

2020 LOW CARBON BUSINESS & COMMUNITIES WORKSHOP

Accelerating the clean energy technology and resource efficient future contributing to the UN Climate Change Summit, Paris, December 2015.

09.00-13.00, Wednesday, 25th November 2015,
St. Mary's Guildhall, Coventry.



09.00-09.05 Welcome

Cllr Ann Lucas OBE, *Leader-Coventry City Council, Director-Coventry & Warwickshire Local Enterprise Partnership*

09.05-09.20 - Chair & Introduction

Cllr Kevin Maton, *Cabinet Member for Business, Enterprise and Employment, Coventry City Council; Director Coventry & Warwickshire Local Enterprise Partnership*



09.20-09.35 Presentation

Natasha Smith, *Senior Manager, Sustainable Energy Policy, Office For Gas & Energy Markets (OFGEM)*

09.35-09.50 Presentation

Martin Orrill, *Head of Energy Technology & Innovation, British Gas Services Plc*



09.50-10.05 Presentation

Julie Cranmer, *Business Development Director, Lombard Commercial & Private Banking, Royal Bank of Scotland Group*

10.05-10.20 Presentation

Neil Liddell-Young, *Renewable Strategy & Commercial Development Manager, Severn Trent Plc*



10.20-10.35 Presentation

Paul Fairburn, *Director of Enterprise & Innovation, Coventry University*

10.35-10.50 – Q&A/ Discussion

10.50-11.15 - Refreshments, Exhibition/ Network

11.15-12.30 – Workshops

12.30- End - Lunch/Exhibition/Networking

The UN Climate Change Summit, Paris, December 2015 is expecting an agreement stimulated by a joint commitment between USA and Chinese Presidents also Pope Francis Encyclical and many other local and international celebrities. Lord Stern has produced an updated finance review of the investment required to address the greatest threat to life on earth requiring 2% GDP per annum.

Coventry and Warwickshire Council's, Local Enterprise Partnership as well as Coventry and Warwick Universities together with leading businesses have strong climate change adaptation and mitigation commitments to 2020, building on varied progress to date.

Investing in resource efficiency, renewable energy installation, manufacturing smart clean energy technologies including transport, will create new business opportunities, jobs and skills. This event will showcase achievements and stimulate greater mainstream engagement to accelerate 2020 delivery.

REGISTRATION

- Delegate Fee- **£20 + VAT (£24)**
- Exhibition- **£200 + VAT (£240)**
- Sponsorship opportunities
- Join the **Low Carbon Energy Technology & Resource Efficiency Partnership**

WORKSHOPS (11.15-12.30)

1. Coventry & Warwickshire Low Carbon 2020
2. Clean Energy & Technology Developments
3. Resource Efficiency- Towards Zero Waste
4. Horizon 2020 : Access to Finance and Funding
5. Homes Fit for The Future.
6. Low Carbon Sustainable Buildings

"It's great news that Coventry is continuing to lead the way in making carbon reductions and is increasingly being recognised as a low carbon city. The city council is continuing to do its bit to reduce carbon with schemes like the Heat line district energy network and the move to an efficient new building at Friargate. As importantly, low carbon is now big business - worth over £122 billion to the UK as a whole and employing 41,000 people in the West Midlands."

Councillor Kevin Maton, Coventry City Council.



Contact: Tony McNally, Low Carbon Energy Technology & Resource Efficiency Partnership- Co-ordinator,
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Workshops 11.15-12.30, Wednesday 25 November 2015 (* Facilitators)

1. Coventry & Warwickshire 2020 Plans * Tony McNally, Director, Climate Change Solutions Ltd

Identify the key cross sector collaborative initiatives towards accelerating the delivery of the 2020 Low Carbon objectives.

1. Joel Cardinal, Head of Energy & Sustainability, University of Warwick
2. Peter Burns MBE, President, Coventry & Warwickshire Chamber of Commerce
3. Dr. Les Duckers, Principal Lecture, Energy & Environment, Coventry University
4. Andre Burgess, Partner, EMVC Solutions Ltd

2. Clean Energy Technology Developments * Ralph Hepworth, Director, Merc Consulting Ltd. (former AWM Environmental Technology Cluster Manager)

Assess the potential for installing the range of appropriate renewable energy technologies by 2020 in light of reduced subsidies and other barriers.

1. Paul wood, Concessions Director, Energy Services, Cofley-Suez
2. Prof. Phil Mawby, School of Engineering, Chair in Power Electronics, University of Warwick
3. Neil Young- Liddell, Renewable Strategy Commercial Development Manager, Severn Trent.
4. Natasha Smith, Senior Manager, Sustainable Energy Policy, Office for Gas & Energy Markets
5. Andrew Burley, Corporate Business Manager, British Gas Business

3. Resource Efficiency- Towards Zero Waste * Philip Johnson, Business Consultant, International Synergies Ltd & Anna Bright, Senior Sustainability Advisor, Sustainability West Midlands

If you are looking to reduce your business costs the National Industrial Symbiosis Programme West Midlands team will facilitate a lively and interactive session that will allow you to exchange details about waste streams you 'have' onsite or 'want' as a resource to source as more cost effective process inputs.

