

KANTAR PUBLIC

Heat Network Consumer and Operator Survey (2022)

Technical Report Annexes



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Annex A: Consumers Questionnaire

CAWI

Questionnaire

Name of survey

Heat Network Consumer and Operators Survey 2022 Consumer Survey

B001 - PHCharacteristics: Property and household characteristics

Begin block

Q001 - Screen: Screen

Single coded

Not back

Is the property used for residential or non-residential purposes?

Normal

- 1 Residential
- 2 Non-residential

Ask only if **Q001 - Screen**,1

Q002 - TypeA: TypeA

Single coded

Not back

What type of property do you live in?

Please choose one answer only

Normal

- 1 Flat or Maisonette
- 2 Terrace house
- 3 Terrace bungalow
- 4 Semi-detached house / end of terrace house
- 5 Semi-detached bungalow / end of terrace bungalow
- 6 Detached house
- 7 Detached bungalow
- 997 Other
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q001 - Screen**,2

Q003b - JOB_TITLE

Single coded

Not back

What is your position or job title?

Please choose one answer only

Normal

- 1 Owner/ proprietor
- 2 Company Secretary
- 3 Finance Manager/ Director
- 4 General Manager
- 5 Office manager
- 6 Facilities manager
- 7 Building/ Property manager
- 8 Other (please specify) *Open
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q001 - Screen**,2

Q003 - TypeB: TypeB Single coded

Not back

Which of the following best describes how the property is used?

Please choose one answer only

Normal

- 1 Arts, Community and Leisure (including libraries)
- 2 Education (including nurseries)
- 3 Emergency Services
- 4 Factories
- 5 Health
- 6 Hospitality (including hotels and restaurants)
- 7 Offices
- 8 Shops
- 9 Warehouses
- 10 Central Government Buildings
- 11 Other Public Sector buildings
- 12 Other (please specify) *Open
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q001 - Screen**,1

Q004 - TENUREA: TENUREA Single coded

Not back

Do you (or your household) own or rent the home that you live in?

Please choose one answer only

Normal

- 1 Own home outright
- 2 Buying it with the help of a mortgage or loan
- 3 Part own and part rent (shared ownership)
- 4 Rent from a council or local authority
- Rent from a housing association, housing co-operative, charitable trust or registered social landlord
- 6 Rent from a private landlord or letting agency
- 7 Rent from someone else
- 8 Live rent-free in another person's property
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q001 - Screen**,2

Q005 - TENUREB: TENUREB Single coded

Not back

Does your organisation own or rent the property that you use?

Please choose one answer only

Normal

- 1 Own
- 2 Rent
 - Buying it with the help of a commercial mortgage or loan
- I/my employer manage the building on behalf of another company
- 997 Don't know
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q108 - SITE: SITE Single coded

Not back

Which of the following best describes this property?

Normal

- 1 Part of a building
- 2 A whole building
- 3 A collection of buildings

Ask only if Q108 - SITE,1

Q109 - OCCUPY: OCCUPY Single coded

Not back

Roughly what proportion of the building does your organisation occupy? If you are not sure, please give your best guess.

Normal

- 1 Less than 10%
- 2 At least 10% but less than 25%
- 3 At least 25% but less than 50%
- 4 At least 50% but less than 75%
- 5 75% or more
- 997 Don't know *Fixed *Exclusive

Ask only if Q108 - SITE,3

Q110 - SITEUSE: SITEUSE NUMERIC

Not back

How many other buildings on this site does your organisation own or rent?

997 Don't know *Fixed *Exclusive

999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if Q004 - TENUREA,1,2,3 or Q005 - TENUREB,1

Q006 - FREEHOLD: FREEHOLD

Single coded

Not back

Who is the freeholder of the property?

If you have a freehold, you own your property outright. A leasehold means that you own the property for a specific number of years only. At the end of this time, the property reverts to the freeholder. Most flats are leaseholds.

Please choose one answer only

Normal

- 1 You/a member of your household is [IF SCREEN = 1]
- 2 Your organisation [IF SCREEN = 2]
- 3 Housing Association [IF SCREEN = 1]
- 4 Private Housing Developer
- 5 A private landlord
- 6 Other (please specify) *Open
- 7 Don't know
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 1 'You/a member of your household is' should only appear for respondents who chose answer option 1 at 'screen' as per instruction text

Answer code 2 'Your company' should only appear for respondents who chose answer option 2 at 'screen' as per instruction text

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Q007 - WHENBUILT: WHENBUILT

Single coded

Not back

Roughly when was the property built?

Please choose one answer only

Normal

- 1 Before 1960
- 2 1960-1999
- 3 2000 2009
- 4 2010 or more recently
- 5 Don't know
- 6 Prefer not to say
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q010 - BEDNUM: BEDNUM Numer

Not back | Min = 0 | Max = 15

How many bedrooms do you have in your home?

Please write in the box provided

999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q001 - Screen**,2 and AREA=1

Q008 - AREA Single

Not back

AREA

The next question asks about the total floor area of the property. Would you prefer to answer this in square metres or square feet?

Normal

- 1 Square metres
- 2 Square feet
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

	Ask only if Q001 - Sc	creen,2 and AREA=1
Q008 -	SQAREAM	NUMERIC
Not ba	<u>ck</u>	
Please	the total floor area of the property? give your answer in square metres. are not sure, please give your best guess.	
<u>Jquai e</u>	reet	
997 999	Don't know Prefer not to say [hidden in CAWI] *Fixed	d *Exclusive
Scripto	er notes: Answer code 999 'Prefer not to steet and only appear if the responder	say' should be hidden in CAWI as per instruction tries to proceed without answering

Ask only if **Q001 - Screen**,2 and AREA=2

Q008 - SQAREAFT

NUMERIC

Not back

What is the total floor area of the property? Please give your answer in square feet. If you are not sure, please give your best guess.

Square feet

997 Don't know

999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q009 - TENURELENGA: TENURELENGA

Numeric

Not back | Min = 0 | Max = 100

How long have you lived in your current home?

