

Welcome To The

RENEWABLE ENERGY MARKET PLACE CONFERENCE

Christchurch Civic Offices, Council Chamber
Thursday 20th September, 2012

10am - 2pm

Cllr Ray Nottage, Leader

Cllrs Mrs Margaret Phipps, Environment Portfolio Holder

Rachel Sharpe, Sustainability Management Officer

Christchurch Borough Council is hosting the above Conference to highlight certain renewable energy technologies and associated products and services for the information of those attending. The Council does not endorse or support the commercial product or service of any individual or Company in attendance.



Renewable Energy Market Place Conference 20th September 2012

List of Delegates

Cllr Ray Nottage Cllr Colin Jamieson

Cllr Mrs Margaret Phipps

Cllr Trevor Watts Cllr Bernie Davis

Cllr Mrs Myra Mawbey Cllr Mrs S Derham-Wilkes

Cllr John Lofts Cllr Nick Geary

Cllr Mrs Lesley Dedman Cllr Mrs Trish Jamieson

Simon Trueick Judith Plumley Keith Mallet Lindsay Cass Steve Duckett Barry Dike Rachel Sharpe

Steve MacKenzie Cllr Gary Suttle Cllr Barry Quinn Cllr Mrs Gloria Marsh Diane Bermand

Cllr Elaine Atkinson Cllr Tony Woodcock Ian Johns Leader Deputy Leader

Environment Portfolio Holder Economy Portfolio Holder Community Portfolio Holder

Cllr for Highcliffe

Cllr North Highcliffe and Walkford

Cllr for Highcliffe

Cllr for North Highcliffe and Walkford

Cllr for West Highcliffe Cllr for West Highcliffe

Community and Planning Policy Manager

Head of Community and Economy Head of Legal and Democratic Services

Head of Environmental Services Head of Planning and Health Private Sector Housing Manager Sustainability Management Officer

Chief Executive

Leader

Cllr for West Purbeck Ward Cllr for Swanage North Ward Neighbourhood Planning Officer

Leader

Cllr for Parkstone

Asset Management and Sustainability Officer

Christchurch Borough Council Christchurch Borough Council

Christchurch and East Dorset Partnership Christchurch and East Dorset Partnership

Purbeck District Council Purbeck District Council Purbeck District Council Purbeck District Council Purbeck District Council

Borough of Poole Borough of Poole Borough of Poole

Vice Chairman and Chairman Environment New Forest District Council Cllr Christine Ford Review and Scrutiny Panel Planning Policy Officer New Forest District Council Edward Gerry Planning Policy Officer Emma Waterman New Forest District Council Cllr Robert Gould Cabinet Member for Environment **Dorset County Council Dorset County Council** Head of Planning Don Gobbett **Energy Efficiency Officer Dorset County Council** Jon Bird Sustainable Development Manager **Dorset County Council** Kate Hall Portfolio for Planning and Environment Bournemouth Borough Council Cllr David Smith Cllr Lawrence Williams Portfolio for Corporate Policy Implementation **Bournemouth Borough Council** Bournemouth Borough Council Cllr Mark Anderson Chairman Environment and Transport Scrutiny Panel Cllr for Winton East Bournemouth Borough Council Cllr Anniina Davie Cllr Barry Goldbart Cllr for Westbourne and West Cliff Bournemouth Borough Council Executive Director for Environment & Economy Bournemouth Borough Council Bill Cotton Bournemouth Borough Council Mr Neil Short Environmental Health Project Officer Cllr Deborah Croney Deputy Leader North Dorset District Council Portfolio Holder for Environment and Leisure North Dorset District Council Cllr Michael Roake Clir Jane Somper Ward Member for Abbey North Dorset District Council Ward Member for Shaftesbury Christy's North Dorset District Council Cllr Mervyn Jeffery Ward Member for Portman Cllr John Stavt North Dorset District Council Sustainability Officer - Environment North Dorset District Council Paul McIntosh Town Councillor Blandford Town Council Cllr Jackie Stayt West Dorset District and Weymouth Oliver Rendle Environmental Assessment Officer & Portland Borough Councils. ACRA, Alliance of Christchurch's Residents Association Malcolm Burton-Smith

Malcolm Burton-Smith Mike Collard Brian Smith Robert Austin Colin Dewsnap Paul Hanson George Meyrick ACRA, Alliance of Christchurch's Residents Association Secretary – Stanpit and Mudeford Residents' Association Highcliffe Residents' Association Highcliffe Residents' Association

Chief Executive, Meyrick Estate Management Ltd Meyrick Estate Management Ltd and Managing Director New Forest Energy Ltd



AGENDA

Renewable Energy Market Place Conference

20 September 2012

Council Chamber, Civic Offices, Christchurch Borough Council

- 10.00 Arrival, registration and coffee.Opportunity to browse the Renewable Energy Market Place stalls
- 10.50 Introduction—
 Cllr Ray Nottage, Leader, Christchurch Borough Council
 Cllr Mrs Margaret Phipps, Environment Portfolio Holder, Christchurch Borough Council

