per annum. Customers are located in the UK, Ireland and Europe and include Tesco, Birdseye and McDonalds.

Fitz Scientific

Unit 35, Boyne Business Park, Drogheda, Co. Louth
Contact: Michelle Kells/Geoff Fitzpatrick
t: 041-9845440 f: 0419846171
e: mkells@fitzsci.ie e: gfitz@fitzsci.ie
w: www.fitzsci.ie

Fitz scientific provide quality testing of soil, compost and waste samples with excellent turnaround times at value for money pricing. The company has operated in the Ireland and the UK for over 10 years and our customer based includes government bodies, the food, agricultural, and waste sectors. Our team of technicians and consultants have extensive knowledge of nutrient management plans, permit applications as well as waste licence analysis and monitoring experience. Currently we are offering competitive pricing on the analysis of soil for; Carbon / Nitrogen ratio, organic matter, heavy metals, nutrient, micro and physical testing, in addition to AT4 testing. This is backed by a comprehensive scope of accreditation to ISO 17025. For more information on the monitoring and testing services we can provide contact us today on 041 98 45440.

Greenstar Ltd

6 Ballyogan Business Park, Sandyford, Dublin 18
Contact: Malcolm Dowling
t. 01 294 7900 f. 01 294 7990
e. Malcolm.dowling@greenstar.ie
w. www.greenstar.ie

Greenstar is Ireland's leading provider of integrated waste management solutions. Greenstar provides services at each level of the waste management hierarchy with our business development spanning a range of services from education, research, composting, recycling, to developing residual landfills for safe disposal of waste which cannot be reused, recycled or recovered. This suite of services will include significant provision of bio-waste treatment capacity at a national level. Greenstar will play a significant role in the future development and provision of Ireland's waste

management infrastructure, with an expert team of staff with extensive experience in the areas of recycling and recovery, biological treatment, residual landfill management, engineering, environmental impact assessment, business development and communications.

GreenSax

DMG House, Deansgrange Business Park
Deansgrange, Co. Dublin
Contact: Garrett Walsh
t. 01 436 6314 f. 01 2884992
e. office@greensax.com w. www.greensax.ie

Greenstake is a product development company specialising in the development and manufacture of compostable and biodegradable products.

Indaver

4th Floor, Block 1, West Pier Business Campus,
Old Dunleary Road, Dun Laoghaire, Co. Dublin
Contact: Claire Downey
t. + 353 1 69728451 f. + 353 1 2807865
e. claire.downey@indaver.ie w. www.indaver.ie

Indaver Ireland delivers high quality, cost-effective services in the specialist hazardous and non-hazardous waste market in Ireland. Operating since 1977, Indaver is a well-established waste management company, with a proven track record. Our offices in Dublin and Cork allow us to provide an efficient responsive service to our customers. Our transfer station in Dublin Port allows for a fast and convenient service for both small and large quantities of hazardous waste. The company is developing waste management infrastructure in Meath and Cork in order to provide a secure, cost-effective and sustainable waste solution to assist Ireland in meeting its Landfill Directive targets and to reduce its dependence on other countries to provide solutions for its waste. The 130 million waste-to-energy facility in County Meath is under construction, will be operational in 2011. The development represents the largest ever single investment in solid waste management infrastructure in Ireland.

KWD Recycling

Aughacreen, Killarney, Kerry
Contact: Séan Murphy/Brian Bruton
e. sean@kwd.ie brian@kwd.ie
t. 066632458 w. www.kwd.ie

Mulleady's Ltd

Cloonaugh, Drumlish, Co. Longford
Contact: Anthony Mulleady
t. 043 3324145 f. 043 33 24731
e. am@mulleady.com
w. www.mulleadygroup.com

Mulleady's Ltd is a waste recycling and transfer station facility operating from a 9-acre fully-EPA licensed site in Drumlish, Co. Longford licence W0169-01. The waste licence allows us to accept up to 95,000 tonnes per annum. Mulleady's Ltd employs 70 people at the facility. We are permitted waste collectors in the Midlands, Connaught, North-Eastern and Cork Regions. We are licensed to accept non-hazardous solid waste comprising domestic, commercial, industrial and construction and demolition wastes. We operate a pay-by-weight system for all our wheelie bin customers since January 2005. We also supply skips, roll-ons, compactors, separate collections for recyclables. We supply bailers for cardboard, paper and plastic wastes, and we can cater for waste and recyclables from domestic, commercial and industrial sources utilising a modern materials recovery facility.