Please write in the number of years and (if known) the number of months
If you have lived in your home less than a year, just write in the number of months

998 Don't know *Fixed *Exclusive

999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Within the open answer box please provide two separate boxes for the respondent to write 'Years' and 'Months'

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q001 - Screen**,1

Q011 - HOUSEHOLD: HOUSEHOLD

Numeric

Not back | Min = 1 | Max = 100

How many people are there in your household altogether, including any children and yourself?

Please write in the box provided

999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q012 - GENDER: GENDER

Matrix

Not back | Number of rows: 4 | Number of columns: 10

[IF MORE THAN ONE @ HOUSEHOLD] And what is the gender of each person in your household? Please include yourself and any children

[IF PNS or only 1 @ HOUSEHOLD] And what is your gender?

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

	You	Person 2	Person 3	Person 4	Person 5	Person 6	Person 7	Person 8	Person 9	Person 10
Male	O	O	O	O	O	O	O	O	O	O
Female	O	O	O	O	O	O	O	C	O	O
Other	O	O	O	O	O	O	O	O	O	O
Prefer not to say [hidden in CAWI]	0	•	O	•	•	•	•	•	•	•

Scripter notes: The number of columns shown to the respondent (i.e. Person 2/person 3 etc) should correspond with the number entered at 'HOUSEHOLD'

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

IF PNS @ HOUSEHOLD please only show a single column

Q013 - AGE: AGE Matrix

Not back | Number of rows: 11 | Number of columns: 10

[IF MORE THAN ONE @ HOUSEHOLD] And how old is each person in your household? Again, please include yourself and any children [IF PNS or only 1 @ HOUSEHOLD] And how old are you?

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

	You	Person 2	Person 3	Person 4	Person 5	Person 6	Person 7	Person 8	Person 9	Person 10
Under 5	O	O	O	O	O	O	O	O	O	O
6-13	O	O	O	O	O	O	C	O	O	O
14-15	O	O	O	O	O	O	O	O	O	O
16-17	O	O	O	O	O	O	O	O	O	O
18-24	O	O	O	O	O	O	O	O	O	O
25-34	O	O	O	O	O	O	O	O	O	O
35-44	O	O	O	O	O	O	O	O	O	O
45-54	O	O	O	O	O	O	C	O	O	O
55-64	O	O	O	O	O	O	C	O	O	O
65-74	O	O	O	O	O	O	O	O	O	O
75+	O	O	O	O	O	O	O	O	O	O
Prefer not to say [hidden in CAWI]	0	•	•	•	•	•	•	0	•	0

Scripter notes: The number of columns shown to the respondent (i.e. Person 2/person 3 etc) should correspond with the number entered at 'HOUSEHOLD'

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

IF PNS @ HOUSEHOLD please only show a single column

If response to "You" column is Under 5, 6-13 or 14-15 please screen out to "Thank you for your time. These are all the questions we have for you today".

B001 - PHCharacteristics:	Property and household
characteristics	

End block

B002 - ConEnergy: Controlling energy in the property

Begin block

Q014 - INSULATION: INSULATION

Multi coded

Not back | Min = 1

IF SCREEN=1 Does your home have any of the following? IF SCREEN=2 Does the property have any of the following?

Please select all that apply

Normal

- 1 Double glazing
- 2 Loft insulation
- Cavity wall insulation (reduces heat loss by filling spaces between walls with insulating material)
- 4 Solid wall insulation (reduces heat loss by applying insulating materials to either the internal or external surface of a wall (includes render or cladding))
- 5 Wall insulation (unsure what type)
- 6 Under-floor insulation (solid floor, suspended floor)
- 7 Roof insulation
- 8 Draught proofing
- 997 Don't know
- 998 None of these
- 999 Prefer not to say [hidden in CAWI]

Scripter notes: IF SCREEN=1 show 'Does your home have any of the following?' question text

IF SCREEN=2 show 'Does the property have any of the following?' question text

Q015 - CONTROL: CONTROL

Matrix

Not back | Number of rows: 3 | Number of columns: 4

IF SCREEN=1 Does your home have any of the following? If so, do you use any of these devices? IF SCREEN=2Does the property have any of the following? If so, do you use any of these devices?

Please answer yes, no or don't know for each option

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

	Yes - have it and use it	Yes - have it but don't use it	No	Don't know
Temperature controls on individual radiators (sometimes called Thermostatic Radiator Valves (TRVs)	0	•	•	•
Central thermostat that controls overall level of heating throughout the property	0	O	•	O
A device to programme what time your heating comes on (for example, a thermostat with a timer)	O	•	•	•
Building Management System (system designed to manage all heating/energy within the building) [SHOW IF SCREEN=2]	0	•	•	•

Scripter notes: IF SCREEN=1 show 'Does your home have any of the following? If so, do you use any of these devices?' question text

IF SCREEN=2 show 'Does the property have any of the following? If so, do you use any of these devices?' question text

Q016 - SATISFACTION: SATISFACTION

Matrix

Not back | Number of rows: 2 | Number of columns: 6

Overall, how satisfied are you with...

Please choose one answer only

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

	Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied	Prefer not to say
Your heating and hot water system?	0	•	O	•	O	0
The level of control you have over the temperature of your heating?	•	O	O	O	O	0

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

B002 - ConEnergy: Controlling energy in the property

End block

B003 - HEATSYSTEM: Your heating system

Begin block

Q017 - YOURHEAT: YOURHEAT

Text

Not back

The next few questions are about your heating system.

Q018 - HEATSOURCE: HEATSOURCE

Single coded

Not back

IF SCREEN=1 Which of the following is the main way you heat your home? IF SCREEN=2 Which of the following is the main way you heat the property?

Please choose one answer only

Normal

- 1 Central heating (either radiators or underfloor heating)
- 2 Storage heating (any)
- 3 Gas Fires
- 4 Electric heaters
- 5 Portable heaters
- 6 Coal / wood / smokeless fuel fires or stoves
- 7 Fan coil unit [SHOW IF SCREEN=2]
- 8 Air handling unit [SHOW IF SCREEN=2]
- 10 Other (please specify) *Open
- 998 Don't know *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'Which of the following is the main way you heat your home?' question text

IF SCREEN=2 show 'Which of the following is the main way you heat the property?' question text

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q001 - Screen**,1

Q019 - DEFINITIONA: DEFINITIONA

Text

Not back

Most homes have their own boiler or a burner located inside the home to generate heating. For some homes, heating is provided by communal heating. This is where heating is provided by a shared boiler, or another heat source, that is located outside of your home but in or near the same building. The boiler provides heat to all homes within that building. An example of this is a block of flats with a shared communal boiler in the basement.

