



The Private Sector perspective :
Developing Sustainable City Energy
Partnerships

North West Energy Forum – 2nd December 2010



Content of Presentation

1. Introduction to E.ON
2. Sustainable City Strategies
3. Low Carbon Partnerships



E.ON

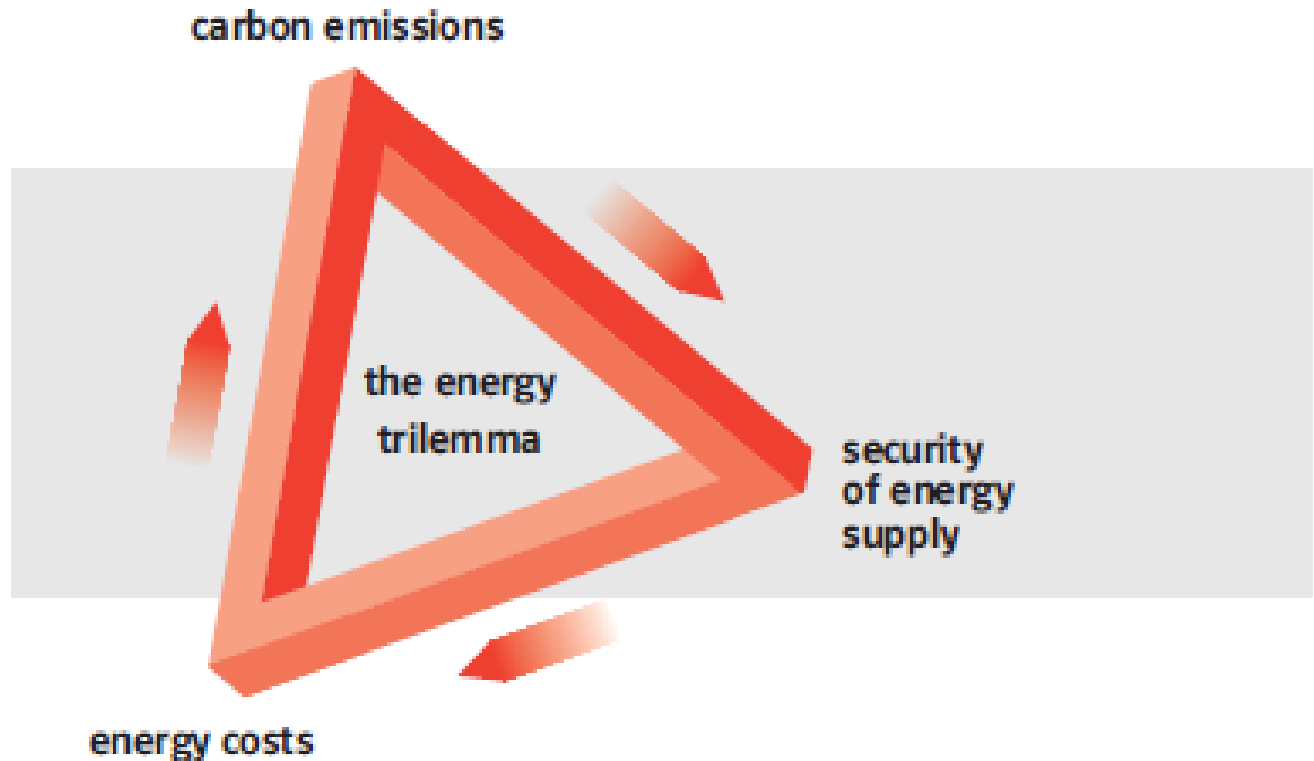
- One of the UK's leading power and gas companies – generating and distributing electricity, and retailing power and gas;
- Employ about 15,000 people in the UK and more than 88,000 worldwide;
- Market leader in UK combined heat and power (CHP) with 12 sites supplying over 500MW of electricity and in excess of 900MW of heat;
- Have installed over 630,000 cavity wall and loft installation measures since 2005, as well as energy efficient boilers and smart meters.

