



Chartered Institution of Building Services Engineers
(Republic of Ireland Region) Conference - 2010

Sustainable Refurbishment of Buildings

9th March 2010 - Clontarf Castle, Dublin



Time Title

8.00 Registration and Coffee

8.45 Opening Address

9.00 Best Practise Sustainable Refurbishment

9.25 Climate Change and Building Services Design

9.50 Improving Energy Performance of Existing Buildings - Energy Service Company's Perspective

10.15 Q & A

10.30 Coffee

11.00 Tyndall National Institute, UCC - Case Study

11.25 Office of Public Works - Sustainable Building Refurbishment

11.50 HSE National Energy Reduction Project

12.15 Q & A

12.30 Lunch

13.30 Hot Topics from the ASHRAE Winter Conference including USA Perspective on Building Refurbishment

13.55 Danish Perspective of Sustainable Building Refurbishment

14.20 Evidence Based Evaluation in Building Services

14.45 Short Break

15.00 The National Energy Retrofit Programme – Driving Mass Delivery

15.00 Why Refurbish Buildings - the Policy Perspective

15.45 Q & A

16.00 Conference Close

Speaker

Eamon Ryan TD, Minister for Communications, Energy and Natural Resources

Dr Colm Cryan (Building Research Centre, University of Limerick)

Anastasia Mylona (CIBSE)

Liam Connellan (Chairman, Dalkia Ireland)

Paul Houston (Project Management Group)

Jim O'Sullivan (OPW)

Jim Murphy (HSE Estates)

Professor Tim Dwyer (Department of Urban Engineering, South Bank University and Chairman CIBSE / ASHRAE Group)

Niels-Ulrik Kofoed (Group Manager - Energy, Sustainability & Indoor Climate Esbensen Consulting Engineers, Denmark)

Dr Kevin Kelly, Dublin Institute of Technology and former CIBSE Chair

Paula Butler, Programme Manager, Sustainable Energy Ireland

Professor Frank Convery, Emeritus Heritage Trust Professor of Environmental Policy at UCD

Tony McKinley (CIBSE Chair)



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Application Form

Name

Company

Address

e-mail

Telephone

Cost

Members & Non Members €125

Unwaged €50

Students €25

Please return completed forms, accompanied by a cheque for the appropriate amount made payable to CIBSE (ROI) Branch, to:

Alan Duggan, Arup Consulting Engineers, 50 Ringsend Road, Dublin 4
alan-j.duggan@arup.com



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Speaker Biographies

Eamon Ryan TD, Minister for Communications, Energy and Natural Resources

Eamon Ryan was re-elected to Dáil Eireann in 2007 by the constituents of Dublin South following his first election to Dail Eireann in 2002. Prior to his appointment as Minister for Communications, Energy and Natural Resources, he was the Green Party spokesperson for Transport and Enterprise, Trade and Employment and opposition convener on the Joint Oireachtas Committee for Communication, Marine and Natural Resources. Prior to his election to the Dáil he set up and ran two businesses, Irish Cycling Safaris and Belfield Bike shop. He was an active member and chairman of the Dublin Cycling Campaign, and from 1995 to 2002 he served on the Advisory Committee of the Dublin Transport Office.

Dr Colm Cryan (Building Research Centre, University of Limerick)

Dr. Colm Cryan is a Lecturer at the University of Limerick and the Director of recently established Building Physics Research Centre. He spends his time developing methods that facilitate the incorporation of best practice sustainability into all aspects of the built environment. The centre has a wide range of projects with industry partners including; modelling natural light in heritage buildings, in-situ thermal testing of walls, rain water harvesting and testing solar panels. His main focus is on next generation refurbishment, a process of optimising the performance of existing buildings – physically, economically and socially. Prior to joining the University, Dr. Cryan was the Director of BRE Ireland and a Group Leader at the Massachusetts Institute of Technologies Lincoln Laboratory, where he was responsible for the Advanced Lasercom Systems and Operations group. Dr. Cryan, has presented at over fourteen conferences, published over eighteen articles and holds sixteen patents. He was awarded the Lynam medal for physics and is a past president of the New England Fiber Optic Council. Dr. Cryan, who spent most of the last fifteen years in Massachusetts, currently lives with his family in Tipperary.

