Woolavington Biomass District Heating

Questions and Answers

Why are you putting the plant room by the car park at the side of the playground?

We consulted with SDC planners about their preferred location for the plant room. Their preference was land next to the car park on the playing field because it isn't really used much. The location has some benefits to keep development costs down such as existing drainage and a nearby gas supply to provide back up to the bio-mass system.

There will be some longer terms benefits as the system has the potential for providing heating and hot water for the Parish Council's plans to develop a sports HUB.

How will the boiler impact Air Quality?

The biomass appliance are DEFRA clean air approved appliances so they pass the Government's standards. They burn only accredited, virgin wood pellet. The chimney height is calculated to ensure it meets strict requirements from building control and that there is no impact on local air quality.

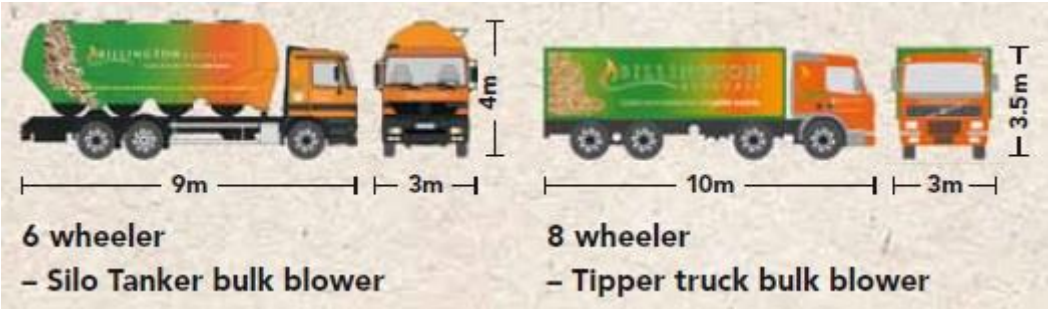
If there is a gas pipe why can't I have gas central heating?

The gas available in the area is not enough for individual appliances but is enough to back up the Biomass system in a District Heating System given how heat is shared more evenly throughout the network.

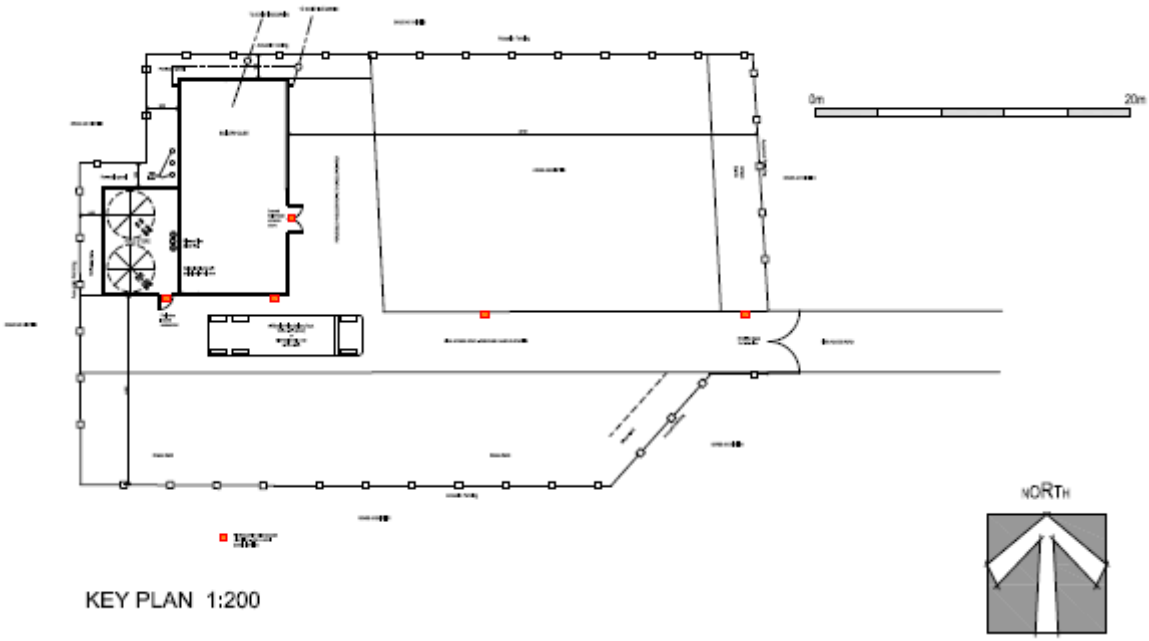
How often will deliveries of biomass be made and how big will the trucks be that bring it?

Fuel deliveries will be made in day time hours and restricted between the hours of 9am and 3pm to alleviate concerns about risks to children playing nearby.

Fuel will be delivered every 1 – 2 weeks in winter and every 3 – 4 weeks in summer. Vehicles are typically 6 wheeler or 8 wheeler, similar to bin Lorries.



The fuel deliveries are made behind the acoustic security fence and take about 45 to 60 minutes from start to finish.

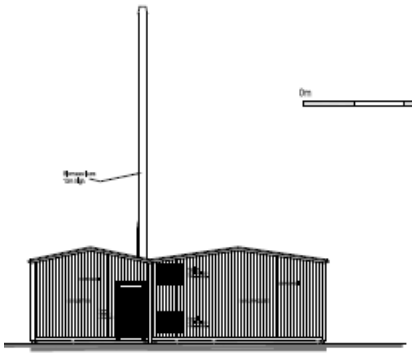


My address isn't included in the plan. Is there any chance I can be part of this in future?

