



Cré is a member of the European Biogas Association, the European Compost Network and the World Biogas Association







COVID19 RESPONSE

At the start of Coronavirus pandemic, Cré took a proactive approach to inform our members on how to keep their composting and anaerobic digestion sites open. We made contact with colleagues in Italy and other countries to learn from their experience in the early stages of the pandemic so that we could inform our Government on measures which they could take. We made representation to ensure our sector would be deemed 'Essential'.



A key thing which we did was to do a weekly survey of all composting and anaerobic digestion sites to monitor their status and changes in feedstocks. This information was then shared with the COVID19 Action Group.

During the height of the initial wave of COVID19, contingency plans were drawn up for the food processing sector in the case of a COVID19 outbreak in a food factory. Anaerobic digestion was established as the first sector to be called in to deal with liquid wastes and the composting plants to deal with solid type wastes. Fortunately, the scenario did not materialise, but our sector was acknowledged as the first port of call to help deal with the treatment of waste. The following were some of the key actions completed as a part of the COVID19 response from Cré:

- 8 surveys were completed of composting and anaerobic digestion plants and shared with the COVID19
 Action Group.
- A short animation was created to educate our sector on COVID19 measures: https://www.youtube.com/ watch?v=MLNsbtv7tjk
- Cré participated in the Government Action Group on COVID19 Waste
- Regular email updates were provided to all members on COVID19
- Information was provided on potential contingency plans

Fund Raising for GOAL

During International Compost Awareness Week, Cré set up a fundraising campaign for GOAL.

Eamon Sharkey, Director of Fundraising with GOAL, said: "A huge thanks to Cré for selecting GOAL as their charity partner for this campaign. This is a great way of acknowledging the essential service that food waste workers are providing in Ireland during the coronavirus crisis."



EDUCATION AND AWARENESS

RED C Household Food Waste Survey.

RED C was hired by Cré to survey 1,000 people in relation to household food waste management.





Food Waste Awareness pilot schemes

In 2018, a working group on household food was formed between Cré, the three Regional Waste Authorities, the Irish Waste Management Association (Barna Recycling and Clean Ireland Recycling) and the Department of Communications, Climate Action and Environment. The group established pilot schemes for the provision of kitchen caddies to households in Ballaghaderreen (Roscommon), Trim (Meath) and Borrisoleigh (Tipperary). The pilots were coordinated by Pauline McDonagh of the Southern Regional Waste Office and funding was kindly provided by the Department of Communications, Climate Action and Environment. Cré conducted a waste characterisation study on food waste in Ballaghaderreen on the effectiveness of the educational tools.



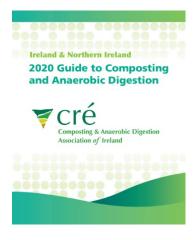
The study found that, by providing a kitchen caddy, liners and an information leaflet, there was a 20–25% increase in the quantity of food waste collected.

Cré Guide To Composting And Anaerobic Digestion 2020

Cré produced a guide to our members and this was widely disseminated

International Compost Awareness Week

Cré Participated in the International Compost Awareness Week with the American Compost Council, the Canadian Compost Council, the European Compost Network, and the Australian Organics Recycling Association.



BROWNBIN.IE cartoon

The brownbin.ie cartoon has been updated and rebranded under the mywaste.ie

In addition to the above, the following communication and awareness was provided:

- Monthly Newsletter to members
- Regular updates for members and stakeholders were provided on Twitter accounts, the Cré
 Compostable Scheme, the ABC Economy, and the EPA funded standards research project
- The LinkedIn account for Cré was maintained
- A YouTube Channel for Cré was established provide useful links
- Websites were maintained: cre.ie, abceconomy.ie, biopost.ie, and compostable.ie

EVENTS

Cré Online Festival

The Cré Online Festival was held over four days in September in partnership with the Compost Council of Canada. The event had 16 speakers looking at Planning for the New Green Deal. The sessions were attended well with up to 150 people in some sessions.

