

# Sustainability Committee

SC(3)-09-08 (p2): 8 May 2008

## Inquiry into Carbon Reduction in Wales: Carbon Reduction by Industry and Public Bodies

### Response from the Cardiff Council

Cardiff Council is grateful for the opportunity to respond to the National Assembly for Wales's inquiry on carbon reduction. Cardiff Council's responses to the questions raised are outlined below.

1. Is the proposed 3% annual reduction target by 2011 'in areas of devolved competence' sufficient to enable Wales to make its full contribution to meeting UK wide targets? If not, what targets should be put in place?

Cardiff Council believes that the adequacy of the proposed 3% annual reduction by 2011 in areas of devolved competence depends upon how much progress has already been made in these areas since 1990. This is the baseline year against which UK Kyoto targets are monitored (60% reduction by 2050, based on 1990 baseline, plus additional UK target of 20% reduction by 2010). Cardiff's view is that if no significant progress has yet been made then 3% is too low, but Cardiff Council recognises that increasing the target to a larger annual percentage would be undeniably challenging.

Cardiff Council believes that any targets set should tie in with the draft Climate Change Bill reduction targets (due to receive Royal Assent in spring / summer 08), and these in turn should be evidence-based and in keeping with the latest Intergovernmental Panel on Climate Change (IPCC) science on the subject.

With regard to its own targets, Cardiff Council has set a target of 60% reduction in CO<sub>2</sub> by 2018 for all Council non-domestic buildings and emissions from waste management.

2. Should the emission reduction target be based on Welsh consumption, or production, or both (i.e. should it take into consideration the carbon dioxide generated in Wales [production], or the carbon dioxide emissions that Wales' residents are responsible for, regardless of their source [consumption])?

Cardiff Council believes that targets should be set for both consumption and production. Cardiff Council believes that if targets are not set for both consumption and production then there will be no incentive for reduction in all areas.

3. What particular challenges does Wales face in reducing carbon dioxide emissions from industry and public bodies, and how can these challenges be overcome?

Cardiff Council notes that businesses in Wales are generally making good progress in reducing emissions, as it makes sound financial and business sense to do so. Public bodies are moving in the same direction, as a result of greater incentives to achieve reductions.

Cardiff Council would point out, however, that there remain issues in Wales related to retrofitting energy efficiency measures and renewable technology on older properties. This can be both difficult and expensive, and is an area which is deserving of greater emphasis.

4. Do the current WAG economic development policies give sufficient emphasis to carbon reduction?

It is Cardiff's view that the evidence base for impacts upon economic development relating to climate change is rapidly evolving. Cardiff Council would emphasise the need to ensure that the link between economic development and climate change is maintained - as per the Stern Report - and that WAG economic policies should continue to look at both carbon reduction and adaptation to climate change.

The Welsh Assembly Government's Strategic Framework for Economic Development, Wales: a Vibrant Economy is clear in its recognition of the need to develop a low carbon economy. It also notes the importance of encouraging innovation and building a knowledge economy, to focus a Welsh research base on areas such as low carbon energy. Cardiff Council is in agreement with this principle.

5. To what extent has WAG been successful in utilising the powers available to it in order to reduce CO<sub>2</sub> emissions from industry and public bodies?

Cardiff Council entered into a Policy Agreement with WAG in 2003, and this included a target to achieve a 6% reduction in CO<sub>2</sub> emissions per m<sup>2</sup> from Council buildings by April 2007.

Cardiff Council is of the view that the WAG Policy Agreement has been a key driver in establishing CO<sub>2</sub> reductions from Cardiff Council's buildings portfolio (there was little or no co-ordinated activity prior to 2005).

Cardiff Council successfully calculated and reported its CO<sub>2</sub> baseline - which was not previously known - and this has proved highly useful in current energy management operations for assessing Cardiff's portfolio of buildings; identifying available savings; prioritising action; and putting in place further processes to ensure consumption figures are monitored. The agreement has placed Cardiff Council in a strong position to embark upon a Carbon Management Plan with the Carbon Trust in 2006-07.

The 4.39% reduction achieved represents a considerable saving - and one which would not have occurred were it not for the presence of the indicator. In future, an understanding of stricter enforcement, or the demand for a full explanation in the case of non-compliance, might possibly produce more beneficial results.

Cardiff Council believes that the use of WAG powers to establish Policy Agreements has undoubtedly proved successful in leading the Council into a strong position from which to launch a committed Carbon Management Plan. Future agreements could be similarly successful.

In addition to this, Cardiff Council notes that since February 2007, all new WAG-funded buildings have been required to meet the BREEAM 'Excellent' standard.

This will ensure effective and necessary capacity building for the future. BREEAM does not necessarily equate to 'low-carbon', but low-carbon buildings can score highly on the BREEAM rating. The rate of building turnover in Local Authorities is relatively slow, and for this reason Cardiff Council believes that attention should be focussed upon improving existing building stock.

Cardiff Council feels that the BREEAM policy is proving successful in preparing the way for more robust construction standards from 2011. The zero-carbon proposals themselves are still understood by Cardiff Council to be subject to final definition by WAG.

6. Could alternative targeting of WAG financial resources lead to greater emissions reductions from industry and public bodies than is currently being achieved? If so, where could additional resources lead to greatest impact? (Please provide detail to support your evidence)

Cardiff Council has identified the following possible options for achieving greater emissions reductions from industry and public bodies:

- Targeting of grants towards tonnes of CO<sub>2</sub> saved. Government grant schemes such as the Low Carbon Buildings Programme offer resources for discounted microgeneration (on-site renewables). Whilst the need to grow the renewables market is appreciated, Cardiff Council believes that other investments might provide greater CO<sub>2</sub> savings per £ and hence achieve greater CO<sub>2</sub> reductions overall.

