



Composting & Anaerobic Digestion
Association of Ireland

Organised by the European Compost Network & Cré

Supported by the European Biogas Association

AD Europe 2014

Large International Conference & Trade Show on Anaerobic Digestion and
Composting of Organic Waste & Agricultural Residues

Growing the Industry in the Next 5 Years- Waste or Energy Policies?

20-21 February 2014

City North Hotel, Dublin, Ireland

- **38 Presentations**
- **Key International Speakers**
- **Banquet Dinner & Irish Dancing**
- **Artisan Food & Craft Fair**
- **Free Irish Whiskey Tasting**
- **Trade Exhibition of Equipment and Technology Supplier**
- **Demonstration of a Van Fuelled by Biomethane**

Opening Address

Minister Fergus O'Dowd, T.D

**Minister of State in the Department of Communications, Energy and Natural Resource,
and the Department of Environment, Community and Local Government**

Video Address – Enda Kenny T.D. (An Taoiseach) Prime Minister of Ireland

www.adeurope2014.eu

Main Sponsors



"Céad Mile Fáilte" - A Hundred Thousand Welcomes!

WHY COME TO DUBLIN?

There is an increasing interest in organic waste treatment solutions based on anaerobic digestion all over Europe. The implementation of these solutions needs careful consideration in order to use this new technology successfully. For this reason, the European Compost Network (ECN) and Cré Ireland are organising the conference and trade show **AD EUROPE 2014**.

The conference will also include specific topics for compost operators.

AD Europe 2011 was organised by the ECN and Cré in February 2011. The event was a success and was oversubscribed with 280 delegates and 25 exhibitors. Based on the positive feedback from delegates, over 84% said they would attend the event again.

AD EUROPE 2014, which takes place on the 20 & 21 February 2014, will be one of the largest networking conferences in Europe. AD EUROPE 2014 includes 35 speakers from countries from around the world over two-days.

AD Europe 2014 has something for everyone - whether you are a technology provider, planner, local authority, AD/compost operator, consultant, waste management company, a farmer looking to diversify, financier, policy maker or someone with a general interest in anaerobic digestion and composting.

The conference will have two parallel sessions which will cover the following topics:

- ▶ Optimisation of the AD Process and Technology
- ▶ Gas to Vehicle
- ▶ Food Waste Policy
- ▶ Gas to Grid
- ▶ Financing the Industry
- ▶ Case Studies and Success Stories
- ▶ Adding value to Digestate and Compost
- ▶ European Policy Updates

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 or compost plant; technology suppliers who cover all aspects such as pumps, digesters, and monitoring equipment; and support agencies who can provide advice on digestate/compost use and also finance matters. A list of exhibitors can be found on the conference website www.adeurope2014.eu



NETWORKING

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

Bearing in mind the current economic climate, the conference has organised free transport to and from Dublin airport to the venue (only 15 minutes away) and reduced accommodation costs of €59 room only.

BANQUET DINNER

On the evening of the 20th February, a drinks reception will be held in the exhibition hall followed by a delicious banquet dinner. After dinner there will be some traditional Irish Dancing.

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.

The City North Hotel is 30 minutes from Dublin City Centre and a regular bus leaves the hotel to the City Centre.