Keynote Speakers

- 11.00 Opportunities and the potential market for solar PV and other domestic scale renewable energy technologies Pete West, Renewable Energy Development Office, Dorset County Council
- 11.15 Tidal Energy Poole Tidal Energy Partnership (PTEP) Paul Cooling, Carbon Reduction Manager, Borough of Poole/PTEP Director Tilak Ginige, Senior Lecturer in Environmental Law, Bournemouth University Andy Hadley, Transition Town (Poole)/ PTEP Director
- 11.30 Energy from Waste –
 Robert Asquith, Planning Director, New Earth Group Ltd
- 11.45 Biomass and the Renewable Heat Incentive (RHI) Jeremy Hinton, Business Development and Operations Manager, New Forest Energy Ltd
- 12.00 Deep Geothermal Energy and Ground Source Heat Pumps Guy Macpherson-Grant, Managing Director, EGS Energy Ltd
- 12.15 The Role of the Local Authority in Enabling Low Carbon Finance "The Missing Chapter"Christoph Harwood, Partner, Marksman Consulting LLP
- 12.30 Joint Question and Answer Session
- Closing Comments –
 Cllr Mrs Margaret Phipps, Environment Portfolio Holder, Christchurch Borough Council
 Cllr Ray Nottage, Leader, Christchurch Borough Council
 - Followed by buffet lunch and networking with further opportunity to browse the Renewable Energy Market Place stalls.
- 14.00 Conference close

Market Place Stalls

Solar PV and other domestic scale renewable energy technologiesPete West, Renewable Energy Development Officer, Dorset County Council

Poole Tidal Energy Partnership

Paul Cooling, Carbon Reduction Manager, Borough of Poole/PTEP Director Tilak Ginige, Senior Lecturer in Environmental Law, Bournemouth University Andy Hadley, Transition Town (Poole)/ PTEP Director

Wave Power – The AmpereWave Initiative

Chris Budd

Energy from Waste

Robert Asquith, Planning Director, New Earth Group Ltd Rachel Surbuts, Communications and Marketing Manager, New Earth Group Ltd

Waste Wood Biomass

Peter Brown, Energy Supply Manager, Eco Sustainable Solutions Ltd

Anaerobic Digestion

Peter Brown, Energy Supply Manager, Eco Sustainable Solutions Ltd

DEAC

Peter Bywater, Senior Project Manager Theresa McManus, Sustainable Project Manager

The Benefits of Low Carbon District Energy

Peter Hamnett, Emergent Technology Specialist, Cofely District Energy

Biomass from Forestry

Jeremy Hinton, Business Development and Operations Manager, New Forest Energy Ltd

Deep Geothermal Energy and Ground Source Heat Pumps

Guy Macpherson-Grant, Managing Director, EGS Energy Ltd

The Role of the Local Authority in Enabling Low Carbon Finance – "The Missing Chapter" Christoph Harwood, Partner, Marksman Consulting LLP



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The following information has been provided by our Speakers and Stall Holders:

SOLAR PV -

Pete West, Renewable Energy Development Officer, DCC

Prior to joining the Sustainability Team in Dorset County Council in 2008 Pete West worked for nine years as renewable energy project manager for two not-for-profit energy advice centres/ energy agencies and was also a member of the management board of the International Network for Sustainable Energy, an NGO network based in Denmark.

Opportunities and the potential market for Solar PV and other domestic scale renewable energy technologies appropriate for conurbations, focusing on:

- PV domestic and strategic
- Potential for PV installations in Dorset
- Current PV installations in Dorset by District
- FIT and subsidies/funding

TIDAL ENERGY - POOLE TIDAL ENERGY PARTNERSHIP (PTEP) -

Paul Cooling, Carbon Reduction Manager, Borough of Poole/PTEP Director Tilak Ginige, Senior Lecturer in Environmental Law, Bournemouth University Andy Hadley, Transition Town (Poole)/ PTEP Director

Poole Tidal Energy Partnership aims to harness the power of the tide in Poole Harbour and the spirit of the community in a manner that is economically sustainable, is sensitive to the local environment and contributes to the vision for clean energy. They are keen to work with everyone in the local area to make the most of the natural resources which flow around Poole. They will also highlight the technology of heat exchangers for use with tidal energy.

WAVE POWER -

Chris Budd, The AmpereWave Initiative

AmpereWave are developers of wave and tidal energy systems. The designs offered provide economic alternative energy generation solutions to areas that are not suited to existing technology because of shallow water and/or low flow speeds. Specifically AmpereWave have developed a tidal energy system with a large capture area which is suitable for shallow water and slow flow speeds and is unobtrusive and discrete.

ENERGY FROM WASTE

Robert Asquith, Planning Director, New Earth Group Ltd

NEAT technology utilises household waste that cannot be recycled to generate low-carbon, renewable energy. Advanced thermal treatment of the refuse-derived fuel, in zero and low-oxygen chambers, creates gas that can be used to power a steam turbine or gas engine to generate electricity. Modular units, each generating enough power for around 1,800 homes, provide flexibility and low visual impact, as well as reducing landfill. Efficiency and greenhouse gas effects are substantially better than the alternatives of traditional incineration or landfill.

