

LOW CARBON THWING & OCTON

Renewable energy projects in
Thwing & Octon

Helen Troup / 10th October 2020

AGENDA



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THWING & OCTON PARISH COUNCIL HAS SECURED A GRANT TO EXPLORE RENEWABLE ENERGY FOR THE COMMUNITY

This project is supported by the Department for Business, Energy & Industrial Strategy (BEIS) funded Rural Community Energy Fund (RCEF) which is managed by the North East Yorkshire and Humber Energy Hub and administered by Tees Valley Combined Authority.

The Parish Council took this opportunity to develop a plan to future-proof the Parish from the coming bans on coal and wood for heating, and increasing resilience for electricity price volatility, while contributing to the UK's decarbonisation targets.

The study funded by RCEF will be conducted by Avieco.



Helen Troup



Luiza Haussen



Ollie Cowburn

WE WILL WORK WITH YOU TO ASSESS OPTIONS FOR RENEWABLE HEAT AND POWER

The project will explore a number of options to decarbonise heat and power:

- **Large-scale ground mounted solar PV**
- **Solar PV on rooftops**
- **A shared heat network supplying homes and businesses with low carbon heat**
- **Efficient, renewably-powered lampposts**
- **Recommendations on low carbon heat for individual homes**

The objective of this project is to identify which technologies will best meet the needs of the village, reducing carbon impacts, moving away from oil and coal, and saving money on energy.



EACH OPTION HAS BENEFITS AND CHALLENGES: LARGE SCALE SOLAR PV

Benefits:

- Big carbon savings
- Potential for the community to have shared ownership
- Financial return to the host and any community shareholders
- A third party could pay for the installation and offer low-cost power

Challenges:

- Need to identify suitable land parcel to install the solar panels
- Can take a long time to negotiate with the electricity grid, landowners, etc
- Lower financial returns now that the feed-in tariff scheme is closed



EACH OPTION HAS BENEFITS AND CHALLENGES: ROOFTOP SOLAR PV

Benefits:

- Individual households and businesses get zero-carbon, free electricity
- Easy to install, with limited disruption to you and village life
- Some schemes still offer free installation

Challenges:

- Not all buildings will be suitable
- Lower financial returns now that the feed-in tariff scheme is closed
- Bigger visual impact on the village



