The UK is committed to reducing greenhouse gas emissions by 80 per cent by 2050 from a 1990 baseline. In order to reach this target the energy system will need to undergo a ‘transition’ on all levels, including those relating to human actions and behaviours. Responsible for approximately 30 per cent of total carbon emissions in the UK, the residential sector has a crucial role to play in reaching national CO₂ reduction targets (Palmer et al., 2006). It has been estimated that this sector has the potential to cut emissions by 60 per cent between 1996 and 2050, with two-thirds of the reduction in this scenario coming from demand reduction and one-third from low- and zero-carbon technologies (Boardman et al., 2005). Realising reductions of this scale will undoubtedly involve ‘substantial behaviour change from all sectors of society’ (HMG, 2009).

Policy approaches in the transition to sustainable lifestyles

While an important component in creating a low-carbon economy will be ensuring that the UK’s energy supply is decarbonised, it has more recently been acknowledged that the only way to achieve significant cuts in emissions is through ‘ambitious per capita demand reduction’ (HMG, 2010a). In combating climate change, increasing the efficiency of energy use represents a cost effective and relatively straightforward step in closing the gap between supply and demand. With at least 80 per cent of the homes standing in 2050 having already been built, there is clearly a strong need to address the efficiency of the existing housing stock, one of the least efficient in Europe (Boardman et al., 2005).

While the technological advancements necessary for meeting both renewable energy and energy efficiency targets appear feasible (CCC,
2008), the government has so far had to rely heavily upon financial incentives and regulation in order to realise emissions savings in these areas. In 2002, the Department of Environment, Food and Rural Affairs (Defra) introduced the Energy Efficiency Commitment (EEC), a three-year energy saving objective for domestic energy suppliers. By the 2004 Housing Act a target was established to improve residential energy efficiency in England by at least 20 per cent by 2010 from a year 2000 baseline. The EEC was renamed the Carbon Emissions Reduction Target (CERT) in 2008 and remains the primary government scheme aimed at increasing the efficiency of the current domestic housing stock. CERT runs as a legally binding obligation placed on gas and electricity suppliers to spend a fixed amount per customer on efficiency measures or renewable technologies each year. Ancillary initiatives in place include Warm Front, designed to deliver energy efficiency measures to those on the lowest incomes, and various activities run through the Energy Saving Trust. Given that space heating makes up the greatest segment of household energy consumption (around 60 per cent), this is the area in which the majority of improvements have been made, via cavity wall and loft insulation and high-efficiency condensing boilers (DECC, 2010a).

Within the Low Carbon Transition Plan (HMG, 2009), released under the Labour government in 2009, proposals were announced for a far more efficient housing stock by 2050, with the majority of heat and electricity to be generated from low-carbon sources. Shortly after the 2010 general election, Prime Minister David Cameron pledged that the coalition government would be the greenest government ever, announcing their flagship Green Deal programme, a key element of their energy strategy (HMG, 2010b). The Green Deal is designed to overcome both the upfront and hidden costs associated with investing in efficiency improvements that are often cited as barriers in preventing consumers from realising energy-saving opportunities (NAO, 2003; Ofgem, 2009). It will offer loans with repayments that are lower than the expected savings and which are tied to properties rather than individuals. Coming into effect in the autumn of 2012, the Green Deal has clear potential to help unlock emissions reductions from homes and commercial properties, but the generation of sufficient demand will be crucial to the success of the programme (CBI, 2011). A significant increase is required in the uptake from older homes which are harder to treat (CCC, 2010), but the extent to which demand for such measures can be stimulated from households is unclear (NAO, 2008). Evidence would suggest that a lack of upfront capital is not the only barrier to