



Organised by the European Compost Network & Cré Ireland in co-operation with the European Biogas Association and the Irish Bioenergy Association

# AD Europe 2011

Large International Conference & Trade Fair on Anaerobic Digestion of Organic Waste & Agricultural Residues

"The Future of Anaerobic Digestion in Europe

– Situation, Barriers and Chances"

24 - 25 February 2011 Crowne Plaza Hotel, Dublin Airport, Santry, Ireland

- 30 Presentations over Two Days
- Key speakers from the European Commission, Canadian
   Compost Council, Volkswagen, the European Investment Bank
- Networking Dinner
- Trade Exhibition of Equipment and Technology Supplier

**Main Sponsors** 







Conference Details on www.cre.ie/AD2011

**EARLY BIRD RATE ENDS 21 JANUARY** 

### "Céad Mile Fáilte" - A Hundred Thousand Welcomes!

### WHY COME TO DUBLIN?

There is an increasing interest for organic waste treatment solutions based on anaerobic digestion all over Europe. The implementation in practise needs careful consideration in order to use this new technology successfully. That is the reason for the European Compost Network ECN and Cré Ireland for organising the conference and trade show AD EUROPE 2011.

AD EUROPE 2011 will be one of the largest European networking conferences held on anaerobic digestion (AD) of organic waste in Europe taking place on the 24 & 25 February 2011 near Dublin airport in Ireland. AD EUROPE 2011 includes 33 speakers from 15 countries from around the world during the two-day conference.

The conference theme is the 'Future of Anaerobic Digestion of Organic Waste in Europe - Situation, Barriers and Chances" and will provide the latest update on:

- European biowaste policy and impacts on anaerobic digestion;
- Status and trends on anaerobic digestion of agricultural residues, energy crops and biowaste in Europe;
- Proper use of by-products of the process (heat, digestate, electricity and biomethane) will be discussed in detail by key organisations;
- A wider view on what is happening in America and Canada with presentations from the American Biogas Association and the Composting Council of Canada;
- Providing AD plant operators with the latest advice on how to optimise biogas yield; and
- Interesting success stories from processing mixed waste, the optimal energy crop, combining an AD plant with a composting plant, use of heat in district heating and successful uses of outputs from an AD plant.

The target of the conference is providing key advice on setting incentives for AD in member states in Europe and advice from the European Investment Bank on how to raise finance for an AD plant.

AD Europe 2011 has something for everyone if you are a technology provider, planner, local authority, AD operator consultant, waste management company, a farmer looking to diversify, financier, policy maker or someone with a general interest in anaerobic digestion.

#### **TRADE SHOW**

There will be a comprehensive trade show with exhibitors from across Europe. Exhibitors will include consultants who can provide advice on planning and building an AD plant, technology suppliers which cover all aspects such as pumps, digesters, and monitoring equipment. Support agencies which can provide advice on digestate use and finance. An up to-date list of exhibitors can be found on the **conference website** www.cre.ie/AD2011



### **NETWORKING**

A key element of the event is to provide ample opportunities for networking. Bearing this is mind, the conference, trade show, networking dinner and hotel accommodation is all in one building. This makes networking very comfortable over the two days.

Bearing in addition the economic climate in mind, the conference has organised free transport to and from Dublin airport to the venue (only 2km away) and reduced accommodation costs of €59 B&B. The conference fees have also been reduced significantly compared to previous conferences.

### **NETWORKING DINNER**

On the evening of the 24<sup>th</sup>, a drinks reception will be held in the exhibition hall followed by a dinner. After dinner there will be some traditional Irish Dancing and Singing.

### **VISITING DUBLIN**

The conference has been organised on a Thursday and Friday to provide international delegates an opportunity to stay in Dublin over the weekend and visit some of Dublin's most popular tourist destinations such as the Guinness Storehouse and the Book of Kells in Trinity College. Delegates will be provided with information on all tourist destinations.

### DAY 1- THURSDAY 24<sup>TH</sup> FEBRUARY

### **Introduction and Framework**

Chair - Dr. Jane Gilbert, ECN

#### 09.00 Opening & Welcome Address

David McDonnell, Chairman of the Cré Anaerobic Digestion Committee, Ireland and Dr. Jane Gilbert, Chair of ECN

### 09.15 European Biowaste Policy and Impacts on Anaerobic Digestion (Subject to final confirmation)

The EU policy affecting biowaste and AD is changing and the presentation will examine the latest developments in the area of Biowaste incl. End-of-waste legislation, Biowaste recycling targets and dependencies with other EU policy fields

Bartosz Zambrzycki, European Commission, DG Environment, Belgium

## 09.40 Status of the Anaerobic Digestion of the Organic Fraction of Municipal Solid Waste in Europe

Bruno Mattheeuws, Organic Waste Systems n.v. OWS, Belgium

### 10.00 Status and Trends on Anaerobic Digestion of Agricultural Residues and Energy Crops in Europe

Dr. Arthur Wellinger, European Biogas Association EBA, Belgium

### 10.20 Biowaste - How to Explore the Entire Energy and Soil Related Benefit Best?

Biomass inventory and the suitability of waste streams, the need for an integrated perspective of energy recovery and material recycling in the form of compost PD Dr. habil. Ina Körner, Hamburg University of Technology, Germany

10.40 Coffee break

### **Optimisation of the AD Process and Technology**

Chair - Barry Caslin, Teagasc

### 11.20 Increasing Efficiency of Biogas Plants by Technical and Chemical Means

The presentation will cover technology types/latest configuration, different pre-treatment and future technical developments, hybrid systems and additives, engines developments, how to speed up the plant process to increase biogas yields and efficiency of plants.

