# The Road to 2016 Using Merton to Achieve Zero Carbon

GeoThermal Live, Peterborough Wednesday, 30th April 2008



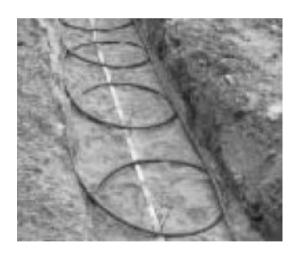
# Jonah Anthony Policy Director Micropower Council



# Heat Generating Technologies









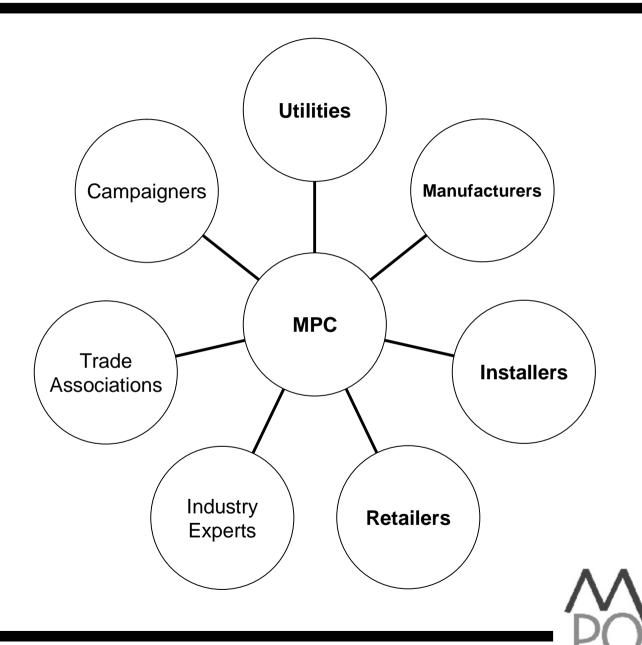
# Electricity Generating Technologies











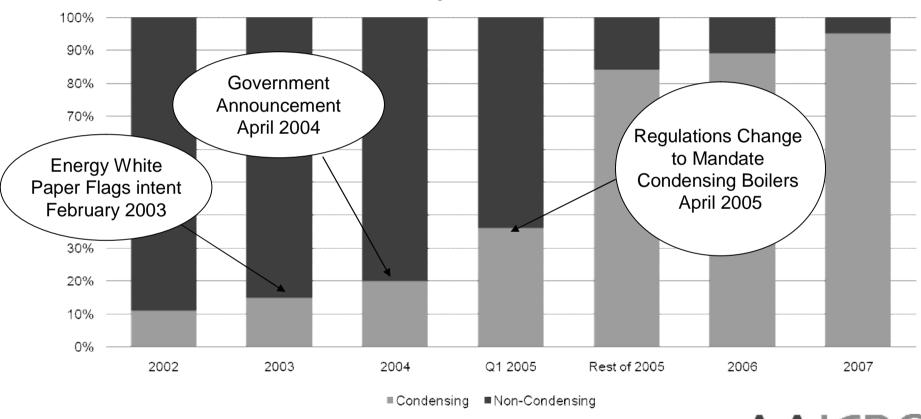
Why bother with regulation and policy, isn't it all too complex and costly?

Because it is the key driver for markets in the home heating sector.



#### **Building Regulations – the condensing boiler experience**





Source: SBGI Published Boiler Sales Statistics



## Zero Carbon Agenda

Zero Carbon Homes 2016

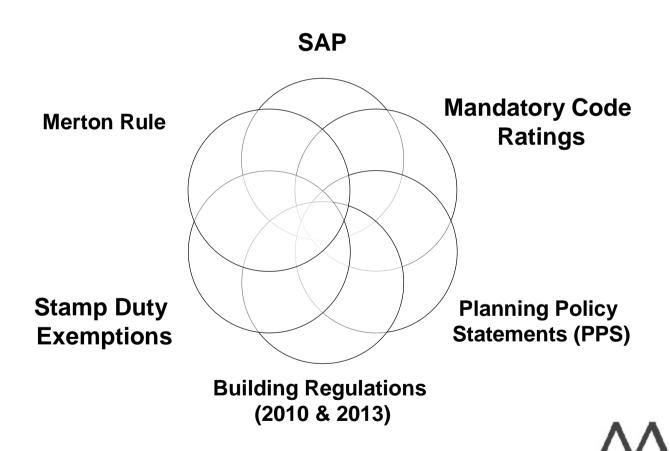
Zero Carbon Schools 2016

Zero Carbon Public Buildings 2018

Zero Carbon Buildings 2019



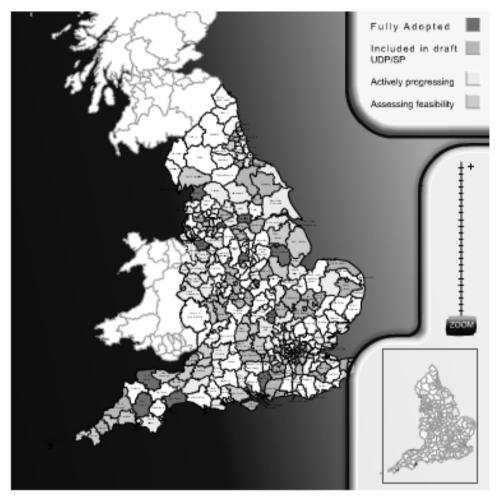
## Matrix of policies



#### Merton Rule

- Allows local authorities to set on site energy generation targets for new developments
- Michael Fallon MP's Bill protects that right in law
- Sends a strong message that we want sustainable development





170+ boroughs in England have now adopted the Merton rule, or are in the process of doing so

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#### Merton Rule

- Zero Carbon is only an aspiration. Merton Rules are actual obligations.
- Makes developers start thinking about on site generation now (and not on the eve of 2016).
- Raises awareness and understanding (builders, architects, planners)
- Builds up the necessary supply chain and commercial relationships.



#### **Definitions**

- CLG's Code definition
- Treasury definition
- Developer's concerns on definition looking at changing it



#### CLG

 Definition of a zero carbon home taken from DCLG press release (13 December 2006)

A zero carbon home is one with 'zero net emissions of Carbon Dioxide (CO2) from all energy use in the home'. The definition encompasses all energy use in the home (including energy for cooking, TVs, computers and other appliances) rather than just those energy uses that are currently part of building regulations (space heating, hot water, ventilation and some lighting). It means that over a year there are no net carbon emissions resulting from the operation of the dwelling. This could be achieved either through steps taken at the individual dwelling level or through site wide strategies. So it will not be necessary for each dwelling to have its own microgeneration capacity where development level solutions would be more appropriate.

http://www.communities.gov.uk/news/corporate/towardszero



#### True Zero Carbon Dwelling (as defined in CLG's own technical guide to the code)

Where net carbon dioxide emissions resulting from ALL energy used in the dwelling are zero or better. This includes the energy consumed in the operation of the space heating/cooling and hot-water systems, ventilation, all internal lighting cooking and all electrical appliances, these are now dealt with under Section 14 SAP 2005 extension for SDLT. The calculation can take account of contributions from onsite renewable/low carbon installations. Zero Carbon homes with the Code can also take advantage of the allowance with Section 14 to omit the requirement for secondary heating where applicable.

Off-site renewable contributions can only be used where these are directly supplied to the dwellings by private wire arrangement.

 http://www.planningportal.gov.uk/uploads/code\_for\_sustainable\_homes\_ \_techguide.pdf



### **HM** Treasury

#### 5 Zero-Carbon Home

(5) For the purposes of the definition of "net CO2 emissions"—

"allowable electricity" means electricity generated from a zero-carbon energy source designed to serve the dwelling and which is conveyed to the dwelling, or to a sub-station connected directly to the dwelling, by cables used exclusively for the conveyance of electricity from that source;

http://www.opsi.gov.uk/SI/si2007/draft/20078879.htm



### **Balancing Act**

 Rewrite the definition to loosely and we have little or no microgeneration (incl. ground source heat pumps) as developers go for the easier route of off setting

#### **BUT**

 Write the definition too restrictive, and the target of zero carbon homes is viewed as impossible to meet and simply ignored by developers – also meaning little or no microgeneration

#### Advice

- Get involved with the policy and regulation debates
- Make it happen now under the Merton Rule
- Publicise the fact that you have made it happen – counter myths
- Increase consumer confidence (responsible selling, certification, robust performance information)



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