Jim Murphy (HSE Estates) CEng MIMechE, CEnv, FIHEEM

The HSE currently spends over €70 million per annum on energy consumption. There have been many local programmes and initiatives introduced throughout the health sector over the years to reduce this but the demand for energy has continued to grow exponentially, particularly in the acute hospitals sector. It is imperative therefore for the HSE to review its energy strategy and consumption patterns with a view to developing a national plan aimed at reducing this consumption, consistent with international best practice. This presentation describes the approach the HSE has taken to achieve this goal. Jim Murphy joined the DoHC in 2001 and moved to the HSE in 2007. Previous experience would include senior engineering roles in the pharmaceutical, food and electronic industries.

Professor Tim Dwyer (Department of Urban Engineering, South Bank University and Chairman CIBSE / ASHRAE Group)

Tim is Professor of Educational Development in the Department of Urban Engineering at London South Bank University. His particular area of interest is focussed around buildings and systems performance and the delivery of teaching and support of students and engineers using flexible learning. He is a director of the American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE). He chairs the Chartered Institution of Building Services Engineers (CIBSE) Individual Case Procedure Panel, chairman of the CIBSE ASHRAE Group, chair of the CIBSE Communications Committee and sits on the CIBSE Council. Tim is an active committee member (and past chair of the preceding group) of the Institution of Mechanical Engineers (IMechE) Construction and Building Services Division as well as the organiser of Greater London Region Southern Area (London) events.



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Dr Kevin Kelly, Dublin Institute of Technology and former CIBSE Chair

Dr Kevin Kelly has a first class honours degree in building services engineering and a doctorate in education. He is a Fellow of the Chartered Institution of Building Services Engineers (UK), Fellow of the Society of Light & Lighting (UK) and a Chartered Engineer with Engineers Ireland. He is a former chair of CIBSE (ROI). He is a lecturer in the School of Electrical Engineering in the Dublin Institute of Technology and was formerly Head of Learning Development in DIT where he was responsible for leading change and bringing about a student centred learning environment in the faculty of engineering with 5000 students. His research interests are in Lighting, Sustainable Buildings, Electrical Services Engineering and Organisational Change. He has presented peer reviewed papers on changing universities and new methods of education at ASEE, SEFI and IGIP conferences in the USA, Norway, Finland, Hungary, Turkey and Dublin in the last three years.

Professor Frank Convery, (Director, Urban Institute, UCD)

Prof. Convery has held the chair of Heritage Trust Professor of Environmental Policy at University College Dublin since 1982. His research career began with the award of a Doctorate in forest economics from New York State University. His commitment to research and in particular environmental policy has developed since then and is evidenced by a strong publication record in the areas of energy efficiency, environmental economics and resource management and more recently the European Union's Emissions Trading Scheme. Frank has received many scientific awards and honours during his career including; Member of Scientific Committee, European Environment Agency; Member of High Level Advisory Group on Environmental Economics to the European Commission and the European Environment Agency. As well as President of the European Association for Environmental and Resource Economics and Member of Informal Expert Advisory Committee on Climate Change to the Department of An Taoiseach. More recently he has held the position of Chair, Board of Sustainable Energy Ireland and is a member of the Commission on Taxation. He is the current Chair of COMHAR – Ireland's Sustainable Development Council and also Director of UCD Urban Institute Ireland he is also leading UCD's new initiative, the Earth Systems Institute.

Paul Houston (Project Management Group)

The Tyndall National Institute (previously the National Micro-electronics Research Centre) has operated humidity controlled Cleanrooms since the early 1980s. The chilled water system and the main cleanroom AHU were conventionally sized to maintain low humidity. As part of a recent site wide expansion the existing systems were replaced achieving very significant energy savings. The works were undertaken during a brief shutdown in listed buildings. Paul Houston graduated as a Mechanical Engineer from CIT in 1989 and worked in a facilities engineering role within the ICT industry. He joined PM in 1998 and since then has been the Building Services lead in a variety of industrial, institutional and commercial projects where he has gained extensive experience in low energy designs and renewable technologies.

