

Open Eco Homes 2022 Report



Open Eco Homes aims to inform and inspire homeowners to substantially reduce the carbon footprint of their homes. It's an annual project of Cambridge Carbon Footprint, running since 2010.

In 2022, we ran a total of 20 tours and talks, and for the first time, offered a mixture of in-person and online tours. This included 9 homes open on 14 days (some were open for both online and in-person tours) and 6 very popular online talks. Two of these talks: "Cool Homes in a Heatwave" and "Low Cost Home Energy Saving" took place in early summer.

A theme was 3 homes showcasing pioneering electrical solutions: PV panels with batteries in homes and cars, all interconnected to the grid for import and export, to save carbon and cost, slashing demand at peak times.

Summary of Success

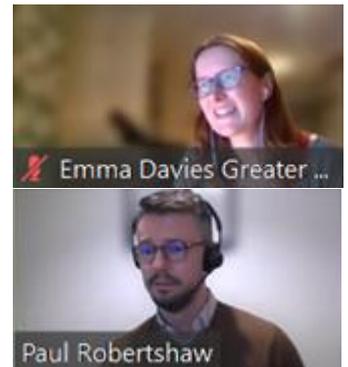
- Overall, there were 370 participants
- The programme of talks was particularly successful, and for the first time ever, there were more attendances at the talks than the tours (209 participants at talks)
- 52% of participants said they were new to OEH
- We estimate that **416 tonnes CO₂** will be saved by improvements inspired or enabled by this year's OEH - based on feedback from participants on their intentions resulting from OEH.
- Since 2020, videos of all online tours and talks have been put online, Over the year to 19 October 2022, our [YouTube videos](#) were watched for a total of 3,443 hours. If the impact/hour is 1/3 of direct participation, we estimate this will save about **3,000 tonnes of CO₂**.

Talks

The most popular event this year was the online talk on "[Low Cost Home Energy Saving](#)" in May, with 50 participants and over 300 YouTube views by mid October 2022. The interest in low-cost measures perhaps reflects the worrying economic outlook: despite great interest in reducing energy costs, we get the impression people are feeling more cautious about investing in major retrofit projects.

The online talk "[Living with a heat pump](#)" was also very popular, with 42 participants hearing from home owners and an expert in heat pump system design. We know that this event has led to several new heat pump installation enquiries.

For the first time, we addressed the problems faced by owners of listed and heritage homes, in an online event on "[Greening your Older Home](#)". This involved Emma Davies, Principal Sustainability Officer, and Paul Robertshaw, Senior Conservation Officer, from The Greater Cambridge Shared Planning Service. It was very well received by 32 participants who got encouraging advice about the things that are now often permissible to improve the energy efficiency in a listed or heritage home.



Participants: "Thank you for this whole initiative - very helpful". "Really inspiring and useful"



Tours

Paul's 1968 terraced home in Oakington had the widest publicity, including the Sunday Times, [Bloomberg](#) and ITV. It has a very high standard of retrofit, including an Air Source Heat Pump, PV Solar panels, vehicle to grid power storage and a Mixergy tank for hot water and. Materials used are eco-friendly, and the whole scheme aims at high quality design for Universal Living and Dementia Awareness. Watch [a recording here](#).

Participant: *"I'm just starting a similar journey, so this has been really interesting"*



Summary

9 Open Homes Tours

[1905 Cambridge semi](#) with a phased retrofit now to a net-zero plan: vacuum panels in sash windows
[Orchard Cottage](#), a new-build with hollow clay block walls that doesn't need a heating system
[1935 detached home](#) with high retrofit standards of retrofit achieving near 90% energy reduction
[1963 Cambridge home](#) with thoughtful DIY-led retrofit. Fully electric, with Vehicle to Grid power storage
[1929 retrofit & new extension](#) that doubled floor area & cut gas use by a third, with fresh air from MVHR
[1600 timber-frame architect's home](#) sympathetic deep retrofit using natural and reused materials
[Living lab 1975 terrace home](#) with pioneering tech: PV, batteries, linked to electric car and heat storage
[Near-Passivhaus newbuild](#) with lots of natural light; stored rainwater for loos, washing machine & garden
[1968 Oakington mid-terrace](#) retrofit with natural materials, heat pump and electric storage in home & car

6 expert talks:

[Greening Your Older Home](#) sympathetic retrofit advice with listed building or conservation area consent
[Living with a Heat Pump](#): experiences of homeowners and a heat pump system designer
[Achieving Air Tightness](#): why is this so important and difficult for deep retrofit?
[Smart Electric Homes](#): saving costs and carbon using PV, batteries and vehicle to grid
[Cool Homes in a Heatwave](#): shading, insulation, ventilation and personal cooling to keep comfortable
[Low-Cost Home Energy Savings](#) Taking control of your energy, draught-proofing, insulation, etc

Slightly to our surprise, despite the easing of the pandemic, the online tours were in general more popular than the in-person tours. This might in part have been because some of the homes were in villages outside Cambridge, but it probably also suggests we're all getting used to the convenience of online participation.

New Resources

Since the earliest days we've prepared a detailed case study for each home, describing what was done, and listing the key suppliers used. Following requests to make this information more easily accessible, we've created an online [Supplier and Installer Directory](#) listing all the suppliers used and recommended by OEH hosts. Topics range from "Air Source Heat Pumps" to "Wood burners".

Thank you

Many thanks to our funders, staff, host householders, speakers and to all the other volunteers organising and helping run Open Eco Homes. Best wishes to participants inspired by OEH to create their own eco-home!

from: Tom Bragg and the OEH team

Enabled by [funding and sponsorship](#) from:



[Open Eco Homes](#) is an annual project since 2010 of the charity [Cambridge Carbon Footprint](#)

