

# Made today, gone tomorrow?

Symposium series on future trends in resource use and management

Session 4: Future Infrastructure

Wednesday 13<sup>th</sup> October 2010

Holiday Inn Liverpool City Centre, Lime Street, Liverpool, L1 1NQ (directions attached)

## Programme

0915 – 1000 Registration and coffee

1000 – 1010 **Introduction and setting the context**

**Peter Jones OBE, Chair of Envirolink Northwest and independent sector commentator**

1010 - - 1035 **What Should the Future Look Like and What Ought this to Mean for Infrastructure?**

**Dr Dominic Hogg, Director, Eunomia Research and Consulting**

Thus far, Government has illustrated a systematic tendency to underestimate the potential for recycling. By the measure of Government recycling targets, we are becoming habitual over-achievers. Notwithstanding the allegations made in respect of the planning system's (in)ability to deliver, planning consents have been awarded for the construction of an ever-increasing quantity of residual waste treatment. Whether this will be built is another matter, but it suggests that there is a need to consider the extent to which residual waste treatment capacity has the potential to undermine future initiatives in respect of waste prevention, preparation for reuse and recycling.

1035 – 1100 **An Energy Hierarchy: with particular reference to waste feedstocks contributing to low carbon**

**Professor Chris Coggins, Director, WamTech**

Future supplies of energy are of increasing concern in the UK – shortages, sources, security, ownership and prices. In addition to fossil fuels, new nuclear build and renewable such as wind, solar and wave biomass renewables and carbon from waste will be important.

An energy hierarchy will be outlined, comparable to the waste hierarchy, with energy efficiency at the top, followed by the use of source-segregated biomass materials (wood, energy crops), source-segregated biomass wastes, the production of new fuels from the carbon content of waste and finally energy recovery incineration (not mass burn incineration, but used to generate power, heating and cooling). All are concerned with

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energy generation and diversion of wastes from landfill – not diversion from reuse and recycling.

In future, a range of technologies will form a composite mix and varied to suit local circumstances, feedstock availability, scale and local energy demands. There is no single ‘magic bullet’.

The ‘localism versus national’ agenda will be covered together with how to engage communities in recognising and accepting the need for new infrastructure in managing their wastes.

- 1100 – 1115    **Q&A session**
- 1115 – 1130    Refreshment break
- 1130 – 1230    **Roundtable discussions**
- 1230 – 1250    **Review of ‘Placemats’**
- 1250 – 1310    Speakers’ response, final questions, Chair’s summing up of the morning
- 1310 – 1400    Lunch and networking
- 1400 – 1425    **If Today’s Waste = Tomorrow’s Raw Material, What Infrastructure Will We Need?**

### **Professor Ian Williams, Waste Management Research Group, University of Southampton**

The zero waste concept – that today’s waste is tomorrow’s raw material – has been recently embraced by a few relatively small countries, including New Zealand, Scotland and Wales. Whilst these countries are not world leaders in terms of their economic activity or manufacturing output, they are the first to publicly recognize the urgent need to move from our current one-way linear resource use and disposal culture to a ‘closed-loop’ circular system modelled on Nature’s successful strategies.

The term “zero waste” is perhaps a bit misleading in that it does not mean that wastes will not arise in society; the zero waste approach envisions a “second industrial revolution”, with all industrial inputs being used in final products or converted into value-added inputs for other industries or processes. In this way, industries will be reorganized into clusters such that each industry's wastes / by-products are fully matched with the input requirements of another industry, and the integrated whole produces no waste. From an environmental perspective, the elimination of waste represents the ultimate solution to pollution problems that threaten ecosystems at global, national and local levels. In addition, full use of raw materials, accompanied by a

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shift towards renewable sources, means that utilization of the Earth's resources can be brought back to sustainable levels. But what will all this mean for future waste infrastructure decisions? And are we capable of making the “right” decisions.....?

1425 – 1450 **The Role of the Community Sector in Supporting Waste and Resource Management Infrastructure; A Forward Looking View**

**Paul Brannigan, Specialist in Business Development and Coaching to Social Enterprises**

In these times of significant financial cuts that affect people’s lives and the ability to deliver positive environmental benefits the Community Waste Sector has become even more important. It has also become more endangered. Find out what undermines and supports our communities delivering environmental solutions.

