

What about retrofitting a heat pump?

As long as the earth endures, cold and heat, summer and winter,
day and night, shall not cease. *Genesis 8:22*

Back in 2021 we spotted an opportunity offered by Essex County Council to consider installing solar panels under their Solar Together scheme. The scheme offered the opportunity to join other Essex residents and, with the large number of potential participants, ECC then invited competitive offers from qualified companies. We felt this gave us assurance that the firm they would recommend would be sound, and would avoid us having to deal with a large number of potential firms. After the winning firm had been selected, we received their outline quotation. This first step did not require any payment. At that point we had to decide whether to proceed further, the next step being to pay for a survey and specific quotation for our house.

We decided to proceed and found that the specific quotation was very close to the outline quotation. The process from the survey, quotation of costs and estimate of power production went very smoothly, the installation was completed at the quoted cost. Although our roof orientation is not ideal, we have had no regrets. The power we have generated since then has been well beyond expectations and, coupled with a bank of batteries, provided for our needs most of

the year. Based on the calculations at the time, we have probably covered the installation costs by now in power we have generated for ourselves or exported to the grid.

So when in 2024 ECC offered the same arrangement for considering installing a heat pump, we decided to follow this up. The process proved to be as satisfactory as the solar one had been. One word of caution – do not think that this is a viable option if your boiler has broken down. It took us around 6 months from the first contact to installation. There is a lot of preliminary work to be done. This includes getting an Energy Performance Certificate (EPC), assessing the property's current insulation, the size of rooms and existing radiators, as well as the location of the heat pump (outdoors) and the additional water tanks and pipework (indoors). The outside location was not a problem but indoors we have lost most of the airing cupboard space to accommodate the equipment needed.

The installation was completed last May and took just a week. We changed to a pressurised water system, so the header tank in the loft was removed. Radiators in many of the rooms were changed to bigger ones, either larger dimensions or



The equipment installed in the airing cupboard



The heat pump outside the back door

triple panel rather than double. A large, highly insulated hot water tank was installed so that you have plenty of hot water, albeit at a lower temperature so you mix with less cold. It still feels nice and hot out of the taps. To achieve a high efficiency, the flow temperature in a heat pump system is lower than for a gas or oil-fired boiler, and the maximum output from a heat pump is lower than the output of a conventional boiler. Accordingly, the way you run it to keep the water hot and house warm is rather different. Instead of having it on morning and evening to quickly raise the temperatures, you need to keep it running all the time. You can vary the room temperature, e.g. to be cooler at night, but it will not warm up quickly from cold and the radiators never feel hot.

So, some misconceptions:

- Is the house really warm enough on a cold winter's day? Yes, it is, and it's warm all day rather than just twice. On a cold day before we would have had to put the heating back on if we were at home.
- Is it expensive to run if it's on all the time? No, coupled with the solar panels and batteries, we are on a special tariff for heat pumps and import power to boost the batteries at three off-peak times in the day. This is working out much cheaper than last winter with the gas boiler.
- Isn't the heat pump itself noisy? No, it is by our side door and sometimes it is hard to tell if it is running. Tell-tale is the slight cool draft you can feel or looking to see if the fan is turning!
- But they are much more expensive to buy than a gas boiler? Yes, they are,

but at present there is a Government grant that contributes, and it is better for the environment! Coupled with the solar it seems like a win-win.

If you are interested in considering this as an option in your home, we would be happy to provide more details.

Barbara & Dick Garside

This month's eco suggestions

- **Walk or cycle** if we can instead of driving to places near home
- Find out more about **the climate emergency** and what we can do to help

To find out more or to share your ideas on Eco Church please go to the website www.allsaintsspringfield.org.uk/church-life/eco-church or speak to one of the Eco Church Group – Roger McFarland, Nicky Morecroft, Chris McFarland, Ian Poston, Dave Gauld, Beth Cornish, Ann Salmon, Shirley Duggan.

Children's Society

In March we received a letter from the Children's Society to thank us for £220 from our annual box opening. This was in addition to the gift from the Christingle Service in December.

Many of us are concerned for our young generations. Some have the opportunity to contribute to the lives of grandchildren and to the many who attend our uniformed organisations and some are teachers. But for those who do not have such connections the opportunity to contribute to the work of the Society (formerly Church of England Children's Society) is a real opportunity to make a difference to the lives of our young people.

Not only does the Society help children and young people but it makes their voices heard in Government Departments. Currently numbers of young adults leaving care need someone to 'be there' for them, and children with un-met mental health

needs, can go to drop-in centres and be listened to.



The Society also supports the lives of the many young carers and offers them the social life which they are so lacking.

You could consider asking me for a collection box or making a direct donation as and when you can. If you contact the Society at 50, Banner St. London EC1Y 8S or by emailing supportercare@childrenssociety.org.uk or phoning 0300 303 7000 you will be sent updates and information about the campaigns for change which need your support and also much encouraging news about the good that your support is doing in these young lives. This is a great blessing in a time of great need.

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