Other homes are on district heating systems. This is where heating is provided by a shared boiler or heat source that provides heating and hot water for multiple buildings. This could be multiple houses or multiple blocks of flats. Often, the central heat source has its own small building near these homes, sometimes called an 'energy centre'. Heat is provided to homes via a heat network and heat exchangers inside each person's home.

Both types of shared heating systems are called Heat Networks.

Q020 - DEFINITIONB: DEFINITIONB

Text

Not back

Most properties have their own boiler or a burner located inside the property to generate heating. For some properties, heating is provided by communal heating. This is where heating is provided by a shared boiler, or another heat source, that is located outside of the property but in the same building. The boiler provides heat to all units within that property. An example of this is a shopping centre with a shared communal boiler in the basement.

Other properties are on district heating systems. This is where heating is provided by a shared boiler or heat source that provides heating and hot water for multiple properties. Often, the central heat source has its own small building near these properties, sometimes called an 'energy centre'.

Both types of shared heating systems are called Heat Networks.

Q0XX - PRENETWORK: PRENETWORK

Single coded

Not back

IF SCREEN=1 Is your home part of a communal or district heating system? IF SCREEN=2 Is this property part of a communal or district heating system?

Please choose one answer only

Normal

1	Yes
2	No

998 Don't know [hidden in CAWI] *Fixed *Exclusive
999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q021 - NETWORK: NETWORK

Single coded

Not back

IF SCREEN=1 Which of the following applies to your home? IF SCREEN=2Which of the following applies to the property?

Please choose one answer only

Normal

- It is part of a communal heating network (a centralised heating system that supplies heat and hot water to one building block with more than one customer) [ASK IF PRENETWORK=1,998,999]
- It is part of a district heating network (where heat is generated in a centralised location and distributed among multiple different buildings) [ASK IF PRENETWORK=1,998,999]
- It has its own gas boiler which provides heating [ASK IF PRENETWORK=2,998,999]
- 4 It has its own oil boiler which provides heating [ASK IF PRENETWORK=2,998,999]
- 5 It is solely heated by electric radiators or storage heaters [ASK IF PRENETWORK=2,998,999]
- 6 It uses heat pumps to provide heating [ASK IF SCREEN=2 AND PRENETWORK=2,998,999]
- 7 It uses air conditioning systems to provide heating [ASK IF SCREEN=2 AND PRENETWORK=2,998,999]
- 8 Something else [ASK IF PRENETWORK=2,998,999]
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'Which of the following applies to your home?' question text

IF SCREEN=2 show 'Which of the following applies to the property?' question text

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if Q001 - Screen,1 and Network, 1,2,3,4

Q022 - WATER: WATER

Single coded

Not back

Is hot water provided by the same system?

Please choose one answer only

Normal

- 1 Yes
- 2 No
- 998 Don't know *Fixed *Exclusive

Ask only if SCREEN=1 and Q022 - WATER,2 or Network=5,6,8,998,999

Q023 - WATER2: WATER2 Single coded

Not back

How is hot water provided in your home?

Please choose one answer only

Normal

- 1 Hot water is provided by a heat network (communal heating or district heating)
- 2 Hot water is provided by gas boiler inside my home
- 3 Hot water is provided by oil boiler inside my home
- 4 Hot water is provided by an electric immersion heater inside my home
- 5 Something else
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q001 - Screen**,1

Q024 - HOTWATER: HOTWATER

Single coded

Not back

Is hot water available when you need it?

Please choose one answer only

Normal

- 1 Yes always available
- No it's sometimes not available
- 3 No it's regularly not available
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

B003 - HEATSYSTEM: Your heating system End block

B004 - HEATSERVICE: Your heating service Begin block

Q025 - TIMING: TIMING

Multi coded

Not back | Min = 1

Is heating available at all times?

Please select all that apply

Normal

- 1 Yes *Exclusive
- 2 No it's not available at particular times of year
- 3 No it's not available at particular times of day
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Q026 - HEATLOSS: HEATLOSS

Single coded

Not back

IF Q22=NOT(1) ASK: In the past 12 months, how many times, if at all, have you had a **loss of heating** (IF SCREEN=1) in your home (IF SCREEN=2) in the property?

IF Q22=1 ASK: In the past 12 months, how many times, if at all, have you had a **loss of heating or hot water** (IF SCREEN=1) in your home (IF SCREEN=2) in the property?

If you are not sure of the exact answer, please give your best estimate

Please choose one answer only

Normal

- 1 None
- 2 1-5
- 3 6-10
- 4 11-19
- 5 20 or more
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'In the past 12 months, how many times, if at all, have you had a loss of heating in your home?' in question text

IF SCREEN=2 show 'In the past 12 months, how many times, if at all, have you had a loss of heating in the property?' in question text

Ask only if **Q026 - HEATLOSS**, 2, 3, 4, 5

Q027 - LOSSLENGTH: LOSSLENGTH

Single coded

Not back

Typically, how long did this loss of heating last?

If you are not sure of the exact answer, please give your best estimate

Please choose one answer only

Normal

- 1 Less than 12 hours
- 2 12 24 hours
- 3 1 3 days
- 4 4 7 days
- 5 More than 1 week
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Q028 - COLD: COLD

Single coded

Not back

IF SCREEN=1In the past 12 months, how many times, if at all, has your home been uncomfortably cold?

IF SCREEN=2 In the past 12 months, how many times, if at all, has the property been uncomfortably cold? Please do not think about areas of the property which need to be kept cool, for example cold storage areas.

Please think of the number of separate occasions when (if screen=1) your home (if screen=2) the property has been too cold, rather than the number of days.

