

with gas condensing boilers; and solar hot water systems are a popular choice and people are willing to install them installed, if they perceive them to be reasonably priced. Furthermore, the survey confirmed that there is an excellent opportunity to pursue the implementation phase of the project, and that it made sense to prioritise energy efficiency measures before solar hot water systems and consider PV as a final (and not inexpensive) addition in the Low-Carbon Homes package.

At a city level, the project offers a huge potential for not only carbon reductions from the building stock but for providing the foundation of an affordable and effective strategy for the implementation of the Decent Homes standards, required by 2010, throughout the city (ODPM, 2001). Under the Decent Homes standard, a home is classified as decent if it is above the current statutory minimum standard for housing (the fitness standard) and in a reasonable state of repair, has reasonably modern facilities and provides a reasonable degree of thermal comfort; that is, it has effective insulation and efficient heating (DTLR, 2002; ODPM, 2003). While the original feasibility study was on private sector homes, there are many council houses in the area that are well below Decent Homes standards and could, at a minimal cost, be brought up to the required standard. There is also a great deal of interest, from Housing Associations, who see the potential for adding value to their housing stock by taking advantage of the 50% cost reductions in energy efficiency measures offered by the scheme.

Implementation of OSI

The implementation plan for the OSI is being carried forward through the following strategy.

The Oxford Solar partnership

Strategic alliances have been established with the participation, of the local government, household, business organisations, energy supply companies and community organisations advocated to implement Oxford's CO₂ reduction targets. A core group has been established with the participation of Oxford Brookes University, elected Oxford Council, the local authority and leading UK consultants specialised on RUE and SET.

The OSI team have held two public open events; one with stalls set up one Saturday on a busy city thoroughfare in Stroud.⁴ The second was a successful Solar Fair in Oxford Town Hall where over 400 members of the public visited and saw a wide range of displays of solar hot water systems. The public even tried making their own solar systems and discussed their own homes and plans for the installation of energy efficiency measures and solar technologies.

Oxford Solar scenarios

The project includes scenario development using models and visualisations that can provide input into planning and strategy development, and influence research and urban development policy. This involves tailoring the relevant tools and processes for urban planning, urban and industrial strategy development to produce a range of scenarios to evaluate the optimum routes for the introduction of solar systems and RUE in Oxford. The relevant scenario development tools include back-casting techniques, exploratory scenarios and the use of scenario workshops.

Back-casting is a technique that helps people create a clear vision of a preferred future, and to devise strategies to make it happen. The outcome of a back-casting event is a timeline with specific events and quantifiable goals needed to make the vision a reality. The procedure for arriving at this is a meeting at which the lead participants, through a visioning exercise, develop a robust image of the team's preferred future. A vision is an image of an ideal future, one that most participants would like to see happen.³ Scenarios are plausible descriptions of how things may change in the future, built to reflect what is possible, not what is preferred, desirable or undesirable. They are meant to be politically and morally neutral constructs (Roaf *et al.*, 2004b). This component is currently under way by a research team at Oxford Brookes University.

Pilot projects

There are two pilot projects under development. The first is to be a street or small area of houses equipped with PV and single point of connection to grid, sized to qualify for a Renewable Obligation Certificate. The second is the implementation of a Solar Suburb.