

Email to all survey respondents

July 2023

Dear survey respondent,

You responded to the Chipping Community Energy (CCE) online survey last year, with regards to expressing initial interest in joining a community-based heating scheme for Chipping.

We have attached a short summary of the project findings to-date which describes the progress made by the CCE Working Group on the project.

The feasibility study has identified the challenges involved in developing community-based heating in England, and whilst we believe we are at the forefront of projects in England attempting to develop a community solution, only a few communities have to date managed to develop a solution, with the benefit of significant financial, technical and logistical support from key local stakeholders such as the local County Council.

As set out in the attached summary there are multiple challenges involved, including the availability of national grant funding for rural communities seeking to develop community-based solutions. This means that the level of savings available to homeowners converting to a heat pump-based solution is significantly influenced by the type of heating system currently installed and the cost of that heat. We have therefore taken the decision to focus on a phased approach, where the first phase concentrates on a smaller Pilot project for those houses on electric heating, which will be paying the highest heating bills.

We will be contacting those property owners with electric heating directly to discuss options for joining a smaller scale Pilot Phase project shortly. If you have not yet responded to the on-line survey, or are not on electric heating, but are very keen to be in the Pilot Phase project (maybe because your current boiler needs to be replaced and you want to convert to low carbon heat anyway), then please let us know via our email address:

info@chippingcommunityenergy.co.uk .

By successfully developing a Pilot Phase we hope to prove the model and make it easier to develop a follow-up project for other homes in Chipping to transition to low carbon heat in the future and will keep you updated on our progress.

Yours Faithfully

Keith Case

Chairman, Chipping Community Energy

Email to all survey respondents on electric heating

July 2023

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You responded to the Chipping Community Energy (CCE) online survey last year, with regards to expressing initial interest in joining a community-based heating scheme for Chipping.

We have attached a short summary of the project findings which describes the progress made by the CCE Working Group on the project.

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As the owner of a property on electric heating we are keen to understand if you would be interested in joining the Pilot Phase project?

The Pilot Phase project will apply for Government funding to develop a community platform to raise the community finance required to build out a network of community owned boreholes. These will provide heat to a ground source heat pump for your property. Whilst some of the details are yet to be resolved, we broadly anticipate that:

- You would benefit from significant savings on your electricity bills, if you heat the building in the same way that you currently heat it with your electric heaters. This is because heat pumps typically generate over 3 units of heat for every unit of electricity used to power the heat pump (i.e. they typically operate at over 300% efficiency).
 - For example, if you currently consume 14,000kWh of electricity per year heating your home & hot water with electric heaters working at 100% efficiency, at the capped Government rate of 34p/kWh, your annual fuel costs for heat will be ~£4,760.
 - If you heated the house to the same level with a ground source heat pump (GSHP), with the improved efficiency, your annual electricity bill cost for heat & hot water would be reduced to ~£1,378.
 - If you heated your home to the same level with an air source heat pump (ASHP) your annual electricity bill for space heating and hot water would be ~£1,559.
- The costs of retrofitting your home to accommodate a heat pump-based heat system, including new pipe work, radiators and control systems will depend on the size and nature of your property. However, the costs for a typical 4 bed property appears to be in the region of £18k. We would work with you to help secure the £6k boiler upgrade grant for GSHP as part of the project. These costs are likely to be similar for both a GSHP or ASHP, but the grant available for an ASHP is £5k.
- You would own, operate and maintain the GSHP and your heat system, as you would an oil boiler. Though GSHP's do not generally require the same level of maintenance and have a typical working life of 20 years.
- To finance, install, operate and maintain the community owned borehole we would need to charge you an annual standing charge. Our target is to offer a standing charge of around £2/day for this, but that rate will

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depend on multiple factors which can only be assessed once we have received responses from those interested in converting to a GSHP and applied for the grant funding.

- If you have suitable space in your front, side or rear garden, the borehole would likely be installed within the curtilage of your property. As you will see from the test borehole at the Community Hall grounds, once completed, the pipework will be below ground level and mostly hidden from view (though we may need a small ground mounted external access manifold). One of the benefits of the project is that even if you do not have space in your garden, there is still a good chance you could join the scheme and benefit from the wider community owned network.

As a community scheme, our aims are to: i) develop the most affordable, low carbon long-term heating option for homeowners; ii) remove barriers to entry for houses seeking to adopt low carbon heating systems (such as high up-front costs); and iii) develop the option that can be most widely deployed in and around Chipping.

Whilst ASHP's may offer a lower cost option for homeowners when accounting for the standing charge in the absence of grants to support the borehole costs, ASHP's face constraints and are not suitable for all properties.

To achieve our aims for this first phase of properties we are also aiming to include **added value** elements to the upcoming grant application (see details below): i) to provide additional support with insulation and fabric efficiency for homeowners, (which could for example include support with planning constraints relating to listed buildings); ii) provide loan support to help with the capital costs to install the system; and iii) provide support to develop a community scale, community owned roof top solar PV scheme (on appropriate local buildings) to offer lower cost electricity to properties joining the scheme, even if they can't accommodate their own solar PV. **Together, we hope that these measures will offer the lowest cost heating solution to those properties joining the scheme.**

Whilst we appreciate that there is still some uncertainty in what we can tell you now:

- Experience from projects like B4RN show the importance and value of community leadership.
- We are working in collaboration with a team who have secured Demonstrator Phase funding from the Green Home Finance Accelerator scheme (a Department of Energy Security and Net Zero funded project). This team is currently developing an application for the second (or Pilot Phase) of this project and are keen to include Chipping in that grant application. The aim, providing there is sufficient interest from homeowners in Chipping, is to include this Pilot Phase project in that grant application to raise the community finance to finance the community boreholes, and the added value elements detailed above. **This would help significantly reduce the costs for this project and the costs to you as a participant.**
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We would be grateful if you could confirm by the 31st July if you are interested in joining the scheme, based on these broad terms.

If you have any questions, please can you let us know our email address: info@chippingcommunityenergy.co.uk .

Yours Faithfully

Keith Case

Chairman, chipping Community Energy