

Green Homes Sheffield Host










Further information

Host address:	266 Barnsley Rd, Sheffield S4 7AG
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More information about this home

The house is a detached Victorian property and currently has 8 occupants. Our energy use is only about £1500 per year - reasonably low for such a large house.

Low carbon measures on show

-  **Low cost:** draughtproofing and insulation in loftspace
-  **Big insulation works:** some floor and internal wall insulation.
-  **Glazing:** secondary glazing.
-  **Lighting:** some LED lights, low energy white goods
-  **High spec heating:** condensing boiler, some under-floor heating.
-  **Renewable heat:** solar hot water Solar hot water and Defra-approved clean-burn wood stove.
-  **Renewable electricity:** solar PV
-  **Sustainable building materials:** insulation from wool and also from recycled paper. Also used green paints with low levels of VOC (volatile organic compound) emissions and FSC (Forestry Stewardship Council) approved timber.
-  **Lifestyle changes:** raised beds for food growing, and a shift from cars to bicycles

Continues overleaf...



Other info:

Nick Parsons gave us an excellent survey of our energy efficiency options, and this is what we've carried out so far:

Draught-proofing and insulation:

- Draught-proofing mainly from Wickes and B&Q.
- Insulation includes Warmcel, Thermafleece, and NatraHemp Celotex (and expanded polystyrene from an abandoned building project elsewhere). [See note about Thermafleece below].
- Secondary double glazing from Clear View (<http://www.clearviewsg.co.uk/>) in Sheffield
- Double glazed sash windows (the maker has now retired).

These have made the house feel more comfortable, even with a thermostat setting of 19 degrees C.

Energy generation and use

- Solar hotwater is a SolarTwin (now available from GenFit)
- Solar PV from RAI Systems
- 5KW Arrow stove
- LED lightbulbs
- Condensing boilers (Baxi Barcelona and Ideal)
- Energy efficient fridges and washing machines

These have allowed us to keep energy costs down even though fuel prices have risen.

Personal insights

In renovating the house our main aim was to minimise our environmental footprint both in the renovation process and also the ongoing running of the house. We were also interested in making the house as self-sufficient as possible.

We began with the improvements that offered maximum cost savings for minimal outlay - e.g. attic insulation and draught proofing. But we also incorporated aspects such as wall insulation when renovating particular rooms, and whenever we had to carry out replacements or maintenance we tried to do so in as eco a way as possible, whilst keeping an eye on our budget.

This typically meant that our investment costs were some 20% higher than if we'd simply gone with the cheapest option. However we are reaping benefits in the energy efficiency measures that we've put in place.

PS. We had both good and bad experiences with Thermafleece - the sheep's wool originally installed was susceptible to moth, but the manufacturers helpfully sent us 85m² of replacement insulation (we opted for NatraHemp). Any Thermafleece made since 2005 is said to be moth resistant, and guaranteed by Defra.



