Athena Electrical Help Local Resident In Making His Home More Energy Efficient

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Last year, we were contacted by a local Stoke Newington resident, David, who has been living in his Victorian house for 19 years. Unfortunately, a couple of years ago, a burst pipe outside his home caused severe flooding of the property and meant that he was forced to completely strip out the basement in order for it dry.

Rather than lament an unfortunate, inconvenient and not to mention costly mishap, David turned his misfortune to his benefit by reconfiguring his house to not only make it far more energy efficient, but save money on energy bills long term.

David began by adding wall and floor insulation, doubling the loft insulation and adding sheet insulation under the rafters. As he points out “insulation is cheap, so that’s a no brainer”. He was also interested in other measures and included a new boiler which uses the waste heat to produce electricity (a Baxi Ecogen .)

Athena Electrical were delighted to get involved in David’s forward thinking plans, and installed solar PV on the roof. We also installed a system called Optimmersion. If the panels are producing more electricity than the house can use, the surplus energy is used to run the immersion heater. In practice, this provides almost all the hot water required in the summer.

The boiler runs off gas, and produces maximum electricity (1kW) when the boiler is running at 20% of its maximum power. Running the boiler at higher powers produces no more electricity. As David says "it’s better to use less power over a long period than high power for a short period. We put in water-based under floor heating in half the house to do that”.

Having retro-fitted his house, David’s energy use is significantly lower, with perhaps the biggest improvement to his drafty Victorian building being the inclusion of insulated plasterboard inside the walls.

We should perhaps also mention, that as part of the whole re-fit, David added double-glazing to the windows and all of these combined energy efficiency measures means that his property has now achieved a Band A energy performance rating which is extremely rare for a Victorian house. He is now producing as much electricity as he uses. The solar panels have produced about 2600 units in a year - mainly in the summer. The boiler has produced about 1700 units - mainly through the winter months.

Being the only MCS accredited solar PV installer in the Hackney area brought David to our door, and we carried out the installation with minimum disruption to him and his home. David says he is ‘very happy’ with the improvements. ‘It feels like the right thing to do”. We wish him all the best for his energy efficient future.

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