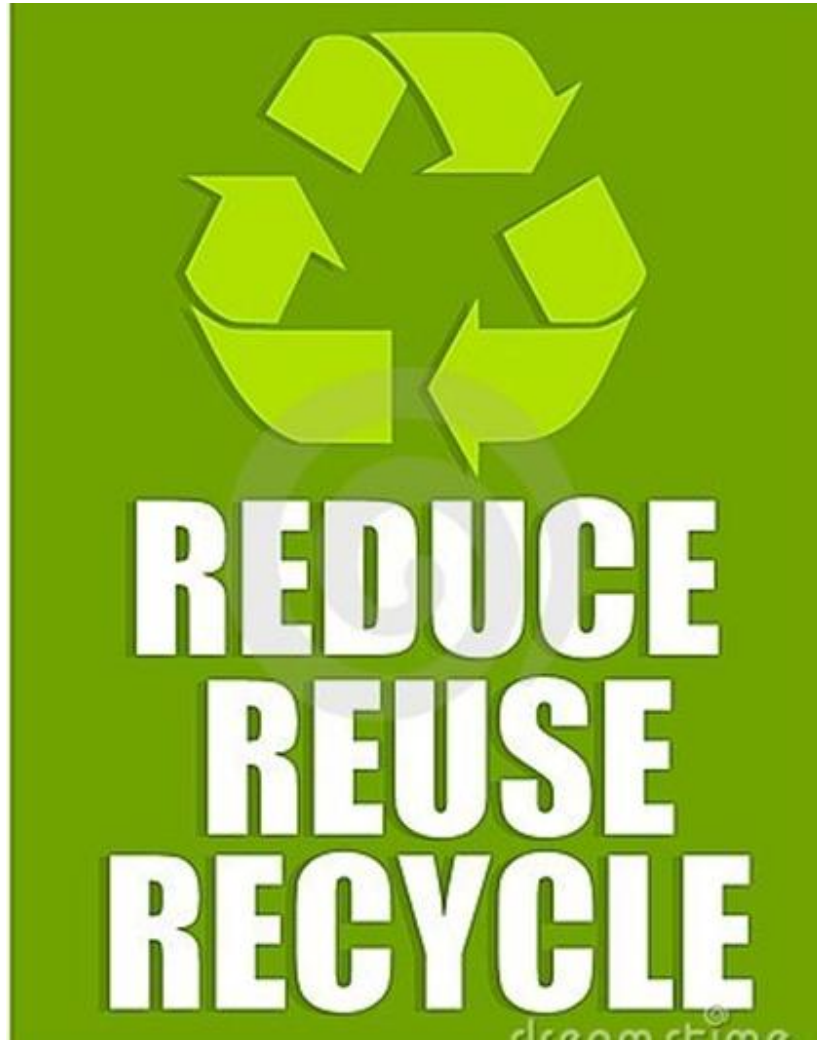


E.ON is helping customers to become 'energy fit' – tackling the three challenges of secure, affordable, low-carbon energy

Solving The Energy *'trilemma'*

Reducing carbon emissions, while keeping energy costs down and the lights switched on





Insulate...your house Moderate...your use Generate...your own

**“Why on earth would
an energy company
want me to use
less energy?”**



Find out at eontalkingenergy.com

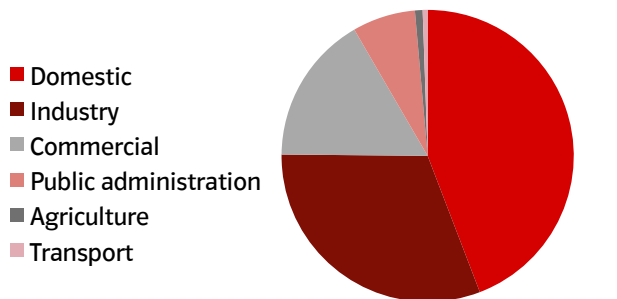
Helping you get energy fit. We're on it.

e-on

The challenge to decarbonise energy use ...

•Residential sector the greatest CO₂ emitter from power and gas

2007 CO₂ Emissions from Power and Gas



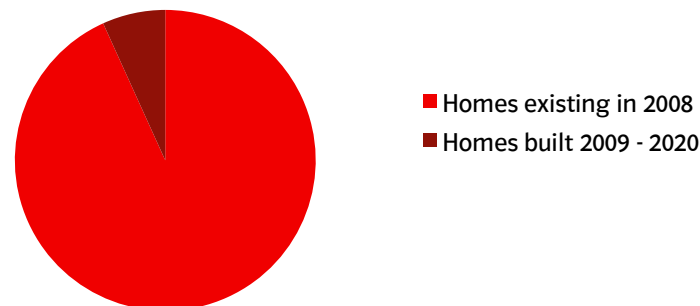
Source: Dukes Tables 4.1 & 5.1

The majority of housing stock in the UK is poor in energy efficiency performance

Low energy efficiency driven by past cheap indigenous coal and gas.