Tom Knitter, Sustainable Energy Authority of Ireland

### **11.40** Optimisation of Biogas Yield - Swedish Experiences Jörgen Ejlertsson, Scandinavian Biogas, Sweden

### 12.00 Novel Pre-treatment Technologies for Food Waste going to AD

Experiences of new pre-treatment technologies that separate of all types of packaging, including collection bags, which in turn essentially reduces the production of residues throughout the process.

Christian Garaffa, Novamont S.p.A., Italy

### 12.20 Optimisation Tools to Reduce Environmental Emissions from AD plants

Results of a monitoring programme, approaches for technical and operational improvements.

Dr. Jan Liebetrau, German Biomass Research Centre, Carsten Cuhls, Gewitra, Germany

#### 13.10 Lunch

#### **Digestate Quality and Use**

Chair - Percy Foster, Cré

### 14.30 Review of Digestate Quality Requirements and Certification Schemes across Europe

The parameter to test the quality of liquid and solid digestate before application onto land will be discussed. Quality assurance/certification schemes around Europe will be reviewed.

Henrik Lystad & Angelika Blom, ECN AD Working Group Chairs, Norway & Sweden

### 14.50 Do Substrates and their Quality Limit the Applications of Digestates?

Prof. Dr. Håkan Jönsson, Swedish University of Agricultural Sciences SLU, Sweden

### 15.10 Proper Application of Liquid and Solid Digestates in Agriculture

The presentation summarises the Austrian national application recommendations and guidelines.

Erwin Pfundtner, Austrian Agency for Health and Food Safety (AGES), Austria

### 15.30 Coffee break – Speed Networking

### **Biomethane and Biofuels**

Chair - Henry Smyth, Bord Gais

### 16.00 European Experiences in Biomethane Production and Grid Injection

Technology survey, performance and costs, some installation examples

Dr. Dieter Korz, Ros Roca Envirotec, Germany

### 16.20 Vehicle Manufacture Point of View of Biofuels

Background and key factors for the Swedish biofuels success story, future perspectives of renewable fuels (bioethanol, biogas, biodiesel)

Marcus Thomasfolk, Volkswagen Cars, Sweden

### **Networking Dinner**

Delegates are encouraged to bring partners & friends to the Networking Dinner

**19.30** Drinks reception in Trade Stand Hall

**20.00** Dinner and music in the Crowne Plaza Hotel

The programme is subject to changes. Please visit the website for final modifications

### DAY 2- FRIDAY 25<sup>TH</sup> FEBRUARY

#### **Case Studies and Success Stories**

Chair - Derek Milton, Fehily Timoney & Co

09.00 Anaerobic Digestion of Mixed Organic Waste - Experiences from Spain

Joan Mata-Álvarez. University of Barcelona, Spain

09.20 Cleaning & Pre-Treatment of Biowaste - A Chance with Wet Digestion

Stephan Schulte, BTA International GmbH, Germany

09.40 Dual Purpose AD Sites - Concept to Treat Mixed MSW Organics and Source Separated Biowaste in Parallel in one AD plant

Jakovos Theodoridis, BEKON Energy Technologies, Germany

### **Parallel Session - Master Class on Digestate Uses**

Chair - Noel Gavigan, Irish Bioenergy Association

09.00 Digestate Uses in Ireland
Conor McGovern, Rx3, Ireland

09.30 Results of the RX3 funded Crop Trials Using Compost & Digestate

Vicky Heslop, Methanogen, Ireland

10.00 Upgrading Existing Composting Plants with an AD Plant in the Netherlands

John van Haeff, Attero, The Netherlands

### 10.30 Coffee break

11.00 Drivers for Anaerobic Digestion Integration in Organic Waste Recovery Strategies: a Focus on Italy

For several reasons Italian composting sector is moving towards AD integration to composting facilities; this presentation will discuss the Italian state of the art on organic waste management and the results of a survey on the key factors which are driving decisions on integration of AD into schemes for the management of organic waste Alberto Confalonieri, Scuola Agraria Del Parco di Monza, Italy

11.20 Case Studies of German On-Farm AD Plants

The presentation will discuss examples of German onfarm AD plants and the types of farms that build AD plants in Germany. It will discuss what initiatives are required to develop similar opportunities for Irish farmers. Peter Young, Irish Farmers Journal, Ireland

11.40 The Best Grass Species for an Energy Crop AD Plant in Ireland and the UK

The energy crop best suited for Ireland and the UK is grass. This presentation will recommend which species of grass is best based on its gas yield and the best economic return per hectare for an AD plant.