For example, to save 1 tonne of CO<sub>2</sub> per year using solar PV requires investment of around £3000, whilst achieving the same 1 tonne saving using cavity wall insulation requires approximately £470. Whilst grants are available for cavity wall insulation in domestic buildings through the Energy Efficiency Commitment (EEC), they are not currently available for the non-domestic sector. WAG could, perhaps, lobby the UK Government to extend EEC to non-domestic buildings.

- Targets for building performance: Cardiff Council believes that WAG policies on the CO<sub>2</sub> performance of new buildings are strong. However, by definition, current emissions arise from existing buildings, many of which perform poorly and should, therefore, be the main focus of attention. There are, in most cases, significant savings to be made from poorly performing existing buildings, including through the introduction of 'Energy Fitness for Purpose', using Energy Performance Certificates as a metric to define minimum energy performance standards for public buildings, and provide direct funding to bring buildings up to standard.

- Provision of funding for Awareness-raising: Cardiff Council notes that existing funding sources focus upon physical energy projects and require a tangible 'payback'. Awareness-raising is highly cost effective in many circumstances. Within Cardiff, for example, clear impacts have been seen on CO<sub>2</sub> emissions at sites such as Willows High School, which was able to save 12.6 tonnes of CO<sub>2</sub> per year and £2,500 of electricity as a result of IT awareness-raising, at nominal cost. Cardiff Council acknowledges that it is difficult to quantify the savings from an awareness programme beforehand and is aware that payback funding is not normally available. As areas for possible future action, Cardiff Council would suggest provision of resources for awareness campaigns via "Energy Saving Wales"; or a Wales-wide awareness campaign funded by WAG and operated by Local Authorities.

7. What examples from other administrations (devolved, UK and overseas), where other means have been used to achieve reductions in carbon dioxide emissions from industry and public bodies, could be adopted in Wales under current powers?

Cardiff Council believes that Welsh targets and policies compare well with other regional requirements in the UK.

However, Cardiff notes that there are some question marks over the effectiveness of the Merton Rule, which requires the use of renewable energy onsite to reduce CO<sub>2</sub> emissions in the built environment. It is Cardiff's view that promoting on-site renewables is potentially less effective than promoting more efficient buildings.

Cardiff Council believes that there is merit in the idea of examining the adoption in Wales of the Code for Sustainable Homes - which measures the sustainability of a new home against categories of sustainable design, rating the 'whole home' as a complete package. Since April 2007 the developer of any new home in England can choose to be assessed against the Code.

8. In the context of the Government of Wales Act 2006, which further means of reducing CO<sub>2</sub> emissions from industry and public bodies could only be achieved with the introduction of further legislative competence for the National Assembly of Wales?

Cardiff Council believes that means of reducing CO<sub>2</sub> emissions within the context of the Government of Wales Act 2006 would probably involve referring to large-scale implementation of low and zero carbon technology and localised embedded energy systems. Examples of such systems would include city-wide heat mains to share waste heat, and biomass-fuelled communal heating systems.

9. If specific CO<sub>2</sub> emissions targets are to be set for Wales, should those targets be subdivided into shares by sector? If so, what share of the total should reductions by industry and public bodies comprise?

Cardiff Council believes that targets should be subdivided into shares by sector. The share of reductions by industry and public bodies should be proportionate to the emissions generated by industry and public bodies.

10. How will the CRC affect your business? Should the proposed commitment be amended in any way?

The CRC trading scheme will create a strong additional driver for reducing Cardiff Council's CO<sub>2</sub> emissions. Emitting carbon will become expensive, and the cost of carbon will become an important decision-making criterion for construction, renovation, procurement and sale.

From Cardiff Council's perspective, carbon cost will for the first time be factored into cost and savings calculations for energy saving projects, as distinct from actual energy costs. 'Carbon cost avoided' will make projects more financially attractive and should accelerate savings.

The CRC should lead naturally to progressive 'decarbonisation' of Cardiff Council's activities. Carbon costs are still to be defined but could be anything from £8 to £16 per tonne, corresponding to an anticipated yearly cost of approximately £300,000 to £600,000 per year.

Cardiff Council anticipates that the CRC will require extra resources to administer. It is anticipated that more robust standards for measuring CO<sub>2</sub> emissions will need to be introduced which would also require further resources, either financial or personnel, to collect and verify energy data.

Cardiff Council would also note that trading could lead to a fluctuating carbon cost that could make decisions on energy saving projects more difficult. Collapses in carbon prices observed in the European Emissions Trading Scheme could lead to apprehension about long-term projects. Price fluctuation of fuels may be greater than changes in the price of carbon, and may remain the dominant driver.

A suggested amendment to the proposed CRC commitment is as follows: The initial proposal for the CRC is to achieve an overall outcome of 8% CO<sub>2</sub> reductions by 2020, against a baseline year of 2008-09. Cardiff Council's own target of 60% CO<sub>2</sub> reduction by 2018 is far in excess of this. If other CRC participants are capable of achieving this, the 8% target could potentially be revised upwards. It is recognised that the forthcoming Carbon Committee may decide to revise the target in this way, and Cardiff will ensure that it remains aware of developments in this area.