Panda Waste Services

Beauparc Business Park, Navan, Co. Meath
Contact: David Naughton
t. 1850 656565 f. 046 902 4189
e. david.naughton@nurendale.ie
w. www.panda.ie

Panda is committed to identifying and delivering waste management systems to all of our customers in our endeavour to aid in minimisation of waste and increase recycling for a better environment. We have just in the Wright Environmental Technology in-vessel Composters. Panda has also been granted planning permission for an Anaerobic Digestion. Panda are committed to complying with all relevant environmental regulations and aim to supply a safe competitive and sustainable service with specific regards to the surrounding environment.

Re-Gen Waste Ltd

Unit 7, Shepherd's Drive, Carnbane Industrial Est,
Newry, BT35 6JQ Co. Down

Contact: Joseph Doherty/Celine Doherty

t: +44 28 30 265 432 (RoI 048 30 265 432)

f: +44 28 30 269 898 (RoI 048 30 269 888)

e: josephdoherty@regenwaste.com

e: celinedoherty@regenwaste.com

w: www.regenwaste.com

Re-Gen Waste Ltd, one of Europe's most advanced MRF installations concentrating on the sorting of Household Mixed Dry Recyclables, Re-Gen Waste has already helped many Councils throughout the UK and Ireland deal with their recycling needs. Strategically located to service the needs of public- and private-sector organisations, the company is capable of processing up to 60,000 tonnes of commingled dry recyclable waste every year. Combining a state-of-the-art automated sorting line which is overseen by the Re-Gen team. Working to your individual requirements, Re-Gen strives to deliver a cost-effective solution to your waste problem

Stream BioEnergy

Carraig House, Brookfield Terrace, Blackrock,
Co. Dublin.

Contact: Morgan Burke/ Kevin Fitzduff

t: 01-685 4935 **f:** 01-2108873

e: morgan.burke@streambioenergy.ie

e: kevin.fitzduff@streambioenergy.ie

w: www.streambioenergy.ie

Stream BioEnergy is an independent, Irish owned, renewable energy development company with an emphasis on delivering infrastructure to process organic waste in Ireland. As part of a vision for a better, safer, more secure and sustainable clean energy future, Stream promotes the use of anaerobic digestion to generate renewable energy from organic materials in a way that safeguards our environment. Stream specialises in AD project development including planning and licensing, plant design, financing and construction. Stream is independent of all technology solutions allowing for the best process design and equipment to be selected on a case by case basis. The management team of Stream has significant experience of developing and operating renewable energy and waste infrastructure projects throughout Europe.

The Lisheen Mine

Killoran, Moyne, Thurles, Co. Tipperary

Contact: Brian Quaid

e: bquaid@lisheenmine.ie

w: www.lisheenmine.ie

t: 0504-45700

B9 Organic Energy Limited

19 Point Street, Larne, Northern Ireland, BT40 1HY

Contact: William Robinson – Lead Consultant

David McKee – Director

Trevor McAleese – Plant Manager, Granville

Ecopark Ltd

e: w.robinson@b9solutions.co.uk

e: d.mckee@b9organicenergy.co.uk

e: trevor.mcaleese@granvilleecopark.co.uk

w: www.b9energy.co.uk

t: +44 28 28 268 273 **f:** +44 28 28 263 380

B9 Solutions was formed specifically as environmental and renewable energy consultants within the B9 family of companies to help others implement carbon reduction strategies or instigate transitioning to a low carbon, resilient future. This may involve energy management schemes on site, but also exploring if there are viable energy efficiency or renewable energy opportunities such as wind, biomass, hydro, solar or anaerobic digestion. The team have unique knowledge and experience in green energy technology, understanding the potential and constraints of bringing renewable energy solutions to industry. We understand the legislation, the science and how to best integrate the technology into your business.

B9 Solutions provides management services for Ireland's largest Anaerobic Digestion Biowaste facility, owned by Granville Ecopark Limited.

PB Media Limited

616, Edenderry Business Campus

Edenderry, Co. Offaly.

Contact: Ronan McGlade

e: ronan@premierbusinessmedia.com

t: +353 46 9773434 **f:** +353 86 2545871

Environmental Engineering



Technology

Science



BIOWASTE MANAGEMENT

Fehily Timoney & Company (FTC) has extensive experience in the field of biowaste management. Our knowledge of biowaste management and treatment derives from the experience gained as one of Ireland's leading solid municipal waste and sludge treatment consultants. We employ scientists and engineers who are expert in an array of engineering and environmental disciplines. This breadth of expertise enables FTC to offer our clients a complete service for the provision of biological waste treatment facilities. We offer a comprehensive service to developers of biowaste treatment facilities including pilot operations.

Services Provided

- Site selection
- Feedstock assessment
- Technical feasibility studies
- Technology Selection
- Statutory compliance (Planning, waste, IPPC, ABP)
- Environmental impact assessment
- Pilot studies
- Conceptual and detail design
- Assessment of operational impacts
- Construction Management

Consultants in Engineering & Environmental Sciences

Fehily Timoney & Company, Core House, Pouladuff Rd., Cork, Ireland.