Time	Main Hall	
08.00-09.00	Registration & Tea & Coffee Break Kindly Sponsored by Biocycle	
09.00-09.10	Opening & Welcome Address , Martin Eves, Chairman of Cr�, Ireland	
09.10-09.30	Growing the Industry in the Next 5 Years – Waste or Energy Policies? Dr. Stefanie Siebert, Executive Director of European Compost Network ECN e.V.	
09.30-09.50	Ministerial Address, Minister Fergus O'Dowd, T.D., Minister of State in the Department of Communications, Energy and Natural Resource, and the Department of Environment, Community and Local Government	
09.50-10.10	The New EU Research Programme 'Horizon 2020'	
10.10-10.20	Novamont and Mater-Bi: A Case Study of Bioeconomy in Europe Christian Garaffa, Novamont, Italy	
10.20-10.30	Q&A	
10.30-11.00	Tea & Coffee Break Kindly Sponsored by Ameriga	
	Session Chair: Department of Communications, Energy & Natural Resources	
11.00-11.25	20 Years' Experience Implementing a Biowaste Strategy for Flanders How to make the circular economy of biowaste a success? Both in the small cycle at home and in the large professional cycle we try to close the loops. But there still are a lot of opportunities for the future. Kristel Vandebroek, Vlaco, Belgium	
11.25-11.50	Bioeconomy Opportunities for the Organic Waste Sector In the past, waste treatment was aimed at removing organic waste from society in a hygienic and efficient manner, mostly by landfilling. In the last decades developments have focused on producing high-quality compost through source separation. In the last few years, we have seen an enormous increase in anaerobic digestion for biogas driven by renewable energy subsidies. A new evolution in organic waste treatment is the occurrence of the Bioeconomy, i.e. the transition of a fossil based towards a bio-based economy. In time, we are running out of fossil feed stocks such as oil, gas, peat and phosphate. These have to be replaced by bio-based equivalents. The EU-27 yearly generates 127 million tons of bio-waste which could serve as a feed stock for the Bioeconomy. Dr. Adrie Veeken, Attero, Netherlands	
11.50-12.15	Anaerobic Digestion of Source Separated Organics in America An overview of state of organics management in America, with an emphasis on source separated food waste will be presented. The remainder of the presentation will discuss: 1) Details on the several dedicated SSO digesters operating in the U.S.; 2) Increasing number of stand-alone commercial/merchant digesters for mix of organic waste streams; 3) Diversion of food waste streams to municipal wastewater treatment plant digesters; 4) Use of farm digesters as outlets for SSOs; 5) Brief overview of regulations affecting AD of source separated organics, again focusing on food waste. Nora Goldstein, Biocycle, America	
12.15-12.40	Organics Recycling from Three Sides of the Ocean – An Overview of Canadian Advances in Composting and Anaerobic Digestion In a recent federal report, over 60% of Canadians are doing some form of composting, more than double since 1994. From kerbside kitchen scraps collection, leaf & yard trimmings to wastewater, agricultural and natural resource residuals, the array of different processing facilities is considerable. And yet, the fundamentals and hard lessons learned have a familiar ring amongst them. The drivers, implementation and market development practices will be reviewed that have helped build today's advances in Canada, helping prepare for further momentum into the future. Susan Antler, Executive Director of the Compost Council of Canada	
12.40-13.00	Q&A	
13.00-14.00	Lunch Kindly Sponsored by Bord Gais	
	Main Hall – "Gas to Vehicle/Grid"	Cr� Hall- "Digestate –Compost- Soil"
	Session Chair: Peter Young, Irish Farmers Journal	Session Chair: Andy Doyle, Irish Farmers Journal
14.00-14.25	Demand Side Application of Biometbane -Transport Dan Fitzpatrick, Bord Gais	What are Important Parameters to Characterise Compost and Digestate? During the last 20 years assessing the quality of products from organic waste has developed and expanded. Previously the content of potential pollutants - especially heavy metals – was the important issue. Today the focus is mainly on the usefulness of compost and digestate, the qualitative requirements of the different applications and the visual appearance. Maria Thelen-J�ngling, BGK, Germany
14.25-14.50	Updates on Biomethane to Grid and Vehicles This presentation will give an update on EU developments in the sector. This update will cover the status of biomethane across Europe, the draft CEN standard for biomethane and the EU funded project Green Gas Grid and a draft EU level biomethane roadmap being developed by this project. Robert McKeon, CNG Services, England	Humus Balances and CO₂ Storage with Compost and Digestate in the Frame of Soil Health and Climate Change Florian Amlinger, Austrian Compost & Biogas Association
14.50-15.15	Biogas Upgrading Technologies – A Technical Review Biogas upgrading to vehicle fuel or natural gas quality is a growing field in Europe, opening for the use of biogas in new areas. The state-of-the-art of current gas upgrading technologies will be presented based on Swedish Gas Technology Centre's recent report 270, with a focus on technology and economy. Daniel Tamm, BioMil AB, Sweden	Development of a Farmer "Friendly" Rapid Ammonium Nitrogen Test for Digestate Digestate contains up to 15% nitrogen but most of the nitrogen is in ammonium form and is susceptible to rapid volatilisation losses if the materials are stored for any length of time. Therefore a lab analysis may not be valid if the time of analysis does not coincide with the time of application. A rapid simple ammonium test has been developed which gives results similar to the standard lab test. The use of the test will ensure that adequate nitrogen is being applied to crops by the farmer based on actual levels rather than a "false" lab test. Dr. Munoo Prasad, Compost Research and Advisory
15.15-15.30	Q&A	
15.30-16.00	Tea & Coffee Break Kindly Sponsored by Bekon	
	Gas to Vehicle/Grid	Adding Value to Digestate
	Session Chair: Ian Killgannon, Bord Gais	Session Chair: Chris Johnston, European Phosphorus Forum
16.00-16.25	There's Mileage in Muck: Small Scale Biogas Upgrading for Vehicle Fuel WRAP has funded a study by Evergreen Gas' use of small-scale biogas upgrade technology to make vehicle fuel. An investigation into how small streams of biogas can be used to make vehicle fuel and an overview of some of the vehicles currently available will be presented. Will Llewellyn, Evergreen Gas, England	Innovate Uses and Markets for Digestate In Germany, 66 million tons of digestate are produced. To solve the problem of an oversupply of organic fertiliser in regions with much livestock farming, digestate can be upgraded like separating, composting, pelletizing and filtering (UF, RO). Thus, the costs of transportation and storage can be reduced and new markets established. David Wilken, German Biogas Association
16.25-16.50	Speaker to be confirmed	Growing Trials with Digestate in the Landscaping, Regeneration, Sports Turf and Horticulture Sectors UK digestate use has increased significantly over the past three years, with agriculture as the key market. To better ensure market resilience, WRAP has supported digestate trials in a number of other markets. Whilst these have all shown technical promise, doubts remain about their commercial potential. David Tompkins, Waste and Resources Action Programme, England
16.50-17.00	Q&A	