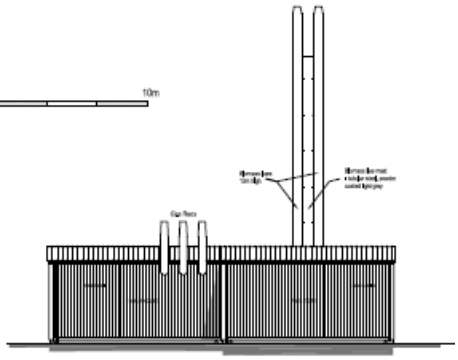
If the scheme is popular, it might be possible to add more biomass and gas modules so that more homes can be connected. Or, if extending this particular scheme isn't possible, similar energy centres could be developed in other areas of the village.

Is this going to look really ugly and be really noisy and open to vandalism?

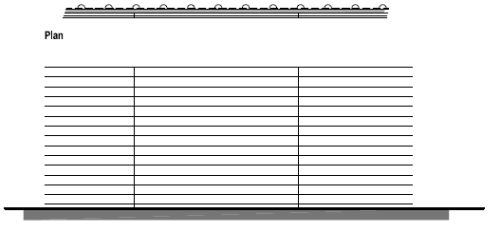
The energy centre will be developed to have a modern appearance and will be surrounded largely by a fence designed to give security and reduce any noise.

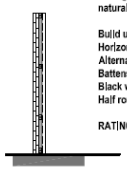


View A - South Elevation



View C - West Elevation





1.8m height
Facing panel of horizontally fixed 125mm face size, natural finish treated timber boards

Build up:
Horizontally fixed 35 x 145mm t&g timber boards
Alternatively & horizontally fixed 35 x 145mm t&g timber boards
Battens to rear with Rockwool RW3 acoustic insulation between
Black woven plastic mesh to rear, securing acoustic batts in place
Half round posts at 350mm centres to rear.

RATING according to BS EN 1793-2;1998 DLr = 32dB

Proposed Acoustic Fence nts

PRECEDENT SCHEMES

Do not scale - use given dimensions only
Work to larger scale information only
To be read in accordance with all other project documentation
If conflict exists, please inform Hub Architecture
Refer to Drawing Issue Register for latest revision issue

MATERIALS:

Roof - trapezoidal metal sheeting. Colour grey

Walls - square cut cedar cladding boards. Natural finish.

Rainwater goods - black, smooth cast iron effect round and half round.

External Circulation Areas - grass, gravel and permeable surfacing to driveway.

Flues - Manufactured to BS EN 1856-1, 13m height. Twin-wall, with 316 grade stainless steel liner and 304 grade stainless steel outer.
Biomass flues each 360mm outside diameter. Gas flues each 310 mm outside diameter.

Acoustic Fence - 1.8m height (standard domestic fence height).

The free standing flue will be visible from the plant room, however, it will be powder coated in a blue/grey to blend in with the skyline.

What is this going to cost me?

Biomass fuel is low carbon and attracts a Renewable Heat Incentive payment from the government which helps to pay for the system.

Homeowners told us in summer 2016 that the cost of putting the new heating system into their homes was really important to them. If they couldn't afford the upfront costs they would have to decide not to take it up. So, the project partners have taken the decision to restructure the tariff to enable the scheme to be provided free of charge to all households in the current scope.

The cost of domestic equipment will be repaid on a sliding scale over 9 years. This means that if a homeowner decides to come out of the system they will have to pay back a proportion of the costs, less and less as each year passes until it is zero at year 10. No charges or conditions will be placed on the property. If there is a sale and the new householder doesn't connect, the seller repays the cost of the equipment at the date they sell the home. If someone dies before the end of the 9 years re-payment period any money that is still owed will be written off.

What will heating cost me?

There are two proposals.

(A) The first charge or tariff is based on 200 homes being connected, the fact that homeowners will repay installation costs over 9 years, and a household consumption rate of 8500 kWh per annum:

- The Rate per kWh is 8.7p (incl VAT)
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- The Daily Standing Charge is 23.1p (incl VAT)

(B) The alternative is based on 200 homes being connected, the fact that homeowners will repay installation costs over 9 years, and the first 1000 kWh/year is free to incentivise the system use with an increased Daily Standing Charge:

- Rate is 8.7p (incl VAT)
- Daily Standing Charge is 36.75p (incl VAT)

This will help to ensure the system operates as efficiently as possible. Each household will only pay for what they use. A typical bill for average consumption is likely to be about £60 per month.

How do I know that the cost of my heating isn't going to go up massively after the first few years?

The scheme will have an agreed tariff formula that is set by SDC and partners and will be Heat Trust Compliant. The final tariff will be confirmed once final connection numbers are known. The more households sign up the cheaper to run the system will be. The Heat Trust sets out rules which the energy provider, npower, must follow:

- Support for customers who are vulnerable and may need more heating than most people
- The obligations that the suppliers of heating have to abide by
- Customer service and reporting a fault or emergency
- The process for customers joining and leaving the biomass heating scheme
- How heat meters work
- How heat Interface Units (HIUs) work
- How heating bills and charges are calculated
- The arrangements for paying the bills and how any heating debt is managed
- Suspension and resumptions of service processes
- Complaint handling and independent complaint handling
- Privacy policy and data protection