



▶ **WHAT IS A COMMUNITY ENERGY NETWORK/ENERGY CENTRE/DISTRICT HEATING?**

The St Mark's Square development receives heat and hot water from a community energy network. A community energy network is made up of an energy centre which generates heat and hot water and is located near to or on the site it is connected to. Once the heat and hot water has been generated, it is then distributed to each customer via district heating pipework. The pipework installed contains a layer of thermal insulation to ensure the heat is retained within the pipe.

▶ **WHY IS THE PROPERTY CONNECTED TO A COMMUNITY ENERGY NETWORK?**

Community energy and district heating schemes have been installed for the past 50 years. The UK Government is supporting this Scandinavian technology as a method to reduce the UK's carbon emissions by 80% by 2050, encouraging new developments to adopt community energy schemes.

▶ **WHAT IS AN ENERGY CENTRE?**

An energy centre is a building that houses the boilers and associated equipment to generate the heat and hot water for each property. Your energy centre is located in the centre of the St Mark's Square development.

▶ **WHAT EQUIPMENT IS IN THE ENERGY CENTRE?**

The energy centre on your development contains gas fired boilers, a combined heat and power unit (CHP) and large thermal storage. This enables the system to be operated to maximum efficiency to reduce the cost of operations. The CHP is a gas engine that is part of the low carbon energy generation solution that is installed within the Energy Centre to produce heat and electricity. The CHP and the gas boilers are used to ensure your heat and hot water demands for consumption are met. Please see the illustration below on how a community energy scheme works.

District heating pipework distributes the heat and hot water around the development



CHP & gas fired boilers generating heat and hot water



Hydraulic Interface Unit (HIU)
The interface in each property that provides instantaneous heat and hot water



▶ **WHO IS VITAL ENERGI AND WHO IS THE ST MARK'S SQUARE ESCo?**

Vital Energi is an energy provider specialising in energy generation solutions (energy centre schemes), the distribution of the heat and hot water (via district heating pipes) and the management and operation of these systems. Vital Energi have been working on district heating and community energy schemes for over 25 years and we have a highly experienced team working on your project. Our team of engineers are available to respond to manage plant equipment 24 hours a day, 7 days a week, 365 days a year.

Vital Energi runs the Energy Services Company (ESCo) for the St Mark's Square development and is responsible for ensuring that the energy centre provides heat and hot water to each property. The St Mark's ESCo is the heat supply company, it manages the heat supply and is the name that you will see on your bills and letters.

INSIDE THE HOME

An environmentally friendly community energy scheme provides heating and hot water to each property through a pipework system below and above ground.

A Hydraulic Interface Unit (HIU) is found inside the property. This unit provides instant heat and hot water to the property on demand. The HIU unit is usually found in the service cupboard.

How it works: The domestic hot water is generated instantaneously via a plate heat exchanger as and when hot water is required - there is no storage of hot water within the property.

The benefit: The units are fitted with a heat meter which uses highly accurate ultrasonic technology to measure heat consumption. This means that you only pay for the heat that you use.



This is an example internal view of the HIU that will be protected with a secure sealed outer case in your home. Your heat meter will sit outside of the case near to the HIU for you to access.

METERING & BILLING

Metering and billing is an important aspect of community energy schemes. All meters at St Mark's Square can be remotely read, allowing Vital Energi to accurately monitor and bill each property for the heat you consume.

HEAT METER



GENERAL ENQUIRIES



Our office is open between 8am and 6pm Monday to Friday.

For general enquiries please see the telephone number in your welcome pack.

MAINTENANCE



Available 24 hours a day, 7 days a week.

For maintenance requirements please see the telephone number in your welcome pack.



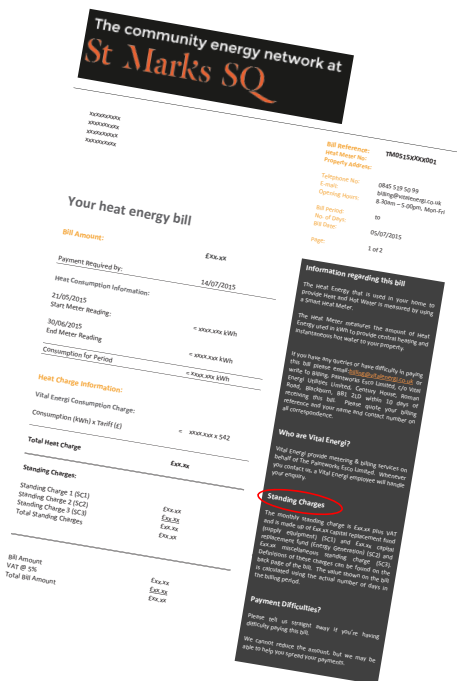
FREQUENTLY ASKED QUESTIONS

How do you charge me for what I consume and what will be included on my bill?