Pádraig O'Kiely, Teagasc-Agriculture and Food development Authority, Ireland

12.00 Challenges to Start Anaerobic Digestion in the New Member States - the Czech Example

Dr. Jan Habart, CZ Biom, Czech Republic

12.20 Is the Development of the AD industry in Northern America and Canada Mirroring Europe?

Susan Antler, Canadian Composting Council, Canada & Nora Goldstein, American Biogas Association, USA

#### 12.45 Lunch

13.45 Renewable Heat - Practice and Incentives

This short overview illustrates the practical renewable heat solutions available to the developer and government infrastructure planners.

Dr. Les Gornall, Process Consultant, Ireland

14.05 New Integrated Design of a Digestion and Composting Plant Resulting in the Use of 5 By-products

A large combined biowaste composting and AD plant located in a business area near Amsterdam Airport has all its by-products utilised. The methane from the biogas is sold for car fuel, the removed CO2 from the biogas and the recovered heat from composting is used in greenhouses, the condensate water is used in vehicles for street cleaning and the compost is sold to agriculture.

Willem Elsinga, Elsinga Policyplanning and Innovation, Netherlands

### **Economics and Subsidies**

Chair - Henrik Lystad, Avfall Norge

14.30 Electricity/Biomethane Subsidies across Europe

Subsidies for AD in different countries will be reviewed and compared. The effects of these different subsidies on the development of AD will be determined. Based on this review, the subsidies for a starting country will be recommended.

Dr. Wolfgang Müller, University of Innsbruck, Austria

14.50 Financing AD Projects

Getting to the point you can raise finance for an AD plant, i.e. what you have to have done before you can even contemplate raising finance. This will cover putting together a business plan, initial finance plan, identifying feedstocks, technology, permitting and planning issues.

Dr. Patrick L. Dorvil, European Investment Bank, Luxembourg

**15.10** Releasing the Finance for AD - What Will it Take? Speaker to be confirmed

**15.30** Final Discussion and Closing Remarks
Josef Barth, ECN, and David McDonnell, Cré

The programme is subject to changes. Please visit the website for final modi-

### **European Compost Network ECN - SIDE EVENTS**

23<sup>rd</sup> Feb. 16.00 - 19.00 h - Annual General Meeting 24<sup>th</sup> Feb. 16.00 - 18.30 h - First Meeting of Working Group WG1 on Anaerobic Digestion

### **CONFERENCE VENUE**

The hotel is located 2 km from Dublin Airport, just off the M50 allowing easy access for delegates from Northern Ireland and from around the country. The distance to Dublin city centre is 6 km. The opening of the Port Tunnel reduces the travel time to the City Centre to 15 minutes. Crowne Plaza Dublin-Northwood is located in 85 acres of the mature woodlands of Northwood Park, Santry.

**Access from Dublin Airport:** The hotel operates a free bus to and from Dublin Airport. Details on this will be provided to registered delegates.

#### OFFICIAL LANGUAGE

The official working language of the meeting is English.

### **ACCOMMODATION & BOOKING**

Single/double Rooms in **Holiday Inn Hotel** is €59 for Bed & Breakfast B&B. The Holiday Inn Hotel is connected to the Conference Hotel Crowne Plaza.

Single B&B in the **Crowne Plaza Hotel** is €99.

To book a room ring + 353 (0)1 8628888 or email reservations@crowneplazadublin.ie and just advise the "CRE Conference" and which hotel you would like to stay in.

Conference Hotel Crowne Plaza Website www.cpireland.crowneplaza.com/Crowne-Plaza-Dublin-Northwood.html

### **PARTICIPATION FEES**

Early Bird Rates (Book before January 21 <sup>st</sup> )	ECN/CRE/EBA/IrBEA Members	Non member	
One Day Pass	€150*	€175*	
Two Day Pass	€225*	€250*	
Standard Rates	ECN/CRE/EBA/IrBEA Members*	Non member*	
One Day Pass	€175*	€200*	
Two Day Pass	€250*	€275*	
<b>Exhibition Space</b>	€100*	€150*	
Networking Dinner	€30*	€30*	
Student (copy of student card required)	€75*	€75*	
	*All rates are exclusive of VA	*All rates are exclusive of VAT at 21.5%	

#### TO REGISTER

To make bookings for the conference go to **www.cre.ie** to download a booking form.

### **BOOKING YOUR EXHIBITION SPACE**

To book your exhibition space please complete the downloaded booking form and mention you want an exhibition space.

#### SPONSORING OPORTUNITIES

If you would like to sponsor the event, please contact Percy Foster (Email percy@cre.ie or Tel. 00 353 (0)86 812 92 60).