Tel.: +353 21 4964133 Fax.: +353 21 4964464

Fehily Timoney & Company, Unit 16, 3rd Floor, J5 Plaza, North Park Business Park, North Road, Dublin 11

Tel.: +353 1 6583500 Fax.: +353 1 6583501

email: info@ftco.ie web: www.fehilytimoney.ie



Changing Standard Thinking In Irish Processing

ISO50001

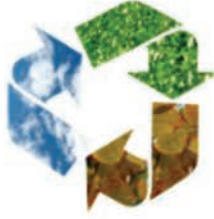
Aviva Stadium, 20th May 2015 **IRELAND**



Food & Drink

For further information
and to receive an exhibitor
pack please contact:

PB Media Ltd
616, Edenderry Bus. Campus,
Edenderry, Co. Offaly
Tel: +353 46 9773434
E: rachel@premierbusinessmedia.com
E: shannen@premierbusinessmedia.com



Pharmaceuticals



Med-Tech



ICT

Aviva Stadium 20th May, 2015

Supported By:



Europe's Leading Supplier of Efficient AD Installations



The Total Energy Solution Provider:

- Customised Container options
- Manufactured in the UK & Ireland
- Design & Construction
- Full Turnkey Contracts
- Project Management
- Commissioning
- Operation & Maintenance

Proven Technical Solutions for:

- Combined Heat and Power
- District Heating
- Trigeneration
- Anaerobic Digestion
- Bio Gas
- Landfill Gas
- Sewage Gas
- Coal Mine Methane

Highest Efficiency - Proven Reliability - Dependable Service

*Operational Availability Contracts with
Guarantees*

Sole Distributor in the UK & Ireland for

Edina Group
Edina Ltd, Dublin + 353 (0) 1 882 4800
Edina UK Ltd, Stockport + 44 (0) 161 432 8833
Edina Manufacturing Ltd, Lisburn + 44 (0) 28 9262 2122

info@edina.eu

www.edina.eu

MEMBERSHIP FORM

Contact Details	
Organisation Name	
Address	
Contact Name 1	
Contact Name 2	
Email of Contact 1	
Email of Contact 2	
Web Site address	
Tel Number	
Fax Number	
Category of Membership	

- Email a 50-100 word description of your organisation for the Cré Membership Directory to percy@cre.ie

MEMBERSHIP CATEGORIES

CATEGORY	Yearly €	DESCRIPTION
Institutional	300	Universities, colleges, hospitals, prisons
Student	100	Student membership
Consultant I	300	Sole trader
Consultant II	450	Single office
Consultant III	750	Multiple offices
Local Authority	400	
Not-for-profit	200	Charities and voluntary
*Processor 1	750	<5,000 tonnes feedstock pa
*Processor 2	900	>5,000 - <10,000 tonnes feedstock pa
*Processor 3	1000	>10,000 - <20,000 tonnes feedstock pa
*Processor 4	1200	>20,000 - <40,000 tonnes feedstock pa
*Processor 5	1500	>40,000 - <50,000 tonnes p.a.
*Processor 6	2750	>50,000 + feedstock p.a.
Trade I	500	Equipment manufacturers & suppliers.
Non- processor	400	Determined case by case
Corporate Companies	2000	Determined case by case
Farmer developing an AD plant	200	Introductory first year price

*the categories under 'processor' refer to the amount of waste to be composted/digested

Prices are ex vat at 23%

PAYMENT DETAILS

You can pay your annual membership subscription by cheque or we can invoice you directly.

Please invoice quoting the Purchase Order Number _____

BANK TRANSFER DETAILS

Account Name: Composting Association of Ireland Address of account holder: Po Box 135, Enfield, Co. Meath, Ireland Bank Name: AIB Address of Bank: Clanbrassil Street, Dundalk, Louth	Bank Code: 932450 Account Number: 66821039 BIC/Swift Code: AIBKIE2D IBAN: IE26 AIBK 9324 5066 8210 39 Reference: your name
--	--

Please Complete this Application Form and Send to:

Cré- Composting and Anaerobic Digestion Association of Ireland, Po Box 135, Enfield, Co. Meath, Ireland. Tel: 00 353 (0)86 8129260 Email: info@cre Web: www.cre.ie



CTO

Environmental Solutions Ltd.

Rostellan, Middleton, Co. Cork

CONTRACT SHREDDING / CHIPPING SERVICE



- **GREENWASTE • BRASH**
- **TIMBER WASTE**
- **LOG CHIPPING**

COUNTRY WIDE

CONTACT AIDAN STAFFORD
087 9977022