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Sustainable Heating: Implementation of Fossil Free Technology

Professor Peter Connor

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BACKGROUND

Across the EU energy demand for heating is largely met through fossil fuels and accounts for around one third of the EU's carbon emissions. This needs to change and the *Sustainable Heating: Implementation of Fossil Free Technology* (SHIFFT) project is working to address this urgent and complex dimension of the zero-carbon transition.

There is enormous potential to reduce CO2 emissions through the adoption of low carbon heating, but a lack of awareness and knowledge on the technical options available and the benefits of sustainable heating, as well as the upfront investment costs of measures, can mean progress is slow. SHIFFT helped to address this by installing measures in a number of pilot areas to demonstrate sustainable heating, and working with citizens to raise awareness, remove barriers, develop incentives and co-create solutions for a transition to sustainable heating. We also developed city-based strategies in the four countries of the 2 Seas region and developed best practice to share.

KEY FINDINGS

There is a need for a local, resident-oriented approach on a neighbourhood scale. This needs to be enabled by central government through delegation to local authorities, and provision of both funding and appropriate policy instruments.

Citizens need:

- Cities to demonstrate commitment to their values in ways that can be applied practically.
- Tailor-made advice and clear information from a trustworthy source, ideally at a one-stop shop.

We worked with four cities to co-produce low-carbon heat strategies, which fed into regional initiatives on low carbon heat planning and policy.



A mix of measures is required, appropriate to technologies, building types, available heat sources, etc.

This might mean providing citizens with information about improving energy efficiency in their homes, which technologies they can best deploy, costs, the savings they can make, whether there are any permissions they might need and how to get them, where they can find trained builders or installers. They might also need financial support appropriate to the different low-carbon heat technologies.

Local Authorities need:

- Capacity support
- Interdepartmental cooperation
- Cooperative networks with other Local Authorities and other key stakeholders
- Facilitation from higher governance levels
- Support for innovation from central government

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POLICY OUTCOMES

- SHIFFT worked with 4 municipalities to develop city strategies for decarbonising heat usage in each city. These were the cities of Middelburg (NL), Bruges, Mechelen (both BE) and Fourmies (FR). As part of this, SHIFFT also prepared general guidance for any city wishing to develop a low-carbon heat strategy.
- Partners worked with communities to select low carbon heat technologies for use in their homes and community buildings.
- A co-creation methodology fed into both the city heat strategies and the work with communities to select low carbon heating options for housing and community buildings.
- SHIFFT produced guidance on how to develop a city heat strategy, suitable for towns and smaller cities. We also broke this down to provide four modules to provide support across the financial, policy and technology and to assist communities in carrying out their own co-creation activities.
- The cities had a key role in all elements of the project. They were active and informed policy partners throughout. They have also formed partnerships with other towns and cities in their countries or regions and disseminated their experiences. Their work has fed into regional initiatives on low carbon heat planning and policy.
- Four cities developed and adopted low carbon heat strategies. The Belgian region of Flanders adopted a region-wide policy to inform citizens on boiler settings to minimise emissions against consumption.

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TEAM

Our SHIFFT research was supported by a diverse group of researchers at Exeter, including Calum Harvey-Scholes, Richard Hoggett, Prof. Karen Bickerstaff, Prof Patrick Devine-Wright, Dr Fin Sherry-Brennan and Dr Chris Manktelow. The whole was project managed by Ronan Doyle, assisted by Basia Cieszewska and by Debby Wright.

RESEARCH

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CONTACT

Professor Peter Connor: [P.M.Connor \[at\] exeter.ac.uk](mailto:P.M.Connor@exeter.ac.uk)

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