

Open Eco Homes 2021 Report



OEH hosts are pathfinder early-adopters who show how their varied retrofit or new-built homes are low carbon, comfortable and healthy. As trusted messengers, they inspire a growing audience to create their own climate-friendly homes, as urgently needed across the UK.

Summary of success

2021 Open Eco Homes were online, because of covid, with **10 home tours and 6 expert talks**:

- 551 participants joined these Zoom events: 96% said it was useful or very useful for them
- 50% said they were new to OEH, so we're reaching well beyond our regulars
- [Videos](#) of these tours and talks have attracted 990 views so far – a significant wider audience
- an estimated 969 tonnes CO₂ will be saved by improvements inspired or enabled by this year's OEH - based on participant feedback, saying what they intend as a result with estimated energy savings

Our themes were 'Getting Started', encouraging each participant to start improving their home, and 'Low Cost', featuring less expensive retrofit examples and actions.

Highlights

In **April** we were delighted to partner with [Cambridge Forum for the Construction Industry](#), also an important OEH funder. A lunchtime webinar attracted 70 building professionals, who heard from Mark Brinkley about his [award-winning self-build](#) and James Smith on his [Victorian terrace retrofit](#), both OEH 2020 highpoints.

In **June** Warren Pope, Project Manager of [RetrofitWorks, Cambridgeshire](#) gave a timely talk on [Heat Pump Choices](#), a topic for anyone wanting low-carbon domestic heating.

Themes for September and October Tours were:

- 'low-cost', including DIY, but with plenty of relevance for people planning only to use professionals
- ['Getting Started'](#), encouraging and supporting participants to make a start retrofitting their home

Two of the most popular tours were from:

Rachel and Jake, showing their [F-rated home to near Passivhaus Standard](#). In October 2020 they bought a draughty 1960s detached house with poor insulation and an EPC of F. Their epic retrofit to near Passivehaus standard was largely by DIY, while they were both working full-time! The result is beautiful and very inspiring, including a heat pump, Mechanical Ventilation with Heat Recovery (MVHR) and PV (solar electric panels)

"We knew money would be tight and hoped we could earn the money as we went, saving through DIY or with help from family and friends. Jake has been able to do a great deal of the build himself!" – Rachel



Andy Rankin showed his self-built [Carbon Positive Family Home](#) . In 2011 Andy was an OEH host [in his narrowboat](#). Since then his family grew, as did the solar business he founded, [Midsummer](#), now recognised as the UK's [Best Renewables Distributor](#) and an OEH sponsor. They were able to self-build a spacious low-carbon home with PV that generates more energy than their highly insulated home uses in total.

"Utterly inspiring" – tour participant



Other homes

Low-cost Retrofit of 1950s Family Home	Suzie and Ian's ex-council house, with unexpected low-carbon tips
Edwardian terrace phased retrofit	Tom and Anne's on-going retrofit, now with solid-wall insulation
Learning from PassivHaus Living	Bea described her lessons, living in Cambridge's first passivhaus
Whole house approach - 1960s retrofit	Shaun's home, now with PV, battery and charging for their EVs
Eco Redevelopment: City Centre Church	Downing Place Church's dramatic eco-refurbishment
DIY 1960s EnerPHit retrofit	Wookey's carefully researched solutions for his largely DIY retrofit

"This is such an impressive, comprehensive & beautiful project!"

Other Talks

Home Ventilation Choices	Vince House described MVHR and alternatives for healthy air
Carbon emissions in builds & retrofits	Low embodied carbon in building projects and the materials
Smart Electric Homes	Using PV, batteries and smart controls for low-carbon electricity
Planning your Retrofit	Getting started starting with easy-wins or whole house approaches
Home Energy Innovation	Mixergy 's smart hot water tank & q-bot 's underfloor insulation robot

"I hadn't thought about embodied carbon in building much at all and learned a huge amount"

New Resources

'[Take Action](#)' provides ideas and advice on numerous ways to cut your home's carbon footprint.
[Case Studies](#) of OEH homes have been expanded to give detailed descriptions of 63 varied eco-homes.

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, Alice Vodden and Alana Sinclair, OEH core team

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



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

