

District Heating System - Frequently Asked Questions

How does the project actually work, does it pump hot water to our homes and is this for our hot taps or does it heat radiators or something, how does it all actually work?

The boiler heats water through burning 'biomass' (in this case, wood chip or pellet) in a chamber. This heats the water in the system which is then pumped around a system of pipes running from the boiler to any connected houses/buildings. The water from the system doesn't generally enter the house or building, the heat is passed from the loop to the house's system via a heat exchanger, which is a plate that conducts the heat from one side to the other. The heated water on your side is then passed around your house system as normal, as heating for radiators or hot water as needed. You don't need to remove your houses boiler; a lot of people keep this as a back up.

How does it all get connected up to each home?

See Above - heat exchanger at the connection point between the biomass system and your house.

Is there any smoke, dust or noise from the boiler plant?

There are minimal emissions from the boiler flue. The burning process is roughly 96% efficient, so heat, smoke etc, is not lost through the burning process like in a power station for example.

How many delivery Lorries will visit per month to the plant?

Depends on the boiler size but this would be arranged by the operators if this model for the project is adopted. Generally, on bigger systems, the boiler would have a larger storage area for fuel so fewer deliveries are required so less than 1 per month.

Will the operators of the plant look after the maintenance, service and inspection side of the plant?

Yes

Who maintains the network, not just the boiler plant but the pipelines to each home?

The operator

What would the height, width and depth of the building be?

Again, this is dependent on the boiler size but is generally timber clad outbuildings smaller than agricultural buildings but larger than garden sheds, (style example photo right)



What space would be needed (acreage wise) for the boiler plant site?

It wouldn't even be an acre - the outbuilding, hard-standing for vehicles. Parking and turning.

What Colour would it be?

The building can be anything - usually these are timber clad but they can be green steel sheeting style agricultural buildings also. This will largely be dependent on planning permission but is often open for negotiation.

Does it have any negative effect on wildlife, bird-life or human health?

No - ecology and environmental health departments of the council during a planning application would be consulted and any objection from these consultees would require further work to satisfy otherwise it would be refused. Generally, it's just a large shed in a field or converted outbuilding if on a farm.

Are you looking into potential of solar for the rest the Parish Council land off Torksey Ferry Road, if it could be connected via the power station to make a cheaper connection point if the DNO agrees?

The connection to the grid is still dependent on Western Power. While it's encouraging that the power station thinks there is potential capacity, ultimately it isn't their call. It will depend on if/when western power has capacity and at that point.

The fuel for the boiler? What exactly is it? is it small willow wood pellets?

Biomass is an all encompassing term but in this case and most boilers, it is wood (chip, pellet or logs). This one will likely be chip or pellet.

Do you have a suitable local supplier for the fuel for the plant so that there is no possibility of it running out of fuel and service loss at any time?

The supply of biomass fuel is a growing sector in the industry so there is no risk of the fuel running out.

Post installation, if the public have any queries, questions or concerns would there be a point of contact number, email for the operator of the plant and network, eg someone notices that the gate to the plant has been broken into or damaged who do they call in an emergency?

A company or person is generally appointed to maintain and be a contact point so there would be someone to call etc.

The end users, the residents who sign up to the system, who do they get bills from for their heating?

The investors would appoint a billing company such as energy billing ltd to bill the end users on their behalf

Who are the investors for the project? And are they one and the same as the potential operators of the plant/network?

Strand energy is the facilitators/operators of the potential project.

What happens at the end of the 25/30-year tenancy, can the tenants agree to renew or continue the plant for another 20 or 30 years to ensure the system continues to operate and provide cheaper heating?

While the tariff might be over by that point, as long as the boiler is operational it can stay in place for as long as possible, or replaced with another. Tenants can agree to another term if satisfied to do so. Terms would be drawn up toward the end of the contract. Or we can decommission plant equipment.

How frequent would prices change for customers of the system?

The price would be fixed for a certain number of years, only increasing with nationwide RPI (usually approx. 2%)

What ideas do you have for a public consultation event and to allay public questions or concerns?

The consultation is booked in for 21st October pending agreement with the Parish Council, and will be in the form of an open day.

What are your thoughts and ideas on aiming to have 90+% of the village connected to the system how will the public be encouraged to sign up?

The motivation will likely be in the form of a payment up front followed by cheaper bills, reduction in carbon footprint etc while also providing energy security against the uncertainty.

Post consultation, theoretically speaking, if the project went ahead, what would the sign-up process be is it a form they have to sign or complete?

First, a letter of intent would be required or a petition like form gathered to clarify the numbers who are in favour of the scheme. Secondly, if the project moves further, a sign-up document would need to be completed and signed further down the line.

Woodbeck, what are the options for Woodbeck as there may be concerns that 'Rampton' are getting cheap bills but nothing for Woodbeck

The potential a second boiler closer to Woodbeck is the potential answer. This would be dependent on having land available however from a landowner willing to have the boiler on their land.

Is there another biomass boiler close by?

Yes, Rampton Hospital installed 2 about 25 years ago next to the hospital to feed the hospitals heating system, there are also one or two smaller versions on local homes.

Will the project go-ahead?

The open day at Rampton Village Hall on 21st October will give a chance for residents to discuss with the energy consultants the pro's, cons and questions about the project, feedback received to the parish council from this event, plus anything in writing or email to the parish council will then be taken into consideration by the parish council, the parish council would then debate the matter at the October meeting and decide whether or not to proceed with the project. If the project is decided to proceed, it would then be dependent on planning permission from Bassetlaw DC.

For Further information, come along to the open day on 21st October to chat with Chris McDonagh & Stuart Robinson the Energy Consultants, however, if you have any other questions, please email them to

clerk@ramptonandwoodbeck-pc.gov.uk and we shall pass your question on to Chris and Stuart for an answer.