

Online Thermal Map Shows Heat Loss From Individual Homes

Aerial mapping company Bluesky, UK, has created and is hosting an online mapping portal to help businesses and residents in Portsmouth identify thermal-inefficient properties. Using specialist thermal sensors mounted on a survey aircraft, Bluesky recorded the heat loss from buildings across the city on a cold winter night.

This raw thermal survey data was then matched to address records in order to create the easy-to-use postcode look-up function. Portsmouth City Council hope the [online thermal mapping](#) will encourage businesses and residents to take action to improve the energy efficiency of their property, thus saving money, reducing fuel poverty and improving the city's carbon footprint.

Portsmouth originally commissioned the Bluesky thermal survey to identify council-owned properties that could benefit from energy-efficiency measures, commented Jasmine Fletcher, Climate Change and Sustainability co-ordinator at Portsmouth City Council. However they soon realised that the data had a much wider potential and appeal. Since launching the online thermal mapping portal, the council's website has received more than 2,500 hits and it continues to be popular, attracting numerous hits every day.

By publishing the thermal map, Portsmouth City Council hopes to help residents and businesses understand how they can benefit from energy-efficiency measures. It has been estimated that installing loft and cavity insulation into a property which is leaking a lot of heat could save up to GBP700 over 3 years. As fuel and energy costs are increasing, this will help to reduce the amount of money paid on heating bills over the long term. Increasing the thermal efficiency of properties in Portsmouth will also help towards reducing the number of people living in fuel poverty along with lowering the city's carbon footprint.

Having entered their postcode and selected the address of interest from the returned list, visitors to the website are presented with a colour-coded map of their property and those surrounding it for context, continued Fletcher. The visitor can then view a list of frequently asked questions and is directed to other areas of the council's website for additional advice and support.

Thermal surveys, such as the one commissioned by Portsmouth City Council, are captured by Bluesky using a 'microbolometer' thermal camera: a system specifically designed for airborne surveying and ideal for use in aircraft flying at night. Combined with an advanced navigation and positioning system and improved sensor control and user interface, Bluesky's new-generation thermal mapping system allows measurements of heat loss from property roofs to be recorded with higher precision and more consistent results than other systems currently in use in the UK.