The sessions delivered were 1) Planning for the New Green Deal, 2) Soil Health and New Market



Opportunities in the New Green Deal, 3) Virtual Tours of Compost and Biogas Plants, 4) Soil Session with Dr Rattan Lai, and 5) Anaerobic Digestion

We were delighted to have some high profile speakers including:

- Eamon Ryan T.D., Minister for Climate Action, Communication Network and Transport.
- Dr Artur RungeMetzger, Director, Directorate General for Climate Action, European Commission
- Dr Rattan Lal, InterAmerican Institute for Cooperation on Agriculture (IICA) Goodwill Ambassador,
 Professor of Soil Sciences and Director of the Carbon Management and Sequestration Center at Ohio State
 University, Winner of the Nobel Peace Prize 2007 and the Winner of the World Food Prize 2020

HACCP Course

Cré held two online training courses on Hazard Analysis and Critical Control Point (HACCP) for ABP biogas and composting sites. 20 people attended the courses.

US Composting Industry

A Webinar on the US Composting industry was held in November.

World Soils Day 2020

Cré, the European Compost Network and the Compost Council of Canada had a webinar on latest research of the effect of compost increasing crop health.

BIOPOST Webinar

BIOPOST is a research project on compostables. An initial stakeholder meeting was held in November resulting in feedback on aspects of labelling of compostables products, where compostable products are used and identifying what policies are needed to support compostables.

Meetings Cancelled Due to COVID19

- · March members evening networking dinner in the Carlton Hotel
- May Workshop Research Project Compost and Digestate Standards
- November members meeting
- June Visit to Carbury Compost
- June Evening Dinner with Dutch Processors

Presentations at Events

- Presentation at the World Biogas Association efestival
- Presentation at the Cré Compostable Scheme at Biobased Industry Association Webinar
- Presentation on food waste trials at a Compost Council of Canada Webinar
- Presentation on the industry at the Compost Council of Canada Online Conference
- Presentation on food waste at Waste Forum
- Presentation on biogas at IrBEA Webinar
- Tony Breton delivered a presentation for Cré's CEO Percy Foster, at the UK Organics Recycling Group Annual conference

Various Meetings Attended

- Waste Enforcement Industry Contact Group
- Meeting with the Department of Agriculture, Food and the Marine on the Irish Fertiliser Regulations
- COVID19 Waste Action Group
- Morgan Burke attended the European Circular Bioeconomy Fund Ireland
- Six meetings of the Advisory Group on a Waste Action Plan for a Circular Economy
- Waste Action Plan Implementation Group meeting with Minister Eamon Ryan, T.D.
- EPA Research 2030 Strategy was attended by Munoo Prasad and Percy Foster
- Munoo Prasad attended a working group meeting on circular economy research of Microbiology Society
- Munoo Prasad attended the ECN webinar on EU activities
- DAFM AgClimate workshop
- Innovation Fund Workshop
- · OECD Dialogue on Circular Economy in Ireland
- Food Waste Working Group

Submissions

- RESS Category for Anaerobic Digestion
- Transboundary Movements of Animal By Products and Waste containing Animal By Products
- A Draft National Climate and Air Roadmap for the Agriculture Sector to 2030 and Beyond
- Lack of Capacity at Landfills for Contamination/Stabilised Biowaste
- · A Review of the Use of Peat in the Horticultural Industry
- Waste Action Plan for a Circular Economy
- Research Needs of the Sector
- Exemption for Stabilised Biowaste
- PAS 9017 Standard

Anaerobic Digestion

- Representation on RESS Auction for anaerobic digestion
- Reviewed the SEAI guides on anaerobic digestion
- Morgan Burke attended the Teagasc workshop on digestate/ pathogens
- Development of a researched digestate quality standard

Animal By Products

- Cré attended two ABP Forum meetings hosted by the Department of Agriculture, Food and the Marine (DAFM).
- DAFM is supportive of the Cré position on End Point for ABP in compost and digestate.
- DAFM examined the Cré proposal for two new compost national ABP standards.
- DAFM consulted Cré on a proposed change to CN11, the conditions document for biogas plants in Ireland. The change would allow energy crops being accepted at biogas plants to be exempt from pasteurisation. The change is limited to energy crops only such as grass, silage, maize, beet, etc.
- DAFM agreed a new policy where compostable products which have only been in contact with milk/ cream can go to green waste composting plants.

RESEARCH

Development of Quality Standards for Compost and Digestate in Ireland

Cré commenced a research project in 2019 on standards for quality compost and digestate in Ireland. This was conducted by Percy Foster and Munoo Prasad. This project has been funded under the Environmental Protection Agency (EPA) Research Programme 2014–2020. The EPA Research Programme is a government of Ireland initiative



funded by the Department of Communications, Climate Action and Environment.