Within your home is a "Hydraulic Interface Unit" (HIU) that includes a heat meter to measure the amount of energy that you use. This meter is read remotely at least once a month; these readings are then used to calculate your bill, ensuring you only pay for what you consume.

There are two elements to your bill:

1. Unit charge, paid per kilowatt hour (kWh) based on your heat consumption.
2. Standing charges are paid monthly, this information is shown on the back page of your bill.



How is the unit rate calculated?

The unit rate is calculated on the basis of the cost to supply gas to the energy centre.

How often does the unit rate change?

The unit rate will be reviewed annually.

Who maintains the Hydraulic Interface Unit (HIU)?

The HIU is maintained by Vital Energi on a fully comprehensive basis.

Can I turn it on and off when I want to?

Yes. There is no difference in operation to a conventional heating system.

Can I change my energy supplier?

No. Due to the nature of the scheme it is not possible for residents to change suppliers for the supply of heat energy (hot water). This does not apply to your electricity supply.

Can I control the temperature the same way as a conventional heating system?

Yes. There is no difference in the way you control your system i.e. with a programmer, thermostats and/or radiator valves.

How do I know I'm only paying for what I use?

Each property is fitted with the latest energy metering technology. This tells you and the St Mark's Square ECo exactly how much energy you have used. This information is transmitted to Vital Energi via remote monitoring to avoid the necessity to access your property.

What to do if there is a problem on your community energy project?

Vital Energi provide a 24/7, 365 days a year service to deal with problems. Should a failure in your system occur for any reason, they will respond and rectify within agreed call-out times, as detailed in your customer supply agreement. Please see the telephone numbers in your welcome pack.

▶ **WHAT YOU WILL BE CHARGED FOR YOUR HEAT**

Your tariff is made up of two parts and will be charged on a monthly basis:

Part 1) Your Heat Consumption Charge is 6.11p*. This is the cost of heat per kWh that you consume.

Part 2) You will be charged a standing charge of £331.20 annually, which is split across 12 months and billed monthly.

(1) Heat Consumption Charge (excluding VAT)	(2) Standing Charge (excluding VAT)
6.11p per kWh consumed	£27.60 per month

*Please note that these charges apply as of August 2018 and will be subject to price reviews as set out in the customer supply agreement.

▶ **WHAT IS A STANDING CHARGE AND WHAT DOES IT PAY FOR?**

The standing charge covers the operational costs of providing heat and hot water to your property. It includes:

- 24/7 operation and maintenance of the Energy Centre with engineers on hand 365 days a year.
- Customer services team on hand to answer your queries.
- Remote meter readings are taken once per month. You are not required to provide meter readings and using this remote technology means that you only pay for the heat and hot water that you use.
- 25 year warranty for the whole energy scheme, including full maintenance and repair of the Hydraulic Interface Unit (HIU) installed within your property.
- Management and production of your bills.

▶ **HOW THIS COMPARES TO A CONVENTIONAL BOILER**

This table provides a comparison of costs between heat supplied from the St Mark's Square community energy network and an individual conventional gas fired combi boiler for a typical 3 bed apartment.

Cost Comparison between Conventional Gas Boiler Heating and Hot Water vs District Heating

Annual Demand (For Heating & Hot Water)		3500 kWh	
Conventional - Average of Big Six Suppliers		District Energy Charge - Private	
Fixed Charges		Fixed Charges	
	Rate Units		Rate Units
Boiler servicing / maintenance	£ 17.08 £/month	Fixed charge	£ 27.60 £/month
Boiler replacement	£ 10.64 £/month		
Monthly fixed cost	£ 27.72 £/month	Monthly fixed cost	£ 27.60 £/month
Annual fixed cost	£ 332.67 £/year	Annual fixed cost	£ 331.20 £/year
Variable Charges		Variable Charges	
	Rate Units		Rate Units
Seasonal boiler efficiency	81% %	Heat consumption	3,500 kWh
Gas consumption	4,321 kWh	Heat charge	6.110 p/kWh
Residential gas variable charge	6.007 p/kWh	Annual variable cost	£ 213.85 £/year
Annual variable cost	£ 259.56 £/year		
Annual Cost		Annual Cost	
Variable	£ 259.56	Variable	£ 213.85
Fixed	£ 332.67	Fixed	£ 331.20
Sub-Total	£ 592.23	Sub-Total	£ 545.05
VAT included		VAT at 5%	£ 27.25
Total	£ 592.23	Total	£ 572.30

- ▶ The St Mark's Square community energy network will be compliant with the heat trust, which is a third party voluntary scheme to protect the interests of householders and micro businesses connected to heat networks.
- ▶ A welcome pack will be provided to all home owners in which information included in this leaflet will be expanded upon.