

Working in conjunction with the Councillor member of the Core Group, the local authority, the university and consultants are promoting and developing a basic package for energy efficiency – a solar hot water and PV system. This package is linked to one of the two different economic models: selling energy to the grid through as a single energy producer (by using the Renewable Obligation Contribution), or installing individual systems by using a local CO₂ programme funding (by using national funds). The public reaction towards these two different options will be tested.

The Oxford Solar dissemination

Outreach to the public will show what Oxford can look like as a Solar City, how it can function, and why it is important. Dialogue will be entered into with citizens on the demand for different scenarios in order to build public support for processes of change towards a sustainable energy future.

Conclusion

The OSI has been designed to use a community-based approach to develop Oxford as a pioneering Solar City. The ultimate aim of the project is to build local partnerships to implement actions to reduce CO₂ emissions from the buildings of the city, by up to 90%. The project aims in turn to stimulate local industry and to ensure that the citizens of Oxford are future-proofed, in safe and comfortable homes, against the twin challenges of climate change and increasingly expensive fossil fuels. To date, the first phase of the project has demonstrated that energy efficiency measures are more popular among householders, being cheaper and better understood technologies. The householders are however, also very keen to have solar hot water systems installed, and many of them would like (eventually) to have solar PV panels on their roofs. It is estimated that with time, the take-up rate for solar systems will increase as the technology becomes more familiar.

Notes

1. The scientific and technical objectives include:
 - **To better understand the energy needs of cities for different energy qualities, and the potential of different forms of RES and RUE in cities**

- To identify or develop optimal strategies for rapid integration of RES and RUE in the energy systems of cities, best suited for different categories of urban areas and different city surface uses
- To optimise the performance of RES and RUE for city application
- To find ways of improving the adoption of RES and RUE technology by small- and medium-sized enterprises (SMEs)
- To identify the different actors in a community and identify their needs, possibilities and limitations

2. Key activities include:

- The collection, evaluation (analysis and assessment) and re-dissemination of information on best available techniques, successful strategies and policies, and best practices for the introduction of RES and the RUE in cities, towns and urban regions
- The evaluation and development of tools and processes for exploring how Solar Cities can function in the future and what they could look like. This includes scenario work (simple models and visualisations) that can provide input into planning and strategy development, and influence research and urban development policy. Included in this component action can be work on defining the criteria and/or targets for a city to be a Solar City within different time frames
- The evaluation and development of tools and processes for urban planning as well as city and industry strategy development. This will be an efficient way of rapidly introducing RES and the RUE in Solar Cities. This includes back-casting techniques and the use of alternative scenarios, the use of external exploratory scenarios and the use of scenario workshops
- The support for research and development of technologies for RES and the RUE with the clear aim of moving products to large-scale markets in Solar Cities
- Research on how to further increase the development of industries for RES and the RUE, with particular emphasis on the take-up of new technologies by SMEs in Solar Cities
- The implementation of a number of demonstration projects to prepare for rapid large-scale implementation of technologies for RES and the RUE in Solar Cities
- Outreach to the public to show what Solar Cities can look like and how they can function. Dialogue with citizens on the need for different scenarios in order to build public support for processes of change towards a sustainable energy future

3. Stalls were set up with the help of the Green Shop in Stroud, Chris Jardine and the Blue Planet Solar School Demonstration team.

4. For more details, see www.prospectiva.net/docs/BackcastingMaking%20it%20Happen.pdf

References

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