Recent EU circular economy, bioeconomy policies and the *New Green Deal* promote the recycling of nutrients from organic wastes into products that can be used as soil improvers and fertilisers, thereby reducing the use of mineral fertilisers. This has renewed interest in the use of compost and digestate as fertilisers.

This study collated the results of analysis, of Irish compost and digestate samples, and then compared the Irish data with databases, reports and standards from other European countries. The Joint Research Centre (JRC) report *End of waste criteria for biodegradable waste subjected to biological treatment (compost & digestate)* and the new EU Fertiliser Product Regulation 2019/1009 were considered in this study. From this collation and comparison process, an updated compost standard and a new digestate standard (whole, liquid and fibre) were developed. This study examined best practice in other countries and options for having End of Waste Criteria, recommending an approach that could be undertaken in Ireland.

The research developed should be used by the National Standard Authority of Ireland to update IS441 and develop a new IS standard for digestate. The research should then be used to define endofwaste criteria.

The possible approach that could be taken in Ireland to define end-of-waste is by either a biowaste ordinance legislation or national fertiliser regulation. Compliance of a plant to either legislation should be through a Quality Assurance Scheme monitored and validated by a Quality Assurance Organisation.

By achieving end of waste status, it generates a level playing field, supports the development of a circular economy market while still guarding the precautionary principle in avoiding pollution when compost and digestate is used on soil.

Instead of the planned workshop on the project, Cré completed a written consultation on the draft findings.

The project is now finished, and the final report is being designed. The report will be published shortly.

Circular Biowastes

Cré, UCD, TCD, and the Irish Bioeconomy Foundation were successful in being recommended for funding on a biowastes project. Unfortunately, due to the funders reduced resources in 2020, the project has not proceeded.

Agri Bio Circular Economy (ABC Economy)

ABC Economy targets waste streams arising from food production/processing and forestry in Ireland to develop new biobased products and generation of energy. These new products and energy systems will maximise the value of wastes, whilst reducing environmental impacts.







The project is led by University College Dublin with Cré and is kindly co-funded under the Sustainable Energy Authority of Ireland Research Development and Demonstration Programme with the Department of Agriculture, Food and the Marine. See www.abceconomy.ie

The project has been extended and will be completed in September 2021.

BioPost

Cré, Trinity College and UCD have started the EPA funded three year project "Sustainable biodegradable, compostable and recyclable plastics for packaging and end of life management", known as BIOPOST.



BioPost's aim is to develop sustainable environmentally friendly plastics to address the realworld problems of current plastics. BioPost will focus on using commercially available and indigenous novel biodegradable polymers and develop composites suitable for packaging applications and evaluate their endoflife options; separation from mixed plastic waste, recyclability, compostability and biodegradability under standard industrial conditions.

The main researchers on the project are Dr Brian Dalton and Dr Purabi Bhagabati. The project website is www.biopost.ie and twitter account is BiopostResearch.

Cré Conducted Surveys of Members on Research Needs

Cré surveyed members on potential research projects for the sector and promoted the most popular projects to the EPA.



EUROPEAN WORK

Cré is an active member of the European Compost Network (ECN) and participates in working groups on compost/digestate quality assurance, compostables and Animal by Product. Percy is the co chair of the Animal by Product group.

Percy Foster and Munoo Prasad attended the ECN working group QAS meeting. The meeting focussed on the ongoing work in the working groups of CEN/TC 223 'Soil improver and Growing media' on the standardisation process (time temperature, stability, impurities) related to the implementation of the EU Fertilising Product Regulation.

ECN submitted an application to the Food Safety Authority for two new composting processing standards.

Cré has being promoting for the end point in the ABP manufacturing chain changed on EU level to occur at the plant. This means there would be a requirement for paperwork for dispatching of compost. This is considered likely to happen and a final decision is expected in 2021.

Cré Joined the Save Organics in Soil - SOS Initiative

This <u>SOS</u> initiative, led by the European Compost Network (ECN) aims to highlight the importance of soil organic matter to encourage policy makers to develop instruments to move Europe towards implementing sustainable, climate proof soil management practices. These include: protecting the existing carbon stock of carbon rich soils, maintaining soil organic matter by respecting the biological cycle (promoting addition of stabilised organic matter from biological treatment), minimising loss of soil organic matter, and encouraging the use of recycled nutrients (such as composts and digestates).