Please see for more details www.international-synergies.com

4. EU Horizon 2020 & Accessing Funding & Financing * Cllr Kevin Maton, Coventry Cabinet Member, Business, Enterprise & Employment and Director, Coventry & Warwickshire Local Enterprise Partnership

Identify the range of EU 2020 partnership funding as well as private sector investment schemes.

1. Jay Gohil, Project Officer, Enterprise Europe Network
2. Mark McLoughlin, Strategic Accounts Manager, Energy Efficiency Financing, SIEMENS
3. Julie Cranmer, Business Development Director, Lombard Commercial & Private Banking, RBS
4. Mike Woollacott, Managing Director, Greenwatt Technologies Ltd

5. Homes Fit for the Future * Rosemary Coyne, ERDF Project Manage, Accord Group & Sustainable Housing Action Partnership Co-ordinator (SHAP)

What are the alternative options for achieving more energy and other resource efficient homes including addressing fuel poverty in light of cancelling the Green Deal and other recent obstacles.

1. Jane Allen, Head of Commercial Energy Company Obligations, British Gas Plc.
2. Richard Osborne, Director of Property Services, West Mercia Housing Group
3. Kate Ashworth, Head of Distributed Energy, Encraft Ltd.
4. Cannon Kenyon Wright, Faith, Global Crisis and Future

6. Low Carbon Sustainable Buildings * Gideon Howell, Environmental Technologies Business Manager, Sustainable Buildings Future, Coventry University

Ways and means to promote best practices together with support opportunities for achieving mainstream low carbon retrofitted built environment.

1. Prof. Jean-Claude Morrell, Research Professor Low Carbon Impact Buildings, Coventry University
2. Ant Wilson, Director-Sustainability & Advanced Design-Building Engineering, AECOM
3. Jessica Duffell, Sustainability Advisor, BAM Construction UK Ltd.
4. Ian Forsyth, Business Manager, 2G Cogeneration Ltd



"As a friend of the United Kingdom I must tell you, I am puzzled," Gore said. "Since the General Election, this country's commitment to zero-carbon homes has been cancelled, the Green Deal has been scrapped. The Climate Change Levy exemption for zero-carbon energy has been removed. Solar and onshore wind support through the Renewables Obligation has been stopped. The Green Investment Bank will be privatised. The prevention of fracking in protected areas has been reversed. Feed-in tariffs are to be reduced by 87% -**Former US Vice President Al Gore**

The Government's 'roll-back of renewables' and 'mixed messages' on energy efficiency is threatening investment in the UK. Today's investors are more uncertain about the UK's low-carbon future. From the roll-back of renewables to the mixed messages on energy efficiency, these changes send a worrying signal about the UK as a place for low-carbon investment. Moreover, this seemingly weakened commitment risks impacting our standing on the global stage, at the exact moment we need to stand up and be counted." -**CBI director general John Cridland**

SUCCESSFUL LOW CARBON PROJECTS



COVENTRY UNIVERSITY, ENGINEERING AND COMPUTING BUILDING

State-of-the-art engineering facility - 60 million £ investment, 15,000m² building offers. The building has been hugely successful. Students use the building's open and collaborative spaces both socially and academically, working together in groups or as individuals." **Gerry Ackerman – Deputy Director of estates and property, Coventry university.**



Combined Heat and Power plant, University of Warwick

The CHP plant runs with 4.6MW capacity that supplies the 292 hectare campus with power and hot water through a district heating network, saving the university an estimated 5,000 tonnes of CO₂ per annum. It generates over 50% of the electricity used on campus. The heat this produces meets most of the hot water, space heating and heat driven cooling system needs.



The second quarter of 2015, from April to June renewables generated 25.3% of UK electricity. 42% of this came from onshore and offshore wind. Wind generated 10.7% of the country's needs. For the first time in a quarterly period, renewables beat coal which generated 20.5%. Renewables also outperformed nuclear which provided 21.5%. This was due to higher wind speeds and increased capacity, with generation increasing by 61.5% onshore and 70.4% offshore compared to Q2 2014. **The Department of Energy and Climate Change (Dated 24th September 2015)**



German engineering giant Siemens plans to become the first major industrial company to have a net-zero carbon footprint by 2030. The company plans to cut its carbon dioxide emissions – which currently total about 2.2 million metric tons a year – in half by 2020, before eliminating them completely by 2030. "Cutting your carbon footprint is not only good corporate citizenship – it's also good business. The investment to pay for itself within the next five years and generate \$20m in annual savings thereafter." - **Siemens chief executive Joe Kaeser**



Severn Trent Centre, Coventry

The seven-storey 20,000m² Severn Trent Centre in Coventry's city centre is a landmark building, both in terms of appearance and environmental credentials. Produced 30% less construction waste, 10% less than construction Co₂ target and avoided 96.5% of land fill waste.