Day 2 – Friday 21 February 2014

Time	Main Hall	Cré Hall
	Food Waste Collection	Case Studies and Success Stories
09.00-09.25	<p>Session Chair: Philip Nugent, Department of Environment, Community & Local Government</p> <p>How to Plan and Start Separate Collection - Examples and Outcomes from Urban and Rural Situations This presentation will provide examples on rolling out separate collection of food waste in an rural and urban situation. Milan, which is currently the largest town in the world per population covered by separate collection of food waste will be discussed. The status of source separated legislation in European Countries will be provided. Enzo Favoino, Scuola Agraria del Parco di Monza, Italy</p>	<p>Session Chair:</p> <p>Combined Anaerobic Digestion and Composting plant with Nitrogen Extraction and the Production of a Mineral Fertiliser Fabrizio Adani, (Ricicla group - DISAA - University of Milan), Massimo Centemero, Italian Consortium for Biogas and Compost Production & W. Giacetti (ETRA SpA, Padova).</p>
09.25-09.50	<p>Experiences of Managing a Brown Bin Advisory Programme in Germany For more than 25 years the biowaste bin is being introduced all over Germany. Various proven measures for the accompanying awareness activities and for the administrative framework conditions will be presented. The speaker's experiences with introducing the biowaste bin to households cover rural as well as metropolitan areas such as Berlin and Munich. Thomas Turk, IGLux, Witzenhausen, Luxembourg</p>	<p>AD in Oslo- Production of Liquid Biomethane from Sorted Household Waste. Biowaste from Oslo is processed in an AD plant. The process is anaerobic pretreatment with thermal Hydrolysis. The biogas is purified and liquefied and used for public transportation, waste trucks etc in Oslo (>50 km away). Liquid digestate is spread on farm land. An alternative strategy of dewatering and concentrating the liquid fraction to a liquid fertilizer will be presented Nils Finn Lumholdt, Waste-to-Energy Agency, City of Oslo, Norway</p>
09.50-10.15	<p>Anaerobic Digestion and Bioplastics: a Strong Alliance for Optimal Food Waste Capture Rates, Higher Biogas Yields and Quality Compost Production High food waste captures are becoming a priority for those municipalities wanting to efficiently divert organic waste for biogas and renewable energy production besides composting. Compostable plastic bags are a key tool in achieving high participation and capture rates in residential food waste collection schemes both in single house and high rise urban settings. Optimal handling of this kind of feedstock made of food waste bagged in compostable bags at AD facilities is essential and, most importantly, possible. Case studies of different treatment technologies will be shown. Christian Garaffa, Novamont, Italy</p>	<p>Case Studies of Agricultural Anaerobic Digestion Projects Around the World This presentation would summarize Global Methane Initiative's (GMI) recently released report, <i>Successful Applications of Anaerobic Digestion Around the World</i>. The report discusses various benefits of AD projects in the agricultural sector and provides case studies of several systems to highlight these benefits. The projects range from multi-million dollar facilities that produce CNG fuel for milk delivery trucks from biogas to a collective of household systems in Peru that fuel a public lighting system for a small rural village, enhancing quality of life for the entire community. Allison Costa, US Environmental Protection Agency, America</p>
10.15-10.30	Q&A	
10.30-11.00	Tea & Coffee Break sponsored by Kilkenny Mechanical Handling Systems Ltd.	
	Optimisation of the AD Process and Technology	Waste Policy