WASTE WOOD BIOMASS

Peter Brown, Eco Composting Sustainable Solutions Ltd

Biomass is biological material derived from living, or recently living organisms. More commonly this includes wood (either virgin wood or wood waste), energy crops (grown specifically for energy applications) as well as residues from agricultural harvesting. Food waste which can be used in the anaerobic digestion process is also termed biomass. The benefit of Biomass as a fuel as opposed to fossil fuels is one of timescales with Biomass removing carbon from the atmosphere as it grows and them immediately returning the carbon during its burning.

Biomass is therefore largely carbon neutral apart from the energy used in its processing and distribution.

Biomass can be used to either produce heat or to produce a combination of heat and power when used through a Combined Heat and Power (CHP) Generation Plant.

ANAEROBIC DIGESTION

Peter Brown, Eco Composting Sustainable Solutions Ltd

Anaerobic Digestion (AD) is the degradation of organic matter in the absence of oxygen, as opposed to composting which degrades organic matter in the presence of oxygen (aerobic).

Whereas composting produces some carbon dioxide and water vapour which is vented to the atmosphere, anaerobic digestion produces a biogas (methane) which can be collected and used as fuel for a Combined Heat and Power (CHP) Generation Plant.

The organic material remaining after the process can be used as a liquid fertiliser and soil conditioner for agriculture.

DEAC

Peter Bywater, Senior Project Manager Theresa McManus, Sustainable Project Manager

Renewable energy is a must, but we must not lose sight of good housekeeping and the basics of saving energy and money. It's how we make a difference.

THE BENEFITS OF LOW CARBON DISTRICT ENERGY

Peter Hamnett, Emergent Technology Specialist, Cofely District Energy

District Energy involves the distribution of heat (and sometimes cooling) from a central energy centre to a number of local consumers.

The heat energy can be produced by a range of low-carbon sources, including biomass boilers and combined heat & power (CHP). The networks typically consist of buried pre-insulated pipework, with very low levels of heat loss.

BIOMASS FROM FORESTRY

Jeremy Hinton, Business Development and Operations Manager, New Forest Energy Ltd.

Biomass as a feasible local renewable energy source and unpicking the Renewable Heat Incentive (RHI)"

A brief overview of the basic things to look for when considering a woodchip biomass boiler installation, what the RHI is and how does it work and what possibilities are out there for financing a biomass boiler compared to fossil fuels

DEEP GEOTHERMAL ENERGY AND GROUND SOURCE HEAT PUMPS

Guy Macpherson-Grant, Managing Director, EGS Energy Ltd.,

EGS Energy is a development and consultancy company with unique access to engineered geothermal system technology and know-how and with projects under way in Cornwall and consultancy work worldwide. EGS Energy is leading the development of deep geothermal resources in the UK on a commercial scale.

THE ROLE OF THE LOCAL AUTHORITY IN ENABLING LOW CARBON FINANCE – "THE MISSING CHAPTER"

Christoph Harwood, Marksman Consulting LLP

Christoph Harwood of Marksman Consulting will cover the role of local authorities in attracting finance for local low carbon economies. This is often a vital but missing chapter in local authority low carbon plans and he will explain the range of activities that can help them attract the required funds.

Marksman Consulting is an environmental finance consultancy as has advised a number of local authorities including West Sussex, London, Newcastle and Birmingham on this topic.

Briefing note: Reducing energy demand

Power stations of all kinds have an impact. Reducing energy demand through energy efficiency is the obvious way to reduce the need for power stations.

Energy Efficiency is good for our wallets:

The annual domestic gas and electricity bills for the residents of Bournemouth, Dorset and Poole add up to over £300 million. By insulating our homes and installing more efficient heating, bills and energy use can be cut and comfort improved.

Energy Efficiency is good for our health:

People living in cold poorly insulated homes are more likely to suffer cardiovascular and respiratory problems, and social exclusion.

Energy Efficiency is good for business:

Reducing energy costs improves competitiveness.

Energy Efficiency is good for local government:

Improving private and public sector housing helps meet statutory requirements of the Home Energy Conservation Act and Housing Acts.

Improving energy efficiency of the Council's own estate reduces cost without reducing service quality

Local Authority Energy Efficiency action:

The **Bournemouth**, **Dorset and Poole Energy Efficiency Strategy** complements the renewable energy strategy. A considerable amount has been achieved since the launch of the strategy in 2009, for example:

- From 2008-2012, over 30,000 homes have had loft insulation installed and a similar number have had cavity wall insulation installed, many using match funding from local authorities in Bournemouth, Dorset, and Poole.
- Funding has been secured from regional, national, and EU government sources for several energy efficiency initiatives.
- Dorset manufacturing businesses can reduce energy use at no cost by taking advantage of the "control your compressors" project managed by Dorset Chamber of Commerce and Industry.

We should not loose sight of the fundamental value of reducing energy consumption and ensure that resources are made available to improve the energy efficiency of our homes.

Jon Bird
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