

Open Home Profile

### Homeowner Information

* **Name: Iris**
* **Contact (optional):** **iris.partridge@resnet.org.uk**
* **Location: 51 Langton Road, Bristol, BS4 4ER**

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### Home Overview

* **Home Type:** Edwardian mid-terrace
* **Year Built: 1907**
* **Size:** 3 bedroom property with one bathroom upstairs and a WC under the stairs
* **Renovation History:**
	+ History vague until we moved in in 2013.
	+ “new boiler” – but this is now 11 years old!

In the last 3 years:

* + New windows in the back of the house, with extended sills for planned external wall insulation
	+ New front door
	+ New bi-fold doors
	+ New roof, with extended rafters at the back to cover the planned external wall insulation
	+ Solar PV on main roof and extension
	+ House is solid wall but has one cavity wall in the extension at the back of the house which we think was put in about 40 years ago, probably when the bathroom was first put upstairs. This cavity has been filled with insulation

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### Green Features

#### Energy Efficiency

* **Insulation:** loft insulation to recommended height below boards
* **Windows and Doors:** all double glazing, new at the back, old in the front, triple glazed bifold doors
* **Heating System:** condensing boiler, gas, 11 years old, efficient for its time
* **Cooling System:** none
* **Lighting:** LEDs in the kitchen
* **Appliances:** looked at new fridge – decided to buy used instead
* **Smart technologies**: none

#### Renewable Energy

* **Solar Panels:** 9 panels, 3.42kw per panel
* **Battery Storage:** none
* **Other Renewable Sources:** None.

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#### Indoor Environmental Quality

* **Air Quality:** none
* **Ventilation systems** some windows with trickle vents – most not, brick vents on the outside and chimneys
* **Natural Lighting:** side wall windows, none in the loft

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#### Performance and Savings

* **Energy Savings:** not analysed this yet – too busy!
* **Financial Savings:** We had our solar panels and new insulation installed just before the energy crisis hit, so we have saved only in as much as that our bill did not go up as much as it would have otherwise.

#### Challenges and Solutions

* **Challenges Faced:** dealing with several different contractors; not necessarily understanding the choices; preparing the back of the house for external insulation (extending rafters and sills) and still only just having found out that we should be taking the render off before adding the new insulation – allowing the building to breathe; rafters are probably badly insulated – we suspect there may be a cavity without insulation where the rafters are longer than they were before.
* **Solutions Implemented:** longer roof rafters and deeper window sills

#### Future Plans

* **Upcoming Projects:** solving the issues with the bifold doors, as they are faulty; installing external insulation;
* **Long-Term Goals:** install an alternative to gas boiler, possibly a heat pump, new windows at the front; more solar panels and add a battery that can work off-grid.