11.00-11.25	<p>Session Chair: Chris Long, FLI Energy</p> <p>Optimising the Composting and Anaerobic Digestion Process For years the Local Authority ran a successful composting plant but as food waste collection spread and captures increased the Local Authority decided to add on a dry plug flow reactor. They have now optimised the process to minimise residues, maximised energy and compost production. Klaus Groell, IGLux, Luxembourg</p>	<p>Session Chair: Tony Breton, Novamont</p> <p>Food Waste Prevention Strategies across Europe In the EU Roadmap for a Resource Efficient Europe, food waste has been identified as a priority, setting a target of 50% food waste reduction for 2020. To coincide with European Year against Food Waste, this presentation will look at food waste prevention activities in Europe and strategies to tackle this resource efficiency challenge. Odile Le Bolloch, Environmental Protection Agency, Ireland</p>
11.25-11.50	<p>Optimisation of Biogas Plants – Focus: Flexible Energy Supply of AD Plants There are a different concepts to optimise existing AD plants (e.g. upgrading from a small AD plant to a large AD plant, expansion of gas production rate in the fermenter by pretreatment and increasing the organic loading, system optimisation by increasing the conversion to a biogas upgrading and feeding into the natural gas network, improve the heat utilisation, flexible energy supply). Recently the German Biomass Research Centre analysed the flexible energy supply of AD plants. The presentation will show different repowering concepts of AD plant and focus on the technical/economical aspects of flexible biogas-based energy supply. Jaqueline Daniel Gromke, German Biomass Research Centre</p>	<p>A Zero Waste Vision for Europe: Management of Resources and the Key Role of Biowaste Enzo will present the drivers behind Zero Waste and discuss the important role the management of biowaste plays in achieving zero waste. Enzo Favoino Scuola Agraria del Parco di Monza, Italy Chair, Scientific Committee, Zero Waste Europe</p>
11.50-12.15	<p>AD Technologies for Green Waste and Grass as Feedstock Dr. Wolfgang Müller, University of Innsbruck, Austria</p>	<p>European Waste Targets Review The European Commission initiated a review of targets set in a number of waste framework and landfill Directives. Dominic Hogg, Eumonia, England</p>
12.15-12.35	<p>AD-WISE - A New Tool to Optimise the Operation of Biogas plants The AD-WISE project is developing an control system based on feed regulation for biogas plants. It is composed of real-time measurement of volatile fatty acids (VFA) concentrations and software that uses this data and other parameters already measured in the plant, to maximise biogas production, while modifying the operating conditions to avoid acidification. John O'Flaherty, MAC, Ireland</p>	<p>Status of Waste Treatment BREF and Implications for Anaerobic Digestion, Composting and MBT Plants Kiara Zennaro, Renewable Energy Association, England</p>
12.35-12.45	Q&A	
12.45-13.45	Lunch Kindly Sponsored by Novamont	
13.45-14.10	<p>Session Chair: Morgan Burke, StreamBioenergy</p> <p>Efficient Separation of Biodegradable Organic Fraction From Source Separated Organics and MSW using High Pressure up Front Processing System. Dr. Dieter Jürgen Korz, Anaergia Inc. / UTS Biogastechnik GmbH</p>	
14.10- 14.35	<p>Pretreatment of Organic Waste for Liquid Fermentation- Gottfried Reither, Komptech</p>	
14.35-15.00	<p>Thermophilic Dry Fermentation and Composting Technology – Steinfurt Case Study, Matthew Cox, Bekon</p>	
15.00-15.15	<p>Food and MSW Separation Utilising the OREX Press- Karl Dirkes, db technologies</p>	
	Financing the Industry	
15.15-15.40	<p>Review on How European Countries are Managing to Fund Anaerobic Digestion and Composting Developments Jack O'Keefe, Larchmont Consulting, Ireland</p>	
15.40-16.05	<p>Policies for Anaerobic Digestion The presentation will review AD subsidies/policy from each country. Future perspectives from CAP Policy will be presented as well as CAP policy supporting the use of compost/digestate. Dr. Jan Stambasky, President of the European Biogas Association, Brussels, Belgium</p>	
16.05 -16.15	Q&A	
16.15-16.30	Closing Remarks	

NETWORKING EVENTS

Artisan Food/Craft Fair & Irish Whiskey Tasting

followed by Irish Musicians in the Hotel Bar
19th February at 8pm in City North Hotel

A free food and craft fair will be organised in the hotel for all delegates attending the conference. There is also a free Irish Whiskey Tasting. It will showcase local produce where you can buy some genuine Irish gifts to bring home.

