

## ENERGY GROUP – HOME ENERGY, SOLUTIONS AND CHALLENGES

27 January 2024

### Notes from Contributors + Participants

Chris Hart gave a comprehensive introduction to the use of the thermal imaging camera in Halesworth and surroundings areas in November/December last year and outlined some of the lessons that had been learned. The outcomes, and use of the camera, were more complex than originally anticipated. (*Chris – do you want to reproduce your notes here?*)

#### Comments by participants

Sarah confirmed that the use of the camera at her house had identified issues that she was aware of, and had pin-pointed them, enabling her to find some low-tech solutions (such as a rolled-up towel used as a draught excluder for the front door)

*Perhaps old towels could be collected/distributed for this purpose rather than being sent to a charity shop?*

Paul was concerned about how to avoid the problem of condensation once insulation had been fitted. Simon from Waveney Heat Pumps suggested that either a heat recovery system (such as is used in *Passivhaus* building) or finding a way to regulate the draughts (eg, a system of vents) would be needed, or ideally, a de-humidifier to dry the air out (and/or in the coldest rooms).

A house in Bungay, in a conservation area, had received planning permission for external cladding, which was encouraging.

Michael asked if you needed to have a certain standard of insulation before being able to receive a grant for an air source heat pump (ASHP). A flat rate grant of £7,500 is available and the house will need to have been insulated to a reasonable standard

Sarah shared her experience of helping her mother to get an ASHP, which hadn't worked well in an old house which was listed. It was important to go with a good installer and to ensure that you had sufficient, and effective, insulation, otherwise the running costs would be high. Effective insulation (including double glazing) can be very difficult in listed buildings .

Simon (Waveney Heat Pumps) advised that a heat pump will generate sufficient heat for any building, including old ones, and that insulation is critical. ASHPs work at a cooler temperature (35 degrees) than gas/oil boilers, and work well with underfloor heating. If using radiators, these will need to be *twice the size* of conventional radiators AND will need larger pipework. Simon's advice is always to spend money on insulation before considering installing an ASHP.

4 people at the meeting were actively considering installing an ASHP.

Jennie lives in an early '70s bungalow with a warm-air blowing system and wondered if that could be changed to operate with an ASHP. Either radiators or underfloor heating would need to be installed. Radiators need to be twice the size as conventional ones, though you can reduce this by 1/3 by fitting aluminium radiators (though that's expensive...) "If it's working, why change it?" Simon asked.

Oliver had an ASHP installed through Octopus (energy provider), which enabled him to store power overnight in his battery system and sell it back to the grid on demand (at a higher price, as identified and managed by Octopus).

Annette flagged up that we all need to be focussed on moving away from burning fossil fuels, so what can be done to facilitate this move?

### *Energy Efficiency*

Looking at a broader horizon, how can we improve energy efficiency for homes and occupiers who were less affluent and/or in fuel poverty? Chris advised that the Suffolk Warm Homes scheme is available to improve the energy efficiency of households with an EPC (Energy Performance Certificate) of D or below, and an income of less than £31,000. Annette advised that the scheme can be accessed by landlords and home-owners and covers insulation as well as new heating systems (ASHPs only).

Chris introduced the concept of the Draught Busters volunteer group, founded in Reading but now across the country. They go into houses (rented or owned) and at an average expenditure of £25 per property, help to resolve heat-loss issues. Could we set up a Draught Busters in Halesworth and area? Is it something the Men's Shed could facilitate, or are there other groups who might take it on? Could Draught Busters be a way to reach people who might benefit from the Warm Homes scheme? The thermal imaging camera will be available again in March for a month – could it be used to support those in fuel poverty, in conjunction with Warm Homes Suffolk/Draught Busters?

Sal wanted to learn more about external wall insulation, and Adele seconded this. Simon mentioned a company in Harleston – Cornerstone East Anglia – that he was intending to check out, which undertakes this work.

Chris talked about a block of flats in Portsmouth that had been externally insulated, and this had resulted in an internal temperature of 18 degrees, without heating! Jennie mentioned that there was a council estate in Ipswich which had also had this done.

### *Closing questions/issues/ideas*

Michael had picked up on the message that insulation was key. Not being able to install solar panels or an ASHP, he would now focus on insulation.

Chris flagged up that the Resources list had more information available. Groundwork East is a good contact.

Annette recommended a Karcher (brand) "squeegee" for removing excess moisture from the bathroom, as an alternative to a dehumidifier.

Can we cold-call some of the companies/suppliers whose names have come up, to gauge their responses and share feedback with the group? Chris encouraged people do this – *email .....???*

Annette – it's not "cost vs the environment" we should see them as natural bed-fellows. If we save money by burning fewer fossil fuels, we will also help to save the environment and vice versa. We will all have to change our way of living. Look at how much energy your home is using and see what you can do to change things.

We have to campaign for more grants for more people to be able to make changes, and to cover the cost of all elements of installing a complete heating system, not just the heat pump, this can run to £31,000. But how realistic is this? The money needs to be available up-front (not claimed at the end of the work) and planning rules changed to facilitate environmentally-friendly developments. Anita mentioned the importance of solar pv panels in the mix.

Do we need local energy schemes. "Think globally, act locally"

Many thanks to Chris to setting up and managing today's meeting and Rachel for her input and support, even though she was unable to be present on the day.