If you are not sure of the exact answer, please give your best estimate

Please choose one answer only

Normal

1	None
2	1-5
3	6-10
4	11-19
5	20 or more
998	Don't know *Fixed *Exclusive
999	Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'In the past 12 months, how many times, if at all, has your home been uncomfortably cold?' in question text

IF SCREEN=2 show 'In the past 12 months, how many times, if at all, has the property been uncomfortably cold?' in question text

Ask only if Q028 - COLD,2 thru 5

Q029 - COLDLENGTH: COLDLENGTH

Single coded

Not back

Typically, how long did this last?

If you are not sure of the exact answer, please give your best estimate

Please choose one answer only

Normal

- 1 Less than 12 hours
- 2 12 24 hours
- 3 1 3 days
- 4 4 7 days
- 5 More than 1 week
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes:

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if Q028 - COLD,2 thru 5

Q030 - WHYCOLD: WHYCOLD

Multi coded

Not back | Min = 1

Is this because...

Please choose all that apply

Normal

- 1 The heating stops working
- 2 It costs too much to keep your heating on
- 3 It is not possible to turn the heating on
- 4 It is not possible to turn the temperature of the heating up
- It is not possible to heat the property to a comfortable temperature even with the heating on
- 6 Something else
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 4 should show 'It is not possible to heat your home to a comfortable temperature even with the heating on' IF SCREEN =1 and show 'It is not possible to heat your property to a comfortable temperature even with the heating on' IF SCREEN=2 as per instruction text

Q031 - WARM: WARM Single coded

Not back

IF SCREEN=1 In the past 12 months, how many times, if at all, has your home been uncomfortably warm?

IF SCREEN=2 In the past 12 months, how many times, if at all, has the property been uncomfortably warm?

Please think of the number of separate occasions when (if screen=1) your home (if screen=2) the property has been too warm, rather than the number of days.

If you are not sure of the exact answer, please give your best estimate

Please choose one answer only

Normal

- 1 None 2 1-5 3 6-10
- 4 11-19
- 5 20 or more
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'In the past 12 months, how many times, if at all, has your home been uncomfortably warm?' in question text

IF SCREEN=2 show 'In the past 12 months, how many times, if at all, has the property been uncomfortably warm?' in question text

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q031 - WARM**, 2, 3, 4, 5

Q032 - WARMLENGTH: WARMLENGTH

Single coded

Not back

Typically, how long did this last?

If you are not sure of the exact answer, please give your best estimate

Please choose one answer only

Normal

- 1 Less than 12 hours
- 2 12 24 hours
- 3 1 3 days
- 4 4 7 days
- 5 More than 1 week
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q031 - WARM**, 2, 3, 4, 5

Q033 - WHYWARM: WHYWARM

Multi coded

Not back | Min = 1

SCREEN=1 Why does your home get uncomfortably warm? SCREEN=2 Why does the property get uncomfortably warm?

Please select all that apply

Normal

- 1 It is not possible to turn the heating down to make it cooler
- 2 It is not possible to turn off the heating to make it cooler
- 3 The heating system breaks
- 4 The cooling system breaks
- 5 The property has poor ventilation (e.g. through windows)
- 6 It is difficult to keep direct sunlight out
- 7 Heat from a neighbour's property
- 8 Something else
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'Why does your home get uncomfortably warm?' in question text

IF SCREEN=2 show 'Why does the property get uncomfortably warm?' in question text

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Q034 - PROBLEM: PROBLEM

Multi coded

Not back | Min = 1

If you had a problem with your gas or heating, who would you contact to get it fixed?

Please select all that apply

Normal

- 1 Your gas or heating and hot water provider
- 2 Your landlord
- 3 The council
- 4 The housing association [IF SCREEN=1]
- 5 A plumber / gas engineer
- 6 An electrician (for electric heating systems)
- 7 I would try to fix it myself
- 8 Other (please specify) *Open
- 9 I don't know who to contact
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 4 should only be shown to respondents IF SCREEN=1

Q035 - COMPLAINT: COMPLAINT

Single coded

Not back

IF SCREEN=1 Have you or anyone in your household made a complaint about your heating in the last 12 months?

IF SCREEN=2 Have you or anyone else in your organisation made a complaint about your heating in the last 12 months?

Please choose one answer only

Normal

- 1 Yes complained
- 2 No had no reason to complain
- 3 No had reason to complain but chose not to
- 4 No had reason to complain but didn't know who to complain to
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'Have you or anyone in your household made a complaint about your heating in the last 12 months?' in question text

IF SCREEN=2 show 'Have you or anyone else in your business made a complaint about your heating in the last 12 months?' in question text

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if Q035 - COMPLAINT,1

Q036 - COMPLAINT2: COMPLAINT2

Multi coded

Not back | Min = 1

Who did you complain to?

Please select all that apply

Normal

- 1 Your energy or heating and hot water supplier
- 2 The Energy Ombudsman
- The Housing Ombudsman [IF SCREEN=1]
- 4 Your housing association/council (if they are not your heating/hot water supplier) [IF SCREEN=1]
- 5 Your local councillor or MP
- 6 Your landlord
- 7 Other (please specify) *Open
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Only show answer code 3 IF SCREEN=1

Only show answer code 4 if SCREEN=1

Ask only if Q035 - COMPLAINT,1

Q037 - COMPLAINSAT: COMPLAINSAT

Single coded

Not back

When you last made a complaint, how satisfied or dissatisfied were you with the way your complaint was handled?

Please choose one answer only

Normal

- 1 Very satisfied
- 2 Satisfied
- 3 Neither satisfied nor dissatisfied
- 4 Dissatisfied
- 5 Very dissatisfied
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

B004 - HEATSERVICE: Your heating service

End block

B005 - HEATHOME: Information about heating in your

Begin block

home

Ask only if **0001 - Screen**,1

Q038 - INFOINTRO1:

Text

Not back

Please think about when you first started using your **current** heating system. This could be when you moved in to your home or when a new system was installed. We are interested in any information you received about the system, other than information provided as part of your bill, account summary or statement.

