



Could a heat pump help you keep costs down and help the environment?

Here we talk to Vanessa Richards from Sustainable Silchester and Founding Member of LCE to find out.

Why install a heat pump?

We wanted to reduce our CO2 emissions, and we thought a heat pump would help. We were also curious as to how well it would work.

What is a heat pump?

Heat flows from hot places to colder places. That's why your cup of tea cools down. A heat pump is a simple machine that reverses this flow. It extracts heat from a cold place and puts it into a warmer place. This is not a new-fangled gadget: the heat pump was invented in 1856, and they have been made in large quantities for over a century.

You have a tiny heat pump in your house - round the back of the fridge. To heat a house, you just need a larger one. There are several types. They vary a bit in efficiency, and quite a lot in cost.

Do I need to make any other changes?

Firstly, improve insulation and draft proofing. This can get complicated, particularly in older houses, so do what you can. THEN do the heat pump.

Is this solution for everyone?

There will be a cost: not everyone can afford it. The heat pump delivers hot water at a lower temperature, so you may need more efficient radiators – not necessarily larger ones, as modern ones produce more output. If you have a combi boiler (no hot water tank) you will need to install a tank – but you will be removing the boiler, so you might not lose any space. If you're lucky enough to have underfloor heating you've won: heat pumps and underfloor systems are perfect partners!

How can I find out if it's the solution for me?

Loddon Community Energy will be offering heat loss surveys for householders on a not-for-profit basis, but in the meantime, we can point you to commercial providers. Even if you don't make the change to a heat pump, it's REALLY worth doing this. You'll be surprised where your house leaks heat and how little you need to spend to fix it!

What does it cost and what are the savings?

It's difficult to compare installation and running costs because they vary from house to house, and everyone's situation is different including access to grants and variations in tariff. However, I can say that we are very pleased with the outcome in terms of our own savings but for me, almost more importantly is the reduction of our carbon footprint.

In January 2021, we used 2741.9 kWh of gas, generating about 600 kg CO2. In January 2022, which had a very similar average temperature, our heat pump used 962 kWh of electricity, generating about 170 kg of CO2. The cost for the months was roughly similar, because gas is a lot cheaper

than electricity at the moment – but as time goes on that will change: there will be more and more cheap renewable electricity generated in the UK, whereas the gas price is going to be affected by international events.

This is a long-term investment – and estate agents are starting to say that houses with heat pumps are more desirable!

How long did the installation take?

In our case it took about two weeks, but it will depend on how much work needs doing to your home to connect the heat pump and associated plumbing to your system.

Any regrets?

NO!

It was much quieter than we expected. The boiler cupboard has a bit more plumbing but no boiler and the heat pump itself is outside.

It's taken a couple of months to get used to it and get the best from it, but we are very happy with our heat pump.

The temperature of the house is much more stable, and generally warmer than we used to have it when we had a gas boiler.

I'm interested, what do I do next?

Do your research!

- Basingstoke Council, Loddon Community Energy and Basingstoke Energy Services can all help you find a reliable installer and have no commercial interest in any of the installers.
- Check that your installer is MCS Certified at <https://mcscertified.com/find-an-installer/> as without this you won't get a grant.
- Get several quotes and – very important – pay at least the deposit by credit card. That way, if the supplier doesn't deliver a "satisfactory product or service", you can get the credit card company to chase them, and in most cases, you will be refunded immediately by the card company.

For obvious reasons the best time to switch is in the summer!

Here are some useful links to help with your research.

<https://www.loddoncommunityenergy.org.uk/>

<https://www.basingstoke.gov.uk/home-energy-grants>

<https://environmentcentre.com/>

<https://www.bes.coop/>