Microcab

A fleet of the zero emission machines, which is a spin-out company from Coventry University. With new project-SWARM, its trailing 10 Microcabs across Europe. Runs for 180 miles on 1.6kg of hydrogen and 3 minutes to refill



UK could feasibly generate 85% of its total energy from renewables by 2030 with an ambitious plan and significant investment. The report calls for a 47% increase on the amount of onshore wind capacity already installed or consented and a 270% increase in offshore wind capacity. Solar capacity would also have to increase by 1.5 GW a year, a reasonable pace considering it grew by 1.2GW in 2014 - **Greenpeace report, 2015**



The bank sourced 99% of its electricity from renewables in 2014, maintaining its 'beyond carbon neutral' policy for the eighth year. The bank reported it has offset more than 100,000 tonnes of carbon since 2006. It also reduced its overall carbon emissions by 4%, bringing its total emissions to 28,603 tonnes of CO₂

- **The Co-operative Bank**



The Manufacturing Technology Centre (MTC)

The Manufacturing Technology Centre (MTC) develops and proves innovative manufacturing processes and technologies in an agile, low risk environment, in partnership with industry, academia and other institutions. It focus on delivering bespoke manufacturing system solutions for our customers.



Coventry District Energy Co.

The ground breaking scheme is the first of its kind in the UK and will see Cofely take the unique role of 'heat shipper' by buying heat from the Energy from Waste (EFW) and 'shipping' it via a 6.6km network of buried pipes to consumers in the City Centre



Coventry city beat 20 others to be awarded the accolade by the Department of Energy and Climate Change (DECC) after managing to cut its carbon footprint by nearly 450,000 tonnes

- Coventry Telegraph, 27th July 2015.

443,000 CO₂ savings in 2013 compared to 2005

The number of Combined Heat & Power projects in the UK last year increased to 2,066, generating around 6% of all electricity produced and reducing carbon emissions by 13 million tonnes -UK Energy Statistics Digest



The UK loses 54% of its electric energy - worth £9.5bn and enough to cover half of every household's annual electricity bill, is one of the worst in Europe and equates to the annual carbon emissions of every car in the UK

- The report, 'Less Waste, More Growth

Mark Carney, Governor of the Bank of England, warned that climate change will lead to financial crises and falling living standards unless the world's leading countries do more to ensure that their companies come clean about their current and future carbon emissions.



Insurers' losses have risen fivefold to \$50bn a year warned that climate change will lead to financial crises and falling living standards unless the world's leading countries do more to ensure that their companies come clean about their current and future carbon emissions.

"The challenges currently posed by climate change pale into insignificance compared with what might come," Carney said. "The far-sighted amongst you are anticipating broader global impacts on property, migration and political stability, as well as food and water security. So why isn't more being done to address it?"

Carney added that there was growing evidence of man's role in climate change, noting that since the 1980s the number of registered weather-related loss events had tripled. Inflation-adjusted losses for the insurance industry had increased five fold to \$50bn (£33bn) a year. - The Guardian 30th September 2015

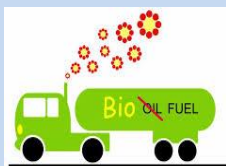


Rt Hon Lisa Nandy Shadow Energy & Climate Change Secretary has pledged to 'democratise' the energy system by boosting community owned renewables across the country.

In her speech at the Labour Party annual conference on 28th September, 2015 Nandy said that businesses and consumers were being 'ripped off' by the Conservative Party's plans to support the Hinkley nuclear plant while cutting subsidies for the cheapest renewable technology, onshore wind. "We want to put people back in charge. But I don't want to nationalise energy. We want to do something far more radical. We want to democratise it. "There should be nothing to stop every community in this country owning its own clean energy power station. Across the country schools are already taking the initiative and going solar. Generating power and heat for their own use. - Edie Newsletter, 30th September 2015

"Advanced biofuels have the potential to save at least 60% of the greenhouse gas emissions from the equivalent fossil fuel. The 3 successful bids show how the government is investing in transport and making better, clean journeys"

-Andrew Jones, Transport Minister.



Bio-methane can be used interchangeably with natural gas in heavy goods vehicles and is significantly less carbon-intensive and less polluting than diesel, potentially cutting transport fleet carbon emissions by up to 96%-

Advanced Plasma Power(APP).



The leaders of 10 oil and gas companies including Shell, BP and Total have issued the industry's clearest statement yet on the need to tackle climate change.



The CEOs of the 10 firms that currently make up the Oil and Gas Climate Initiative (OGCI) on 16th October, 2015 confirmed their support for a strong agreement at Paris, and the need to limit global warming to two degrees. The joint statement issued today said: "Our shared ambition is for a 2°C future. It is a challenge for the whole of society. We are committed to playing our part. "Over the coming years we will collectively strengthen our actions and investments to contribute to reducing the GHG intensity of the global energy mix. Our companies will collaborate in a number of areas, with the aim of going beyond the sum of our individual efforts." BG Group, BP, Eni, Pemex, Reliance Industries, Repsol, Saudi Aramco, Shell, Statoil and Total all signed the statement. - Edie Newsletter, 16th October 2015

