BARNWELL POINT HEATING SYSTEM MANUAL

A guide to the heating & hot-water in your home





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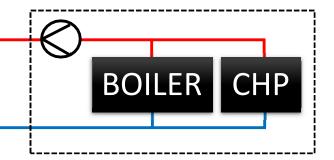
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1. Overview of the heating & hot-water system?

- Your apartment is part of a **district heating system (DHS)** that is supplied form a central plant located in the basement
- Gas fired **Combined Heat & Power** Units (CHP's) which simultaneously generate hot water for the heating network and electricity for landlord equipment
- High efficiency **condensing gas boilers** provide any additional hot water required for the heating network
- Hot water from the central plant is **pumped** around the building as required to supply each apartment with their heating and domestic hot water needs
- Each apartment has a heating circuit that can be **controlled** locally in terms of the **times and temperatures** required
- Instantaneous hot water is provided within each apartment from a heat exchanger when a hot tap or shower is turned on, so there is no need for a hot water storage tank
- Individual heat meters are installed to record the actual units of heating and hot water consumed for accurate billing purposes





2. What difference does district heating make to me?

- The district heating system (DHS) is generally more efficient than a conventional heating system (gas/oil/electricity) and is more economical to run and better for the environment
- The system is **safer** and **quieter** as there is no combustion or waste gases flues inside the apartments
- The apartments achieve a high score under the Building Energy Rating (BER) procedure operated by Sustainable Energy Authority Ireland
- As new, more efficient heating technologies become available it is possible to incorporate them easily which **future proofs** the ongoing viability of the system

3. How is the DHS managed?

- Kaizen Energy are contracted to operate, manage, maintain the system.
- Kaizen Energy will take meter readings every two months and issue you with a heat bill. You have 14 days to pay this bill in line with standard utilities.
- Apartment controllers are installed in each apartment which makes it easy for residents to management their individual heating & hot water usage and costs.
- Your heat meter is located inside your HIU should you wish to double check the meter reading on the bills issued.



How does the DHS provide heating & hot-water to my apartment?

HIU with cover





Legend:

- 1 District heating supply
- 2 District heating return
- 3 Cold water mains
- 4 Domestic cold water (optional)
- 5 Domestic hot water
- 6 Heating supply
- 7 Heating return

- The DHS supplies low pressure hot water to the Danfoss Heat Interface Unit (HIU) within your apartment (pipes 1 & 2)
- The HIU provides domestic hot-water when you turn on your hot taps or shower. This is provided instantaneously via the heat exchanger in the HIU (pipes 3 & 5) so there is no storage tank required
- The HIU provides heating to your radiator heating circuit (pipes 6 & 7) when your request it via your Danfoss controller/thermostat
- The individual apartment heat meter is also located within the HIU on the supply and return pipework.



4. How do I control my heating?



- Your apartment is fitted with a Danfoss TP One-M controller to control your heating.
- You only need to control your heating on and off based on your desired temperature and times that suit you. Your hot water is always available and does not need to be timed on or off.
- You will need to setup you controller to suit your own requirements:
 - A copy of the user manual for the controller should be in your apartment or can be downloaded from the Customer information section of the Kaizen Energy website <u>www.kaizenenergy.ie</u>
 - You can view an online instruction guide here: <u>https://tpone.danfoss.com/</u>



5. Trouble Shooting Guide

If you have a problem with your heating or hot-water, please follow these simple checks, starting at the top:

Problem	Check	Result	Action
No	Is there a power cut or	No	Continue checks
	some other central problem affecting all apartments?	Yes	Please contact Kaizen Energy as the main system pumps and boilers may be down
Heating AND			
No Hot Water	Is the temperature of Pipes 1&2 into your HIU Hot?	Yes	Contact your landlord (likely a local apartment issue)
		No	Contact Kaizen Energy
	I've tried all the above and I still have the problem	Yes	Contact Kaizen Energy
Have Hot Water BUT No Heating	Is there heating in any radiators	No	Continue checks
		Yes	Check the radiator TRVs are open (e.g. setting 5)
	Are the radiators cold at the top and hot at the bottom	No	Continue checks
		Yes	Contact your landlord (likely to be air trapped in the radiator that requires bleeding)
	Is your timeclock controller scheduled on and at a high temperature (e.g. 21°C)	Yes	Continue checks
		No	Follow the user guide to schedule your heating times and temperatures
	I've tried all the above and I still have the problem	Yes	Contact Kaizen Energy
Have Heating BUT No Hot Water	Do you have any water?	Yes	Continue checks
		No	Contact your landlord
	Is there water hot in any of your taps or shower?	No	Contact Kaizen Energy
		Yes	Contact your landlord (likely a local issue with the tap/shower)
	I've tried all the above and I still have the problem	Yes	Contact Kaizen Energy
I have a leak INSIDE my apartment			Turn off all the valves on your HIU and contact your landlord



6. General - Frequently Asked Questions (FAQs)

Do I need to schedule my hot-water on?

• No; Hot water is supplied instantly through a plate heat exchanger in the HIU so there is no need to schedule your water use.

How do I operate the heating system?

• The heating system is operable via the controller and thermostats located throughout your apartment. The operating instructions for the controllers can be found on our website within the Customer Information section.

What is involved in the billing process?

• Bills will be issued bi-monthly based on the kWh energy consumption per apartment at the current heat tariff rates. Bills will be issued to tenants as named on the apartment lease. The amount on each bill is due for payment 14 days from the date the bill is issued.

How do I register for my heat supply?

• To register you will need to download the Kaizen Energy App from the Google play or Apple store *or* alternatively if you do not want to use a smartphone you can use the Selfcare Portal on the Kaizen Energy website. Click on the Sign-Up option and enter your details as prompted.

How are the heating charges structured?

- The heat tariff is set by the OMC and is reviewed annually; it consists of two charges:
 - The usage charge The metered energy consumed within the billing period applied against the relevant €/kWh.
 - The standing charge a fixed daily charge that relates to the fixed costs of providing the heat service regardless of usage.



How are meter readings taken?

• Meter readings are automatically taken for each apartment via a central processing unit located within the central plant of the apartment complex

How do I contact Kaizen Energy with a request or query?

• Contact Kaizen Energy by email to <u>billing@kaizenenergy.ie</u> or by phone on **(01) 685 3516** during normal working hours, Mon-Fri.

How do I contact Kaizen Energy in an emergency outside of normal hours?

• For emergencies that cannot wait until the next working day, please contact Kaizen Energy's emergency number on **086 057 5607.**