1450 – 1500 **Q & A Session**

1500 – 1550 **Roundtable discussions**

1550 – 1610 **Review of ‘Placemats’**

1610 – 1630 Speakers’ response, final questions, Chair’s final summing up

1630 Event closes

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#### Speakers Biographies

##### **Dr Dominic Hogg**

Dr Dominic Hogg is a Director of Eunomia Research & Consulting. He has been working on environmental issues for the last 20 years as a campaigner, academic and a consultant. The last fifteen years have seen him working mostly on waste and resource issues, mainly in respect of policy appraisal (ex post and ex ante), strategy, economics and assessment of environmental impacts. He has advised two House of Commons Select Committee inquiries into waste and is frequently asked to attend workshops and seminars on behalf of the European Commission, most recently, in respect of the ongoing review of the thematic strategies on waste and recycling, and natural resources. Clients have included OECD, European Commission, European Environment Agency, DFID, Cabinet Office, Defra, CLG, Scottish Government, WAG, Irish Government, Govt of Republic of South Africa, Environment Australia, Slovak Ministry of Environment, WRAP, Environment Agency, FoE, WWF International, Greenpeace, Waste Watch, Climate Change Capital Private Equity, Goldman Sachs, Nord LB, Novusmodus, Balfour Beatty Capital, Quanon Capital and a large number of local authorities. He has had varying levels of involvement in the past in work with Liverpool CC, Lancashire CC, Stockport Council, and GMWDA, whilst colleagues have worked with others in the North West region.

##### **Professor Chris Coggins**

Chris Coggins has been involved in waste management since 1983 at Luton College of Higher Education. His early interests were in civic amenity sites and issues of waste data and waste composition. This led to research on household recycling, and he led the Consortium monitoring Sheffield as the UK's first Recycling City 1989-1992. He established one of the first MSc courses in waste management at the University of Luton, before moving to the University of Sheffield 1997-2001 where he managed an ERDF project assisting SMEs with resource efficiency and waste management. Since 2001 he has been working on his own as a consultant. He has authored or supervised over 800 reports, publications and conference papers, sits on a wide range of national waste-related committees (including the Technical Advisory Committee for Defra's New Technologies Demonstrator Programme) and maintains University links through lectures, research collaboration and being an External Examiner for PhDs and Visiting professor at Southampton. His current interests include markets for recyclates, energy recovery from wastes and how to implement waste strategies and policies through delivery mechanisms.

##### **Professor Ian Williams**

Professor Ian Williams obtained his first degree in Chemistry from the University of Surrey in 1988 and a PhD in Public Attitudes to Air Pollution from Road Traffic from Middlesex University in 1995. He has been a lecturer at Middlesex University (1989-2000), the University of Central Lancashire (UCLan, 2000-2004) and the University of Southampton (UoS, 2005-present). He was the founder and Head of the

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Centre for Waste Management at the UCLan and is now Professor of Applied Environmental Science at the School of Civil Engineering and the Environment at the UoS. Prof Williams has a strong track record in the field of waste management and extensive experience of managing Research Council, ESF, ERDF, EU FP7 and Landfill Tax projects, as well as research and commercial projects. Current research projects include: Zerowaste in industrial networks; carbon footprinting of urban areas; transport and logistics of WEEE collection and disposal; bulky waste and furniture recycling/reuse; the development of waste strategies for local authorities in the UK; improving resource use, business performance and environmental compliance in small- and medium-sized enterprises; the environmental impacts (especially emissions to air and water) of organic wastes; recycling behaviours in medium- and high-density housing. He has published two books and over 70 peer-reviewed papers on waste and environmental issues, as well as over 80 commercial project reports.

Ian regularly reviews academic papers for a range of journals and is on the Editorial Board of Waste Management and the CIWM's rapid communications journal, Communications in Waste and Resource Management. He has been a University Lecturer for more than 20 years but has also worked in industry and as a consultant. Ian was awarded the 2006 CIWM James Jackson Award and the Institution of Civil Engineers (ICE) Baker Medal for 2010 for waste management research studies. He is a fanatical fan of "the Scarlets" rugby team.

### **Paul Brannigan**

Paul Brannigan is an IT specialist who developed electronic trading solutions for many large companies trading with companies large and very small. He moved into the community waste sector when taking on the ailing Kerbside social enterprise in Calderdale. Kerbside became extremely successful, but unfortunately they were sidelined in Calderdale's new waste contract. For the past year Paul has been providing business coaching and business development support to social enterprises in the North.