Ask only if **Q001 - Screen**,2

Q039 - INFOINTRO2: INFOINTRO2

Text

Not back

Please think about when you first started using your **current** heating system. This could be when you moved in to the property or when a new system was installed. We are interested in any information you received about the system, other than information provided as part of your bill, account summary or statement.

Ask only if **Q021 - NETWORK**,1,2

Q040 - CONTRACT: CONTRACT

Single coded

Not back

Did you receive a contract document, such as a Heat Supply Agreement, for the supply of your heating when you moved into [SCREEN=1] your home [SCREEN=2] the property or when your system was installed?

A Heat Supply Agreement is a written contract or agreement setting out the terms under which a heat supplier agrees with a customer to provide them with heating, hot water and/or cooling. This could be part of a leasehold agreement, terms of service agreement or a dedicated heat supply document.

Please choose one answer only

Normal

- 1 Yes
- 2 No
- 3 Don't know
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'Did you receive a contract document, such as a Heat Supply Agreement, for the supply of your heating when you moved into your home or when your system was installed?' in question text

IF SCREEN=2 show 'Did you receive a contract document, such as a Heat Supply Agreement, for the supply of your heating when you moved into the property or when your system was installed?' in question text

Q041 - RECINFO: INFO

Multi coded

Not back | Min = 1

When you first started using your current heating system, did you receive information about any of the following?

Please select all that apply

Normal

- 1 The type of heating system you have
- 2 Maintenance and servicing arrangements
- 3 The likely costs of heating
- 4 How you would be billed for heating
- How to change the temperature [Screen=1] in your home [Screen=2] in your property (if you can)
- 6 Who to contact if you need a problem with your heating system fixed
- 7 Who to contact in an energy emergency
- 8 How to complain if you are dissatisfied with the service
- 9 Your contract length
- 10 How environmentally friendly the heating system is
- 11 No information was provided
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 5 should show 'How to change the temperature in your home (if you can)' in question text IF SCREEN=1

Answer code 5 should show 'How to change the temperature in your property (if you can)' in question text IF SCREEN=2

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q041 - RECINFO**,1,2,3,4,5,6,7,8,9,10

Q042 - WHENINFO: WHENINFO

Single coded

Not back

When did you receive this information?

Please select one answer only

Normal

- 1 Before I moved in
- 2 When I moved into the property
- 3 When the heating system was installed
- 4 After I made a complaint
- 5 Another time
- 6 I never received any information
- 998 Don't know *Fixed *Exclusive

Ask only if **Q041 - RECINFO**,1,2,3,4,5,6,7,8,9,10

Q043 - INFOHOW: INFOHOW

Multi coded

Not back | Min = 1

How did you receive this information?

Please select all that apply

Normal

- 1 From your landlord
- 2 From your estate/lettings agent
- 3 From your heating / energy supplier
- 4 From your solicitor
- 5 From the housing developer
- 6 From whoever installed your heating system
- 7 From a previous occupant
- 8 Some other way (please specify) *Open
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

B005 - HEATHOME: Information about heating in your home

End block

B006 - BILLS: Bills, account summaries and statements

Begin block

Q044 - BILLINTRO1: BILLINTRO1

Text

Not back

The next few questions focus on the information you receive about your heating and hot water use and how much you pay for this (including any bills you receive). If you pay for heating and hot water as part of an overall gas, electricity or other energy bill, please think about this.

Q045 - BILL: BILL Multi coded

Not back | Min = 1

Do you receive a bill, account summary, statement or something else, which details how much you pay for heating and hot water? This would include the amount you pay, details of any standing charge and your energy use.

This could just be a summary of your account rather than a request for payment

If you do not receive any bill, statement or summary (for example, if your heating is included within your house/property rent) please select "No".

Please select all that apply

Normal

- 1 Yes by letter
- 2 Yes by email
- 3 Yes through an online account or system
- 4 Yes something else (please specify) *Open
- 5 No *Exclusive
- 6 I don't know I haven't received one yet
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q045 - BILL**,1,2,3,4

Q046 - BILL2: BILL2

Single coded

Not back

Is your bill, account summary or statement just for your heating and hot water?

Please choose one answer only

Normal

- 1 Yes just for heating and hot water
- 2 No it is for overall gas use
- 3 No it is for overall electricity use
- 4 No it is for overall energy use
- 5 Something else (please write in) *Open
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q045 - BILL**,1,2,3,4

Q047 - BILLPROV: BILLPROV

Single coded

Not back

Who provides this bill or statement?

Please choose one answer only

Normal

- 1 An energy supplier please write in the name here *Open
- 2 The council / local authority
- 3 A housing association (if screen=1)
- 4 Your landlord
- 5 Someone else please write in the name here *Open
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q045 - BILL**,1,2,3,4

Q048 - INFOSAT: INFOSAT

Matrix

Not back | Number of rows: 3 | Number of columns: 6

To what extent do you agree or disagree with the following statements?

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Prefer not to say
The information provided on the bill, account summary or statement is clear	0	•	•	•	0	•
ASK IF SCREEN=1 The information provided on my bill, account summary or statement provides me with enough information to plan financially	•	•	•	•	•	•
ASK IF SCREEN=2 The information provided on the bill, account summary or statement provides enough information to allow accurate budgeting	•	•	•	•	•	O

Scripter notes: Row statement 2 should only show IF SCREEN=1 as per instruction text

Row statement 3 should only show IF SCREEN=2 as per instruction text

Ask only if **Q045 - BILL**,1,2,3,4

Q049 - BILLHOW: BILLHOW

Single coded

Not back

How often do you receive your bill, account summary or statement?

Please choose one answer only

Normal

- 1 Annually
- 2 Twice a year (every six months)
- 3 Quarterly (every three months)
- 4 Monthly
- 5 Weekly
- 6 I can access up to date information online whenever I like
- 7 No fixed pattern they come at different times of the year
- 8 Never
- 9 Other (please specify) *Open
- 998 Don't know *Fixed *Exclusive
- Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q045 - BILL**,1,2,3,4

Q050 - BILLINC: BILLINC

Multi coded

Not back | Min = 1

Which of the following is included on your bill, account summary or statement?

