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Heat Project

September 2007

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The project aims to develop options to decarbonise heat without significantly worsening fuel poverty

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- The OCC Heat Project has been running since January and has four main objectives
  - To provide an overview of the 'heat and cooling sector'
  - Establish the carbon impact of heat generation (and cooling) and assess the potential for this to be reduced
  - Identify and assess alternative or additional policy mechanisms
  - Make recommendations on the optimum set of mechanisms and next steps

- We submitted a 2nd interim report to Ministers in July setting out the scale of opportunity and the barriers we face in decarbonising heat. This has been based on: analysis by sector of emissions, reviews of existing practice within and outside of the UK, and interviews with leading industry experts.

- We sre currently working up options to decarbonise heat while maintaining a secure energy supply to report in the next month. In doing so, we will work within existing UK competitive markets and, in particular, will ensure that any impact on fuel poverty is minimal or options to offset it are worked up if this is large.

The way we generate heat and cooling accounts for nearly half of UK CO_2 emissions

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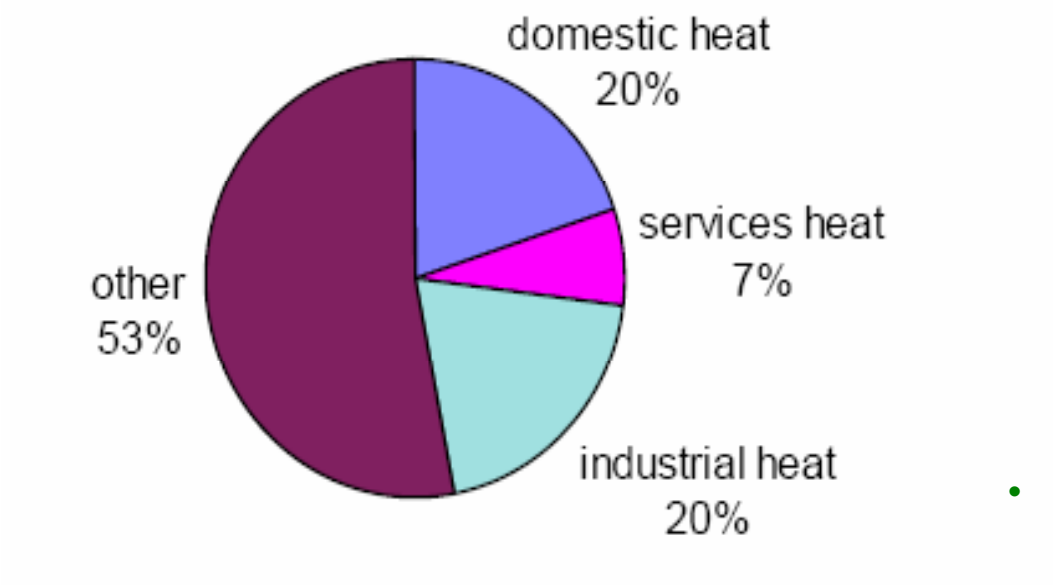
CO_2 emissions by energy source*



* BERR Energy Trends July 2007

- There are a number of ways we generate and use heating/ cooling. These make up the heat sector and (broadly) are:
  - Heating space (e.g. our homes and places of work)
  - Heating water (e.g. for personal use)
  - Industrial processes (e.g. steel manufacturing)
- Overall, emissions from heating and cooling account for 49% of our energy use and around 47% of UK emissions (see left)

The Stern report identified three main issues: these define our workstreams

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Three main issues identified by Stern:

Lack of a 'carbon price' to reflect the wider damage emissions cause

Barriers to technological rollout

Wider barriers to change (e.g. consumer behaviour)

Creating a single carbon price for heat:

We will examine the merits of introducing a single carbon price for heat and of allowing, carbon trading between heat and other economic sectors:

- Workstream 1: Carbon markets

Addressing other barriers to new/ existing technologies:

These workstreams address the wider barriers to the main new and existing technologies in heat. These are:

- Workstream 2: Renewable heat
- Workstream 3: Community heat
- Workstream 4: Large scale heat

Decarbonised heat could make a significant contribution to reducing UK CO_2 emissions by 2020

