

Calne Without Parish Council
Proposal to establish a Thermal Camera Loan Scheme

1. Background

In April 2021, Calne Without Parish Council declared a Climate Emergency and committed to supporting the Wiltshire Council initiative to reduce emissions and to make the county of Wiltshire carbon neutral by no later than 2030. Home heating is responsible for approximate 14% of carbon emissions in the UK.

Of the people who responded to Calne Without Parish Council's 2022 Climate Survey, 65% cited Household Energy Use as an area that the Parish Council should concentrate on and 43% were interested in information to improve the insulation of their house.

Household energy bills increased by 54% in April to a typical cost of £1,971. The Energy Regulator has warned that a typical UK household could be facing an annual energy bill of about £2,800 from this autumn, with 40% of customers experiencing fuel poverty (defined as spending >10% of household income on heating).

Home insulation can save energy, reducing both greenhouse gas emissions and household bills.

2. Proposal

It is proposed that Calne Without Parish Council:

- a) Purchases two FLIR ONE Gen 3 thermal imaging cameras at a price not exceeding £453.60 including VAT (£378.00 exl VAT).

The FLIR ONE is smartphone attachment thermal imaging camera, that is easy to use. They are plugged into a mobile phone that connects the camera to an App that reveals the spots in a home that are losing heat. The App enable the user to use the camera, measure temperatures and take both pictures and videos.

It is proposed to purchase two cameras – one iOS-compatible version and one Android-compatible version.

- b) Establishes a free scheme to loan the thermal camera out to residents of Calne Without Parish Council. This scheme would managed by the Climate Emergency and Environment Working Group who would define the process for hire, including Terms of Hire.

Hiring would be administered by a designated Device Controller, who would hold the device in their home, and be the point of contact for residents to collect the device from and return it to. The Device Controller will maintain records and report back to the Working Group on a regular basis. This would be provided as a free service to residents, but the Device Controller would require hirers to provide proof of identification and address, and sign for the loan of the camera.

- c) Promotes the scheme to residents, using a variety of communication methods, including the Green Energy Event planned for Saturday 3rd September, the Council's columns in Inspire and The Villages, and through the Council's website and social media accounts.

The proposal will provide residents with a tool to identify points of heat loss from their homes, enabling them to take appropriate insulation measures. It will make a small, but practical contribution to reducing household emissions in the Parish, whilst also helping residents to reduce their energy bills.

3. Supporting Notes

Similar Schemes

Octopus Energy operate a free loan scheme using a pool of 200 FLIR ONE thermal cameras. The scheme is popular, with 3,500 customers being helped in 2021/22. Customers apply and are posted the camera for a limited duration and are required to post it back using the same box and a prepaid returns label. More about the scheme is available at: <https://octopus.energy/blog/flir-thermal-cameras/>.

A number of councils are running similar schemes including:

- Linton Parish Council: <https://lintonpc-herefordshire.gov.uk/green-home-energy/> . This website includes a link to a set of Terms of Hire.
- Walmer Town Council: <https://www.kentononline.co.uk/deal/news/how-to-find-out-if-your-home-is-leaking-heat-260537/>
- South Cambs District Council: <https://www.scambs.gov.uk/community-development/thermal-imaging-camera/>
- South Somerset District Council: <https://www.bbc.co.uk/news/uk-england-somerset-60023918>
- Sidmouth Town Council: <https://sidmouth.gov.uk/is-your-house-leaking-heat/>
- Frome Town Council: <https://www.frometowncouncil.gov.uk/your-community/sustainability-and-resilience/energy/thermal-imaging-camera/>

Choice of Device

The FLIR ONE Gen 3 device is proposed for the following reasons:

- It is a cost-effective device, providing a good balance between price and utility.
- It ranks highly on consumer sites. (<https://www.digitalcameraworld.com/uk/buying-guides/best-thermal-imaging-camera>)
- The linkage to the SmartPhone will enable the user to easily capture records from home surveys.
- Confidence is gained from its selection by Octopus Energy for a large-scale lending programme and from user feedback.

The device is compatible with either an iOS Smartphone with a USB-C port, or an Android Smartphone (with USB-C port). It is proposed to purchase one of each.

The quoted price of £226.80 each (incl VAT) is taken from the manufacturer's website.

Seasonal Use

The be effective, the outside temperature needs to be below 10°C. This effectively limits the operating season to October through to March.

Insulation approaches

There are a range of practical solutions to heat loss. In addition to techniques such as loft insulation and cavity wall insulation, a range of low-cost techniques exist, such as:

- Doors – draught excluders, letterbox brushes, internal curtains.
- Windows – close curtains, curtain liners, silicone sealant, secondary glazing window film.
- Loft hatches – loft hatch insulation pillow.
- Chimneys – fireplace guard, removable chimney balloon.
- Floorboards – rugs, filler.
- Hot water tank and pipework – cylinder jacket, foam tubes.

4. Recommendation

It is recommended that the Council approves the purchase of one FLIR ONE Gen 3 – iOS and one FLIR ONE Gen 3 - Android thermal imaging camera, at a total price not exceeding £453.60 including VAT, and establishes a free loans scheme for residents of Calne Without Parish Council, to be managed by the Climate Emergency and Environment Working Group.

Cllr John Barnes