•Situation unlikely to change by 2020 through new build homes

2020 Housing Stock



This could be used as a trigger to drive decarbonisation

Existing buildings covered by the Green Deal

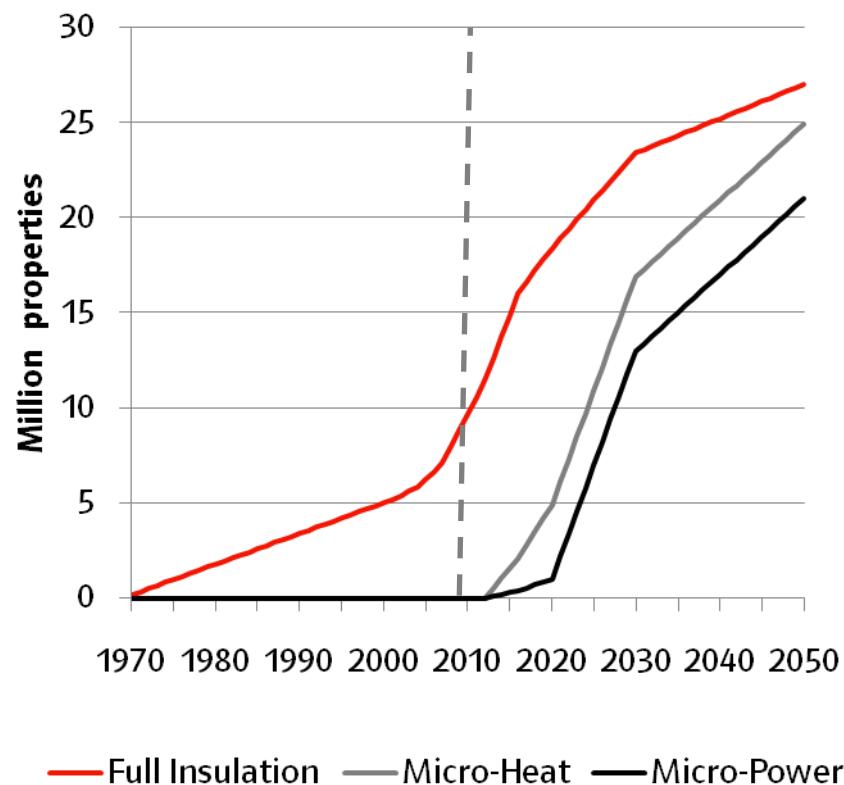
...will require a new approach

Government aims to tackle this through "whole house" measures

Focused schemes...

- **To 2008 (pre-CERT):** Insulation in the Social Housing sector, mainly cavity wall and loft insulation
- **2008 - 2012 (CERT):** Insulation in Private Housing sector, mainly cavity wall and loft insulation
- **2009 - 2012 (CESP):** Trialling regional / community delivery model, using a variety of measures
- **2013 - 2016:** Seven million homes to have had the opportunity to have taken up "whole house measures"
- **2017 - 2020:** Accelerated heat volumes needed to deliver the Green Package
- **2021 - 2030:** All homes to have received "whole house measures"
- **2031 - 2050:** All homes to zero carbon as much as possible

...result in significant downstream plans



Green Deal

On creating sustainable cities

SO YOUR COMPANY CAN
MANAGE THE ENERGY NEEDS
OF A WHOLE CITY?