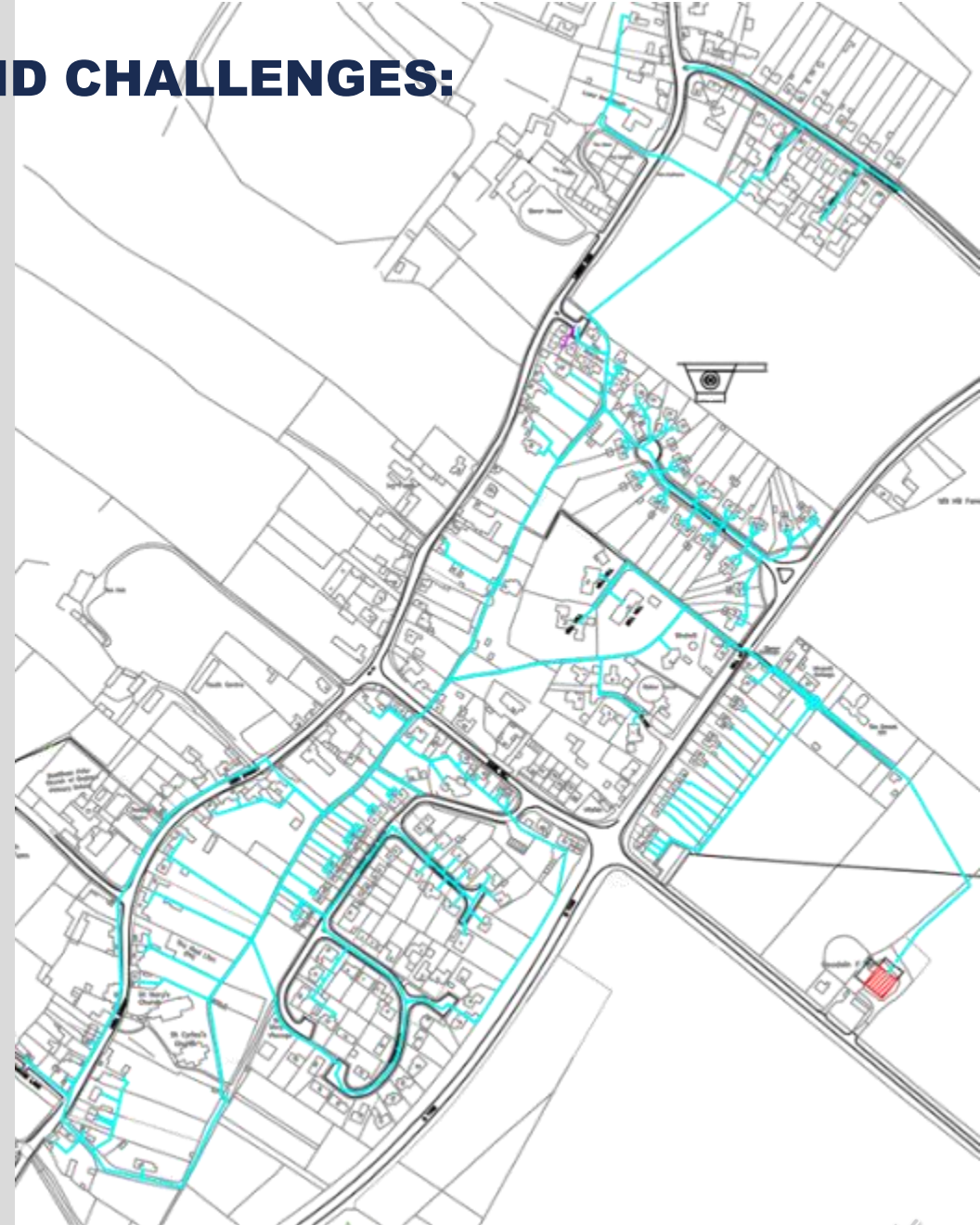
EACH OPTION HAS BENEFITS AND CHALLENGES: HEAT NETWORK

Benefits:

- Get the whole parish off oil and coal with one new heating system
- Big carbon savings
- Cost savings to residents compared to oil
- Can deliver high-temperature heat, so more compatible with your existing heating systems
- Would improve air quality, and reduce vehicle movements in the village

Challenges:

- Long-term infrastructure project – with significant capital cost and complexity
- Laying new pipework will be disruptive to the village
- Needs a sufficiently high heat demand to make this viable



EACH OPTION HAS BENEFITS AND CHALLENGES: RENEWABLY-POWERED LAMPPOSTS

Benefits:

- Reduce running costs for street lighting in the parish
- Power streetlighting with zero-carbon electricity
- Extend streetlight lifespan
- Option to add more streetlamps and improve light levels in the parish

Challenges:

- Multiple varieties of streetlamps in the parish
- Need to work with the District Council to progress



EACH OPTION HAS BENEFITS AND CHALLENGES: RECOMMENDATIONS FOR YOUR HOME

Benefits:

- Information packs covering a range of options for how to decarbonise your home
- Indicate potential suitable funding streams to support you
- Access wider support e.g. the Green Homes Grant

Challenges:

- Relies on each household and business to make changes
- Lower total carbon savings
- Likely to need to install and/or buy new equipment yourself



THERE ARE A NUMBER OF POTENTIAL SITES WITHIN THE PARISH FOR LARGER SYSTEMS AND ROOFTOP OPTIONS



Potential locations within the parish
Renewable energy projects in Thwing & Octon

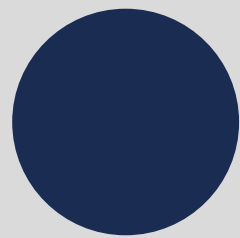
OVER THE COMING MONTHS, WE WILL DEVELOP & COMPARE THESE OPTIONS FOR YOU & THE PARISH COUNCIL



WE NEED YOUR HELP TO MAKE SURE THIS ASSESSMENT IS ACCURATE

- **Complete an energy questionnaire, if not already done**
- **Vote for your favourite projects**
- **Ask questions, raise concerns**





Q&A



**SUSTAIN-
ABILITY.
MORE THAN
A WORD.**

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