Exhibitors are:

McCloskey Bakeries and Artisan Breads- traditional and artisan bakers since 1940.

Moran's Homestore, Ballinagh, Co. Cavan- homemade jams, marmalades, sauces, chutney and relish

Cooles Swan Superior Dairy Cream Liqueur, Navan, Co. Meath – undoubtedly the most melt in the mouth delicious cream liqueur in the world straight from the farm

Janet & Mary's handcrafted Irish jewellery



DRINKS RECEPTION & BANQUET DINNER

20th February at 7.30pm in Hotel

Every delegate's ticket includes attendance at the conference Banquet.

- It will consist of-
- ▶ Drinks Reception
- ▶ Three Course Dinner
- ▶ Entertainment by a Group of Irish Dancers and plenty of fun!



Friday Night 21 February –Traditional Irish Pub in Laytown

A free bus will leave the City North Hotel at 7.30pm and will delegates to the nearby 'Cottage Inn' at the beachside village of Laytown. The Cottage pub has a restaurant where people can buy a meal.

There has been a pub on the site of the 'Cottage Inn' since the 1880s. The first known licence dates back to 1886. It was held by Cornelius Sheridan. The next licence holder was William 'the Willow' Kenahan. Around the First World War the Laytown pub and its sister hostelry in Julianstown came into the ownership of James J Stafford. Run by the Stafford family for decades the Cottage Inn was bought at auction by Michael Glina in September 1976. Jimmy Glina took over in 1986 and proud of his establishment's long history. On October 1st, 1995 'The thatch roof was spotted smouldering at about 8pm and as the historic pub dating back to the 1800's was engulfed in flames. It took two and a half years before the pub, still thatched, could be rebuilt and reopened. The designer Angela Murphy insisted on using all recycled or reclaimed materials,' that attention to detail can still be seen in the charming old world interior of the Cottage Inn.

Agenda for European Compost Network Working Group 1- European Policies

Please note this event is not a public event and is for invited members by the ECN. Members should confirm attendance no later than 10 February to Stefanie Siebert.

Date: 19 February 2014

Time: 14:00 – 19:00

Location: 'Whitewood 1'- City North Hotel, Dublin, Gormanston, Co. Meath, Ireland

Participants:

Members of

- ▶ ECN Working Group 1 "European Policies",
- ▶ Sub-Working Group 1 – BREF
- ▶ Sub-Working Group 1 – ABPR
- ▶ Sub-Working Group 1 – EU Fertiliser Regulation

- TOP 1 Welcome and opening of the meeting
- TOP 2 Approval of the agenda
- TOP 3 Role of Delegates, composition of WG1
- TOP 4 Final report on **End-of waste criteria for Compost and Digestate** – Status of comitology decision
- TOP 5 **Waste related targets** – Assessment of the WFD 2014
- TOP 6 **Industrial Emission Directive – TWG BREF-Waste Treatment**
- TOP 7 **Renewable Energy Directive (RED; Directive 2009/28/EC) – ILUC; Indirect Land Use Change**
- TOP 8 Revision of **EU Ecolabel criteria for Soil Improvers and Growing Media**
- TOP 9 Revision of the **EU Fertiliser Regulation**
- TOP 10 **ABPR** – key items of ongoing development within DG SANCO committee
- TOP 11 **EC bio-economy strategy** – expert group outcomes
- TOP 12 **Phosphorus consultation** – ECN's submission and next activities
- TOP 13 Any other business