Anastasia Mylona (CIBSE)

Anastasia studied Architecture in Greece and completed a PhD research on the environmental performance of buildings and systems, with special focus on the energy performance and overheating risk assessment of highly glazed buildings, at the Welsh School of Architecture, Cardiff University. For two years she was based in the UK Climate Impacts Programme, at Oxford University, working in collaboration with CIBSE to develop a design framework for the use of climate change information in building design. Currently she is employed by CIBSE as their Environmental Data Coordinator leading the development of CIBSE guidance relevant to climate change impacts and adaptation, and the climate change information required for the future proofing of building and their services.



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Paula Butler, Sustainable Energy Ireland

Paula holds an Honours Degree in Natural Science from Trinity College Dublin and a Masters in Environmental Management from Aberdeen University. She previously worked as a Company Associate of E.G. Pettit & Co., heading up the Environmental Management Section. Paula joined Sustainable Energy Ireland in 2002 and is the Programme Manager dealing with Ireland's implementation of the EU Directive on the Energy Performance in Buildings Directive (EPBD). In this capacity, Paula has played a lead role in the development and operation of the national Building Energy Rating (BER) scheme, particularly for the domestic sector. The scheme makes energy efficiency a visible factor in property purchase, rental and renovation decisions. A BER is now required for buildings that are constructed, sold or rented in Ireland. Paula has recently started working on the National Retrofit Programme announced in the 2010 budget, which aims to unlock the significant energy efficiency and employment potential that exists in energy efficiency upgrading in the domestic, commercial and public sectors. It will present opportunities to greatly upscale the level of energy efficiency retrofit activity, by engaging a wide range of market players including energy utilities and financial institutions, as well as pursuing new ways of financing and delivering energy efficiency services.

Niels-Ulrik Kofoed (Group Manager - Energy, Sustainability & Indoor Climate Esbensen Consulting Engineers, Denmark)

Niels-Ulrik Kofoed is group manager in the Energy, Sustainable & Indoor Climate section of Esbensen Consulting Engineers in Denmark. Since 1994 he has worked on a large number of commercial based and research based national and international projects covering various issues from design of carbon neutral office buildings to development of guidelines for bioclimatic design of urban spaces. His key competence is the design of sustainable buildings through the process of Integrated Energy Design including optimisation of the design process and facilitation of work in multidisciplinary design teams. In the last few years he has been involved in several ambitious commercial building projects where the target is an energy consumption lower than 50% of the energy consumption for new buildings according to the present Danish building regulations (2008). With this target and within normal building costs he is presently working on the conceptual energy design for a new 19,000 m² administration building in Denmark for a major European consultant.

Jim O'Sullivan (OPW)

Jim O'Sullivan is the Chief M&E Engineer with the Office of Public Works (OPW). The OPW's property portfolio extends to over 2,000 individual buildings spread over 1,700 individual properties in locations throughout the country. The main functions of the Office in respect of Buildings and Architecture are, the management and maintenance of the State property portfolio (excludes schools and hospitals), Provision (by way of purchase, construction or renting) and fitting out of office and other accommodation for Government Departments, Offices and Agencies. The Design and delivery of the construction of new buildings, refurbishment, adaptation and conservation of existing buildings, and building maintenance projects.

Liam Connellan (Chairman, Dalkia Ireland)

Liam is Chairman of Dalkia Ireland and other companies within the Veolia Environment Group in Ireland. He is Past President of Engineers Ireland and the Irish Academy of Engineering. Liam was Chairman of the National Roads Authority from 1994 to 2001, Director General of the Confederation of Irish Industry from 1972 to 1992, and was President of the Royal Dublin Society from 1995 to 1998.