Please select all that apply

Normal

- 1 Your total charge for heating and hot water (or equivalent)
- 2 The time period this covers
- 3 A description of how your bill has been calculated
- 4 Any standing or set charges within this
- A summary of the amount of heat you have used (e.g. the number of kWhs you have used)
- 6 The amount you are charged for each unit of heat (the price per kWh)
- Any charges for maintenance or upkeep of the heating system [IF NETWORK=1,2]
- 8 Any charges for operating the heating system [IF NETWORK=1,2]
- 9 The date by which you must pay the bill (if this is a bill)
- 10 None of these
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q045 - BILL**,1,2,3,4

Q051 - BILLINFO: BILLINFO

Single coded

Not back

Would you say that you receive too much or too little information in your heating and hot water bills, account summaries or statements?

Please choose one answer only

Normal

- 1 Too much
- 2 About right
- 3 Too little
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

B006 - BILLS: Bills, account summaries and statements

End block

B007 - PAY: Paying for heating and hot water

Begin block

Ask only if **Q001 - Screen**,1

Q052 - PAYINTRO1A: PAYINTRO1A

Text

Not back

We are interested in how you pay for your heating and hot water.

To answer these questions, you must have at least some responsibility for household bills. If you are having difficulty answering these questions you can ask a family member, friend or carer to help you or to fill this out on your behalf.

Ask only if **Q001 - Screen**,2

Q053 - PAYINTRO1B: PAYINTRO1B

Text

Not back

We are interested in how you pay for your heating and hot water.

To answer these questions, you must have at least some responsibility for utility bills. If you do not have any responsibility for paying utility bills please consult with a colleague who does.

ASK ALL

Q054 - PAYINTRO2: PAYINTRO2

Text

Not back

If your heating and hot water is paid as part of an overall gas or electricity bill, please think about this overall bill.

If your heating and hot water is paid as part of your rent or service charge, please think about just what you pay for heating and hot water.

If you don't receive a bill or annual summary think about the last payment you made.

Ask only if **Q045 - BILL**,1,2,3,4

Q054 - PAYINTRO3: PAYINTRO3

Text

Not back

Please have your last bill or statement to hand. This section of the questionnaire is very important. We need this information to us help ensure that people are paying a fair price for their energy.

Ask only if **Q045 - BILL**,1,2,3,4

Q055 - HAVEBILL: HAVEBILL

Single coded

Not back

Do you have a copy of your most recent bill, account summary or statement in front of you?

Please choose one answer only

Normal

- 1 Yes
- 2 No
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q056 - SPLITBILL: SPLITBILL

Single coded

Not back

IF SCREEN=1 Do you pay for heating and hot water separately to other household bills e.g. other utility bills such as water bills?

IF SCREEN=2 Do you pay for heating and hot water separately to other utility bills e.g. such as water bills?

Please choose one answer only

Normal

- 1 Yes
- 2 No heating and hot water is included with rent
- 3 No heating and hot water is included in a central service charge
- 4 Other (please specify) *Open
- 997 Don't know *Fixed *Exclusive

Scripter notes: IF SCREEN=1 show 'Do you pay for heating and hot water separately to other household bills?' in question text

IF SCREEN=2 show 'Do you pay for heating and hot water separately to other utility bills?' in question text

ASK ALL

Q104 - TARIFF: TARIFF

Single coded

Not back

Does your energy provider charge for energy with a fixed rate or variable tariff?

An energy tariff is how an energy provider charges a customer for their gas and electricity use. The two main types of tariff are fixed rate and variable. A fixed rate tariff sets the cost of energy for a certain amount of time, typically one year or more, while prices on a variable tariff can go up or down according to the market.

If you are not sure, this information may be included on a recent energy bill.

- 1 Fixed tariff
- 2 Variable tariff
- 998 Don't know *Fixed *Exclusive

ASK ALL

Q060 - PAYAMOUNT: PAYAMOUNT

Numeric

Not back | Min = 0 | Max = 10000

Thinking about the last payment you made for heating and hot water, what was the total amount paid?

Please write in the box provided

998 Don't know *Fixed *Exclusive

999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Please include a '£' sign before the answer box so respondents answer will look like monetary value

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

ASK IF PAYAMOUNT not equal to 998 and not equal to 999

Q061 - PAYMONTH: PAYMONTH

SINGLE CODE

Not back | Min = 0 | Max = 0

In which month did you make this payment?

- 1. April 2022
- 2. March 2022
- 3. February 2022
- 4. January 2022
- 5. December 2021
- 6. November 2021
- 7. October 2021
- 8. September 20219. August 2021
- 10. July 2021
- 11. June 2021
- 12. May 2021
- 13. April 2021
- 14. March 2021
- 15. February 2021
- 16. January 2021
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Within the open answer box please provide two separate boxes for the respondent to write 'Years' and 'Months'

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if PAYAMOUNT not equal to 998 and not equal to 999

Q062 - PAYPERIOD: PAYPERIOD

Single coded

Not back

What period did this cover?

Please choose one answer only

Normal

- Calendar month
 Any other period
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q062 - PAYPERIOD**,2

Q062A - PAYPERIOD3: PAYPERIOD3

Single coded

Not back

Is this?

Please choose one answer only

- 1 One week
- 2 Two weeks
- 3 Three weeks
- 4 Four weeks
- 5 Two calendar months
- 6 Eight times a year
- 7 Nine times a year
- 8 Ten times a year
- 9 Three months/13 weeks
- 10 Six months/26 weeks
- 11 One year/12 months/52 weeks
- 12 Less than one week
- 13 One off/lump sum
- 14 Other (please specify) *Open
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q045 - BILL**,1,2,3,4

Q057 - STANDCHARGE: STANDCHARGE

Numeric

Not back | Min = 0 | Max = 100000

How much is the standing charge on your bill, summary or statement?

This is the set fee you pay per day, which doesn't change based on how much you use.

997	Information is not provided on my bill, summary or statement *Fixed *Exclusive

- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Please include a '£' sign before the answer box so respondents answer will look like monetary value

Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q045 - BILL**,1,2,3,4

UNIT:UNIT Single code

Not back | Min = 0 | Max = 0

Is the energy usage on your bill displayed in Kilowatt hours (kWh) or Megawatt hours (mWh)?