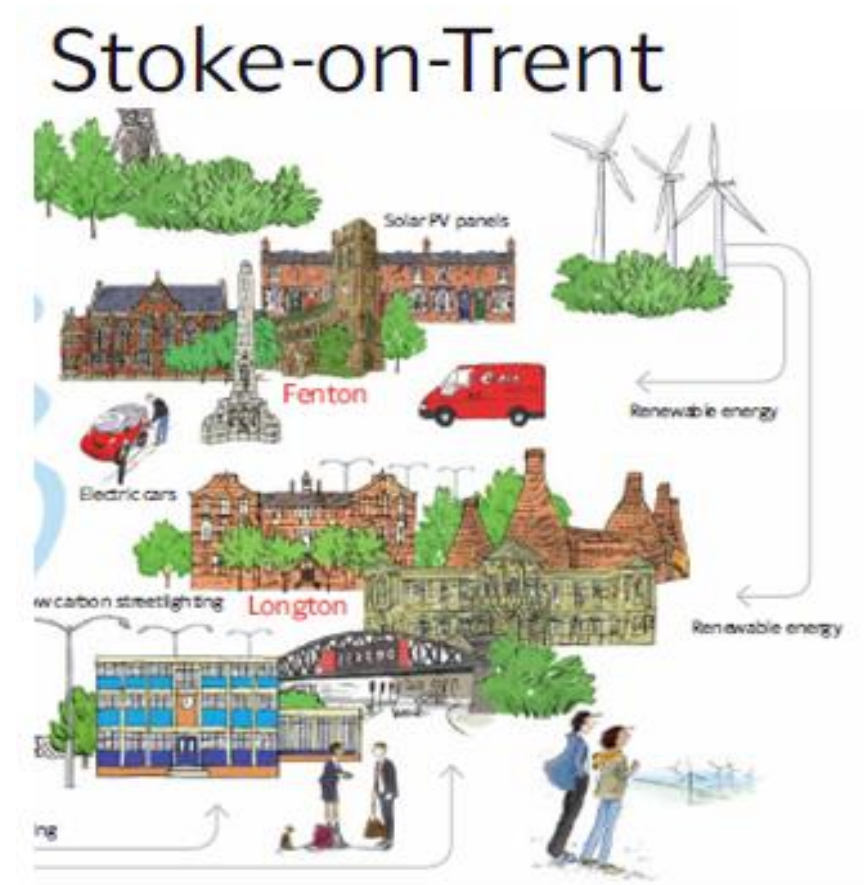


THAT'S RIGHT. EVERYTHING FROM
RENEWABLE ENERGY RESOURCES
TO DISTRICT HEATING AND LOW
CARBON STREETLIGHTING.

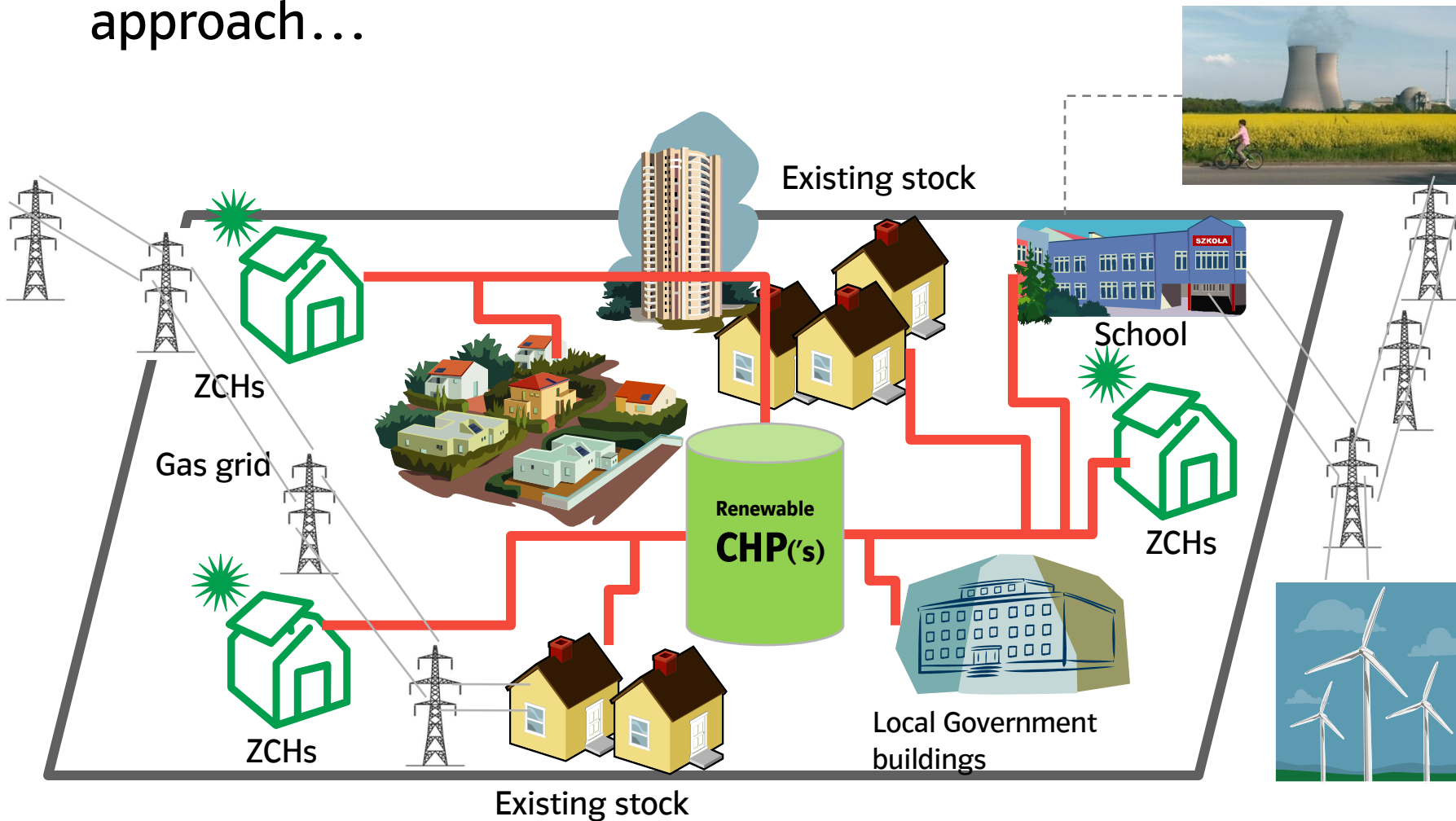
Paul Golby signed an agreement with Stoke City Council to pilot the first Sustainable City approach in the UK

