

Thermal Imaging Report 2022-23



Demand for our free [thermal imaging training and camera loans](#) has really taken off this season, with:

- a record 315 camera loans : 2.8 times more last season
- 85% of survey responders have made or plan to make home energy improvements as a result

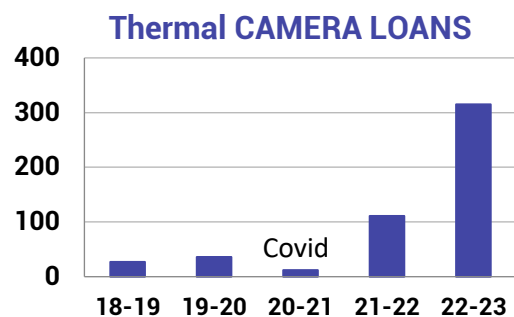
Training

From November '22 to early April '23, we trained over 400 people in 4 separate online sessions to use the cameras and to understand how their images show where heat is leaking from their homes.

Camera Loans

9 thermal cameras were on loan to trainees:
5 belong to South Cambs District Council, 1 to Cambridge City Council and 3 to Cambridge Carbon Footprint (CCF).

[9 volunteers around Cambridge City and South Cambs](#) hosted a camera each for collection and return, so that most loans could be local. The 315 camera loans in total, were either through the week or over a weekend.



Resulting Actions

85% of borrowers who responded to our survey said that as a result of their thermal imaging, they have already made or plan to make home energy improvements. Some are checking up on the varied quality of recent building work.

Examples of what was revealed:

uninsulated sloped ceiling in bedrooms
single-glazed window above the front door
leaking gutter - visible wet patch on wall
Heat leaks along the walls & bad loft insulation

and some resulting actions:

got a quote for fixing this
fitting secondary glazing
checked if neighbour has water ingress
Prepare a report and send it to the landlord

“really useful tool for assessing the home’s heat loss and for planning improvements” - Borrower

Multiple Surveys

Many camera borrowers also investigate other homes of neighbours and community buildings, sometimes with surveys of many buildings.

For example a borrower in Histon surveyed 18 homes, providing each household with a written report. In the small village of Heydon a parish councillor organised another 18 Home surveys – *“the response was excellent, and the Parish Council are keen to use this as a platform for further community engagement.”*



Next season we plan to increase promotion and support for multiple surveys, as this can dramatically add to the impact and help build community action.

Unmet need

Public demand for training and loans was much stronger than in previous seasons, at least partly because of the energy crisis. We were unable to fully meet this welcome demand, even with a record number of cameras on loan. In fact we limited training spaces so that new trainees could be assured of being able to book a camera loan. We will be fundraising for more cameras to meet the demand next season and to further develop and improve the project.

There's a surge of interest from around the country too, with 10 councils and community organisations asking us for advice on setting up their own Thermal Imaging schemes. These include [Suffolk Climate Change Partnership](#) and [East Cambs District Council](#), who now have camera loan schemes in action. [Tring in Transition](#) in Hertfordshire and the [Fal Energy Partnership](#) in Cornwall are both trialling loan schemes.

“Do it!! Don't be in the dark about your heat losses.” – Camera Borrower

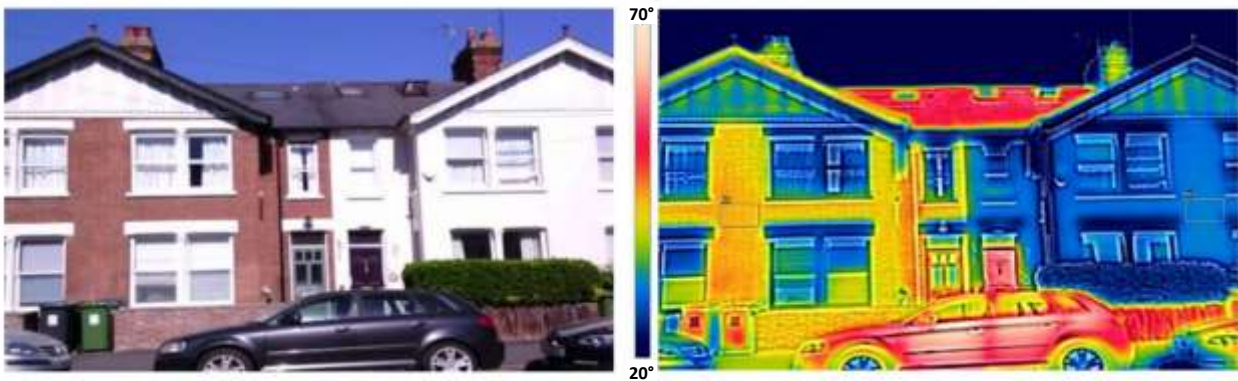
Camera destroyed

In January our oldest camera, bought with a Cambridge City Council grant and on loan since 2010, was being taken home in a borrower's bike pannier, which fell off the bike and was run over by a car. This has been our only camera damage over 13 years. Fortunately CCF's insurance and donations from borrowers enabled it to be replaced with a modern [Flir C5](#) within 2 weeks.

Hot weather Thermal Imaging

Normally we only lend cameras in the colder months, November to early April, because vivid images of heat leakage need a temperature difference of at least 10°C between indoors and outside.

But in heatwaves the cameras can help [reveal what's making your home hot inside](#) and give insights in how to reduce that. So, this summer we'll pilot camera loans for thermal imaging in hot weather.



In a heatwave these plain brick surfaces were 14°C hotter than the white-painted brick

Thank you to all the volunteers, active borrowers, donors and funders who made this project possible and so worthwhile. Looking forward to further improving and developing it next season.

From the Thermal Imaging team: Tom Bragg, Nicola Terry, Bart Hommels, Alana Sinclair and others

