



BC HEAT & WIND PROJECT: FREQUENTLY ASKED QUESTIONS

1. Has the site for the Heat Hub been identified?

- Not yet, this will form part of the Feasibility Study's work. Whilst the Business Park would appear to offer a good location, reducing the length of the heat pipe network runs, i.e, getting the Heat Hub closer to the buildings receiving the heat, is very important. The electricity generated by the Wind Turbine can be more easily carried to a distant Heat Hub.

2. What impact does using the Heat network have on an individual house's carbon output?

- It will reduce it to close to carbon zero.

3. Why do we need a Wind Turbine to power the Heat Network?

- A wind turbine is a good match for heat pumps as it generates most when the heat demand is highest. Having a wind turbine could reduce the costs of running the heat network by up to 30%, this will help us to provide cheaper heat and may be the difference between the Heat Network going ahead or not.

4. What happens when the wind isn't blowing?

- The system will use electricity from the grid if there isn't any available from the Turbine.

5. How much noise does the Wind Turbine make?

- Modern Wind Turbines are very quiet and we're ensuring that the Turbine will be at least 500m from any properties.

6. What about the impact on the sight and sounds of the wind turbine and on wildlife and on tourism?

- A more detailed assessment will be needed on all these matters. The RSPB supports wind turbines. Wildlife impacts, with a correctly designed and located turbine, are minimal, compared to the huge threats they face from the Climate Crisis. There has been no reported effect on tourism in other areas with wind turbines, such as Cumbria, Derbyshire Peak District and Norfolk. A full scrutiny of any Planning Application will be undertaken.

7. Will it be cheaper for the householder?

- Prices for heating are likely to be similar or less than existing costs - and certainly less than the increases in energy prices now being predicted, but with our own Wind Turbine we would also have some protection against rising fuel prices in the future.

8. Would this be an opportunity for installing a second Wind Turbine to supply electricity to enable social housing occupants to transfer from their expensive pre-payment meters?

- An increase in Wind Turbine installations locally would not be realistic at present. It's also difficult to feed electricity from a Wind Turbin directly into peoples' homes.

9. What is the minimum number of houses needed to make this project viable?

- A minimum of 150-200 houses is the initial target for government funding, but set at 100 houses in rural areas.

10. What will the costs to the householder be?

- There are no installation costs, and no costs for replacement of a boiler or for repairs. The householder will pay a standing charge plus a metered cost for usage.

11. How will it be funded?

- In addition to government grants (approx. 50%), funding will be raised by a share issue to cover the remaining 50% plus costs of the Wind Turbine. As long as there's a reasonable return there should be no difficulty raising the capital.

12. Will it pay dividends?

- A fair interest will be paid on the shares but any extra surpluses will be available for Community benefit, not for the shareholders.

13. Can you decide to join the network after it's been installed?

- Yes, as long as there's a network pipe nearby, but there will be a small charge for late joiners.

14. How will you decide where the heat network runs?

- This will be part of the Feasibility Study. An important factor will be the need for a lot of the houses in a street to join the network to make pipework installation viable.

15. Will it still function in a very cold winter?

- The system will be designed to cope with maximum heat loads. It will still be connected to the grid.

16. Will the installation of the network pipes be intrusive?

- Roads will have to be dug-up, but this may offer opportunities such as the installation of fibre-optic broadband cables, or the improvement of the water pipes.

17. What is the time-frame for the project?

- 2 to 3 years at best.

18. How will the thermal energy generated by the ground-source heat pump be stored?

- In a hot water tank located with the Heat Hub.

19. Are you confident that the source of the heat will be sufficient?

- Yes, extra heat can be generated on windier days and stored if not needed immediately.

20. What will the temperature of the heat network's water be?

- Around 60°. Details to be finalised.

21. Is the Heat Network a closed system?

- There would be a Heat Exchanger in each property so the water flowing through the Heat Network is separated from the water flowing through your radiators.