Please check your bill if necessary

- 1 Kilowatt hours (kWh)
- 2 Megawatt hours (mWh)
- 997 Information is not provided on my bill, summary or statement *Fixed *Exclusive
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q045 - BILL**,1,2,3,4

Q058 - ENERGYUSE: ENERGYUSE

Numeric

Not back | Min = 0 | Max = 0

How many units of energy were you charged for?

This is the amount of energy used – this should be a number of (ask if UNIT = 1) Kilowatt Hours (kWh) (OR ask if UNIT = 2) Megawatt Hours (mWh). Please check your bill if necessary.

Enter in (ask if UNIT = 1) Kilowatt Hours (kWh) (OR ask if UNIT = 2) Megawatt Hours (mWh)

997	Information is not provided on my bill, summary or statement *Fixed *Exclusive
900	Don't know *Fixed *Fixelysiss

- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q045 - BILL**,1,2,3,4 and UNIT=1

Q059 - PAYKWH: PAYKWH

Numeric

Not back | Min = 0 | Max = 0

How much did you pay for each Kilowatt Hour (kWh) including VAT? This is the price you pay for each unit of energy in pence per kWh. Please check your bill if you are unsure

Enter in pence

997	Information is not provided on my bill, summary or statement *Fixed *Exclusive
998	Don't know *Fixed *Exclusive
999	Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q045 - BILL**,1,2,3,4 and UNIT=2

Q059 - PAYMWH: PAYMWH

Numeric

Not back | Min = 0 | Max = 0

How much did you pay for each Megawatt Hour (mWh) including VAT? This is the price you pay for each unit of energy in pounds per mWh. Please check your bill if you are unsure

Enter in pounds

997	Information is not provided on my bill, summary or statement *Fixed *Exclusive
998	Don't know *Fixed *Exclusive
999	Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Scripter notes: Answer code 999 'Prefer not to say' should be hidden in CAWI as per instruction text and only appear if the respondent tries to proceed without answering

Ask only if **Q045 - BILL**,1,2,3,4

Q111 - DUM1: ENERGYPAY Numeric

Not back | Min = 0 | Max = 0

Dummy variable: Total paid for kWh used in last bill

Please could you multiply response at ENERGYUSE by response at PAYKWH

Q063 - BILLPAY: BILLPAY

Multi coded

Not back | Min = 1

How do you pay for heating and hot water?

- Pre-payment meter, pre-payment card or pre-payment account (where credit is topped up on a key, card or online account)
- 2 A monthly direct debit
- 3 A direct debit paid at other intervals
- 4 Payments based off actual energy use, calculated individually for each tenant/occupant
- Payments based off actual energy use, calculated for the property in total and divided between tenants/occupants
- 6 Standing order
- 7 Other (please specify) *Open
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q105 - PAYCALC: PAYCALC

Single coded

Not back

How is the amount you pay for heating and hot water calculated?

Please	choose	one	answer	only	,
I ICGSC	CHOOSE	UIIC	answei	OHILL	,

Normal

- 1 It's based on actual (if screen=1) household (if screen=2) property use
- 2 It's based on estimated (if screen=1) household (if screen=2) property use
- It's based on how much the building uses, divided between (if screen=1) households (if screen=2) properties (estimated or actual)
- 4 It's a set price each time it doesn't change based on usage
- 5 Some other way (please specify) *Open
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q064 - PAYCOVER: PAYCOVER

Matrix

Not back | Number of rows: 3 | Number of columns: 3

Which of the following are covered by the price you pay for your heating and hot water?

Please answer yes, no or don't know for each option

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

	Yes – included in the price	No – not included in the price	Don't know
Maintenance and servicing of your heating and hot water system	O	0	O
The cost of replacing your boiler/heating system if needed	O	0	O
Temporary heating if your heating fails (for example giving you electric heaters to use)	O	0	O

Q106 - PRICECHANGE: PRICECHANGE

Single coded

Not back

Thinking about your energy use overall, how has the price you pay for energy, per unit, changed since [MONTH] 2021?

Normal

- 1 Significantly increased
- 2 Increased
- 3 Stayed the same
- 4 Decreased
- 5 Significantly decreased

B007 - PAY: Paying for heating and hot water

End block

B008 - VIEWS: Your views in the price of heating and hot water

Begin block

Q065 - FAIR: FAIR

Single coded

Not back

Based on the service you receive, do you think the price you pay for heating and hot water is typically fair?

Please think about everything that's included in the price you pay for heating and hot water, including maintenance, servicing and repairs.

Please choose one answer only

Normal

- 1 Very fair
- 2 Fair
- 3 Not very fair
- 4 Not at all fair
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q107 - EXPECT: EXPECT

Single coded

Not back

Is the price you pay for heating and hot water as you expected when you first started using your current system?

Please choose one answer only

- 1 A lot higher than expected
- 2 A little higher than expected
- 3 As expected
- 4 A little lower than expected
- 5 A lot lower than expected
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q066 - STRUGGLE: STRUGGLE

Single coded

Not back

How much do you agree or disagree with this statement:

'Keeping up with my/our heating and hot water costs is a bit of a struggle'

Please choose one answer only

Normal

- 1 Strongly agree
- 2 Tend to agree
- 3 Neither agree nor disagree
- 4 Tend to disagree
- 5 Strongly disagree
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Q067 - PAYPROBLEMS: PAYPROBLEMS

Matrix

Not back | Number of rows: 6 | Number of columns: 6

Have any of the following happened in the last 12 months?

Please choose one answer only

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

	All of the time	Often	Some of the time	Rarely	None of the time	Prefer not to say
Missed a payment for heating and hot water due to financial difficulty	O	•	•	O	•	O
Heating was disconnected after a missed payment	0	•	•	O	•	0
Borrowed money to pay for heating and hot water (ASK IF SCREEN=1)	•	•	•	0	0	•
Had to make savings elsewhere to pay for heating and hot water (ASK IF SCREEN=1)	O	•	•	•	0	O
Not used heating or hot water because the cost was too high (ASK IF SCREEN=1)	O	O	0	O	O	•
Received an error with your billing for heating and hot water or gas	O	•	•	•	O	•

Not back | Number of rows: 2 | Number of columns: 6

To what extent do you agree or disagree with the following statements.