We're creating a low carbon task force to reduce city-wide energy consumption and carbon emissions.

Paul Golby said "I'm delighted to sign the agreement – it places us in a strong position to lead the way for low carbon innovation. The agreement includes everything from district heating to low carbon lighting and solar panels."



We see the emergence of a community based approach...



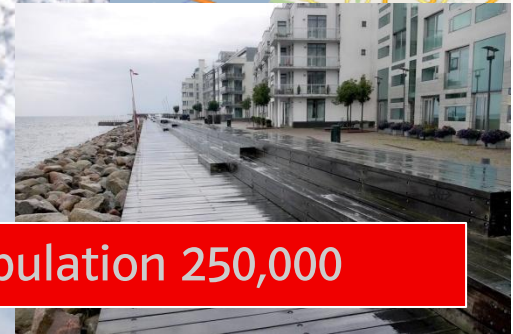


E.ON and the Liverpool City Region

- E.ON are developing a City Region Partnership working closely with The Mersey Partnership;
- Members of the Low Carbon Economy Task Force;
- Objective to work together with aim of reducing energy and carbon emissions across LCR over short/medium/long-term and to create local jobs/local supply chains;
- Working to identify sustainable projects in the sectors of housing, transport, public sector buildings, business, community/education



Liverpool : Population 439,000



Malmo: Population 250,000

Average winter temperature: **6C**

Average heating demand is **16,000kWh/year** (DECC. Gov.uk)

Average winter temperature: **-0.25C**

The average Swede using district heating receives **4,500 kWh/year** (SweHeat & Cooling)

A partnership approach which truly represents the community will bring efficiency, best value and focus to the challenge of carbon reduction. A partnership approach works because :-

- Of Co-Dependency of the solution;
- Government and corporate strategy conclusion;
- Accelerate the speed to implement change.



The Opportunities

- Long term energy partnerships throughout city infrastructure, growth points and large retrofit programmes;
- Leading the way to meeting fundamental regulatory requirements e.g. Carbon Reduction Commitment and increasing energy efficiency in Public buildings (LEP/Green Deal);
- Working with local communities in the region- Increased community environmental awareness;
- Shared learning with regional based educational institutions/Universities/colleges and schools;
- Mutual benefit from inward investment planning based on stable low carbon growth zones;
- Collaborative financial expertise - Access to energy investment funds and grants;

Developing a partnership...

- Declining population
- Poor quality housing
- Under achievement in education
- Multiple Deprivation
- Poor quality infrastructure/environment
- Lack of pride in City