European Compost Network Board Meeting

Date: Thursday 20th February 2014

Time: 16:00 – 19:00

Location: Whitewood 1

Cré Board & Anaerobic Digestion Committee Meeting

Date: Friday 21st February 2014

Time: 14:00 – 14:30

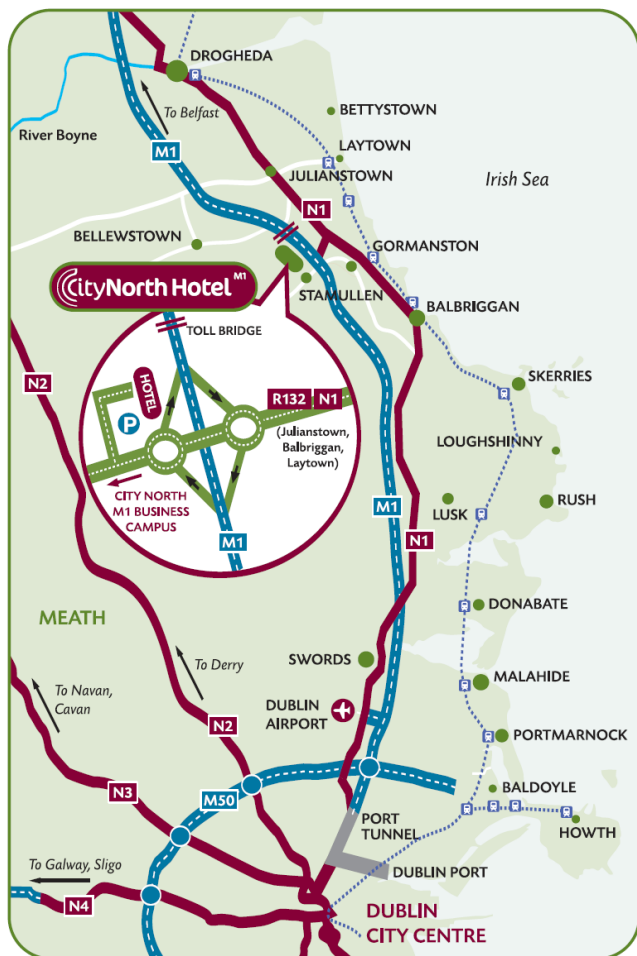
Location: Speakers Lounge

CONFERENCE VENUE

The Venue for the conference is the City North Hotel, Gormanston, Co. Meath, Ireland. It is located just 15 minutes by car from Dublin Airport along the M1 Dublin to Belfast Motorway. It is set in a rural location next to the motorway and is not located in Dublin City. www.citynorthhotel.com

From the Airport, travel North on the M1, turning left at the sign for Julianstown, Drogheda South and Laytown (before the toll bridge).

Travelling along the M1 from Belfast, approximately 8kms past Drogheda, motorists should go through the main M1 toll bridge. See the City North Hotel situated on the right side and take the left turn at the sign for Julianstown – R132 (1st left after toll bridge).



PARTICIPATION FEES

	ECN/CRÉ Members*	Non member*
Thursday, Friday & Banquet meal	€350*	€400*
Only Thursday (no banquet)	200*	225*
Only Friday (no banquet)	200*	225*
Banquet Only	75*	75*
Exhibition Space Package (include 1 delegate)	€550*	€600*
Exhibitor – Additional Delegates	€300*	€350*
Visit to Traditional Irish Pub ‘Cottage Inn’– Friday 21 Feb	Free	Free

*All rates are exclusive of VAT at 23%

TO REGISTER

To make bookings for the conference go to www.adeurope2014.eu

TRAVEL FROM DUBLIN AIRPORT

The hotel operates a free bus to and from Dublin Airport. The City North Hotel can arrange for shuttle bus collection from Area 14 of Dublin Airport.

Simply advise the City North Hotel of your flight arrival time and details and the hotel will schedule a collection time with you. Return shuttle can be booked with the hotel during your stay.

T: +353 (0)1 690 6666 Email : info@citynorthhotel.com

OFFICIAL LANGUAGE

The official working language of the conference is English.

ACCOMMODATION IN CITY NORTH HOTEL

- ▶ €69 per room B&B based on single occupancy
- ▶ €59 room only rate
- ▶ €79 per twin or double room B&B based on double occupancy

These special hotel rates end on Feb 13

Bookings can be made directly by:

Phone: + 353 (0)1 690 6666

Email: info@citynorthhotel.com

Simply mention “CRE” on booking to avail of reduced rate.

To guarantee availability at these rates bookings must be made prior to February 13th 2014.

CITY NORTH HOTEL TO DUBLIN CITY CENTRE

There is direct bus transfer between the City North Hotel and Dublin city centre with Mathew’s coaches. Transfer fee is €9 single, €14 return and the return leg can be on different dates. The bus stop is just outside the hotel and the city centre stop is on Parnell Square. City North Hotel is a regular collection point throughout the day. For other times please simply ask us at reception and we will request that the driver picks up at City North Hotel.

For the return journey, City North Hotel is also a regular scheduled stop throughout the day. For other times please simply request that the driver stops at City North. For further information check on www.mathews.ie or call +353 42 9378188.

BOOKING YOUR EXHIBITION SPACE

To book your exhibition space please go to www.adeurope2014.eu