Please choose one answer only

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
It is important to protect the environment by using low carbon heating where possible	0	•	•	•	0	•
I would be willing to pay more for heating and hot water if it came from a low-carbon source (by this we mean environmentally friendly heating systems which no longer rely on conventional gas central heating but instead use energy from low-carbon alternatives such as hydrogen, the sun, or heat pumps which draw heat from the ground, air or water to provide heating.)	•	•	•	•	•	•

B008 - VIEWS: Your views in the price of heating and hot water

End block

B009 - DEMOGRAPHICS: DEMOGRAPHICS

Begin block

Ask only if **Q001 - Screen**,1

Q069 - DEMOGS: DEMOGS

Text

Not back

To finish off, we would like to ask you some questions about you and your household.

Ask only if **Q001 - Screen**,1

Q070 - WORKSTAT: WORKSTAT

Single coded

Not back

Which of these best describes the working status of the chief income earner in your household? Please choose one answer only

If you are an individual living in a shared house or flat share, please answer with your own working status

Normal

- 1 Full-time paid work (30+ hours per week)
- 2 Part-time paid work (8-29 hours per week)
- 3 Part-time paid work (Under 8 hours per week)
- 4 Retired
- 5 Still at school
- 6 In full time higher education
- 7 Unemployed (seeking work)
- 8 Not in paid employment (not seeking work)
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q001 - Screen**,1

Q071 - OCCUPATION1: OCCUPATION1

Single coded

Not back

Do (did) you work as an employee or are (were) you self-employed?

If you are retired and have an occupational pension, or if you are not in employment and have been out of work for less than 6 months, please answer for your most recent occupation.

Please select on answer only

- 1 Employee
- 2 Self-employed with employees
- 3 Self-employed without employees
- 97 Not applicable

Ask only if Q001 - Occupation1,1,2

Q072 - OCCUPATION2: OCCUPATION2

Single coded

Not back

IF OCCUPATION = 1 (employee) How many people work (worked) for your employer at the place where you work (worked)?

IF OCCUPATION = 2 (Self-employed with employees) How many people do (did) you employ?

Normal

- 1 1 to 24
- 2 25 or more

Ask only if Q001 - Screen,1 and OCCUPATION1,1

0073 - OCCUPATION3: OCCUPATION3

Single coded

Not back

Do (did) you supervise any other employees?

Normal

- 1 Yes
- 2 No

Ask only if **Q001 - Screen**,1 and OCCUPATION,1,2,3

0074 - OCCUPATION4: OCCUPATION4

Single coded

Not back

Which option best describes the sort of work you do?

If you are not working now, please select an option to show what you did in your last job.

- Modern professional occupations such as: teacher, nurse, physiotherapist, social worker, welfare officer, artist, musician, police officer (sergeant or above) or software designer
- 2 Clerical and intermediate occupations such as: secretary, personal assistant, clerical worker, office clerk, call centre agent, nursing auxiliary or nursery nurse
- 3 Senior managers or administrators (usually responsible for planning, organising and coordinating work and for finance) such as: finance manager or chief executive
- Technical and craft occupations such as: motor mechanic, fitter, inspector, plumber, printer, tool maker, electrician, gardener or train driver
- 5 Semi-routine manual and service occupations such as: postal worker, machine operative, security guard, caretaker, farm worker, catering assistant, receptionist or sales assistant
- Routine manual and service occupations such as: HGV driver, van driver, cleaner, porter, packer, sewing machinist, messenger, labourer, waiter or waitress, or bar staff
- Middle or junior managers such as: office manager, retail manager, bank manager, restaurant manager, warehouse manager or publican
- 8 Traditional professional occupations such as: accountant, solicitor, medical practitioner, scientist, or civil or mechanical engineer

Ask only if **Q001 - Screen**,1

Q075 - DAY: DAY Single coded

Not back

Are there any adults at home during the day, other than at weekends?

Please choose one answer only

Normal

- 1 Yes regularly
- 2 Yes sometimes
- 3 Never
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q001 - Screen**,1

Q076 - INCOME: INCOME Single coded

Not back

Which of these best describes your household's total income, before taxes and any other deductions?

This includes earnings from employment or self-employment, income from benefits and pensions, and income from other sources such as interest from savings.

If you are an individual living in a shared house, please answer with your own income Please choose the row which most closely applies. Please choose one answer only.

Annual	Monthly	Weekly
Under £5,000	Under £400	Under £100
£5,000 – £15,999	£400 – £1,329	£100 – £309
£16,000 – £24,999	£1,330 – £2,099	£310 – £489
£25,000 – £34,999	£2,100 – £2,899	£490 – £679
£35,000 – £44,999	£2,900 – £3,749	£680 – £869
£45,000 – £54,999	£3,750 – £4,579	£870 – £1,049
£55,000 - £74,999	£4,580 – £6,249	£1,050 - £1,449

£75,000 or more £6,250 or more £1,450 or more

Normal

999	Don't know *Fixed *Exclusive
998	Prefer not to say *Fixed *Exclusive

Ask only if **Q076 - INCOME**,998,999

Q077 - INCOME2: INCOME2 Single coded

Not back

Is your household's total income, before taxes and any other deductions, £16,000 or more a year?

Normal

- 1 Yes £16,000 or more per year
- 2 No less than £16,000 a year
- 3 Don't know
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q004 - TENUREA**, 3, 4, 5, 6, 7

Q078 - RENT: RENT Numeric

Not back | Min = 0 | Max = 0

How much does the landlord/council/ housing association charge in total for your accommodation, excluding water rates and council tax?

(If TenureA=3) Please do not include any mortgage payments in your response.

997 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Researcher notes: Please could you place a pound symbol to the left of the answer box

Ask only if **Q004 - TENUREA**, 3, 4, 5, 6, 7. Please do not ask if Rent=997

Q079 - RENTPERIOD: RENTPERIOD