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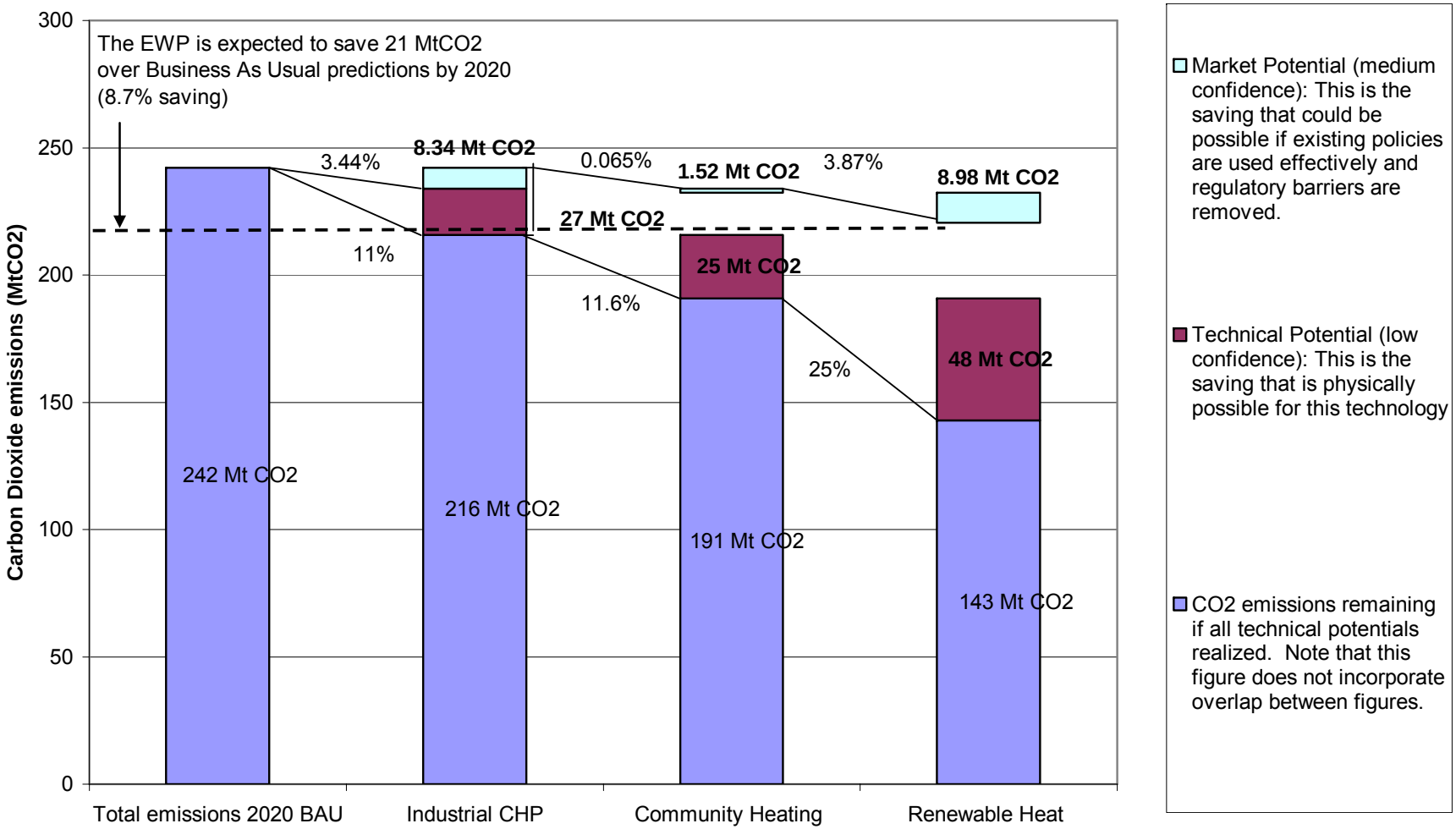
Potential reductions to annual CO2 emissions realisable through the use of heat technologies



* This chart is intended to indicate the relative size of the savings available, and does not imply that technologies should be deployed in the order shown

Executive summary: we will carry out further work over the summer – focussing on developing options

Workstreams:	Further work:
Carbon markets	• Work up options for introducing carbon trading for the whole of the UK heat sector and set out their implications including their fit with wider objectives/ policies
Renewable heat	• Work up options to put renewable heat on a more equal footing with renewable electricity and transport, and examine how regulatory and other barriers can be tackled to increase the amount of heat from waste and biomass.
Community Heat	• Explore ways that local government can coordinate district heating networks where they can deliver a benefit, and the capital can be mobilised to develop them.
Large scale heat	• Work up options for encouraging co-location of large-scale heat suppliers and potential customers to reduce customer risk; conduct further analysis of industrial waste heat opportunities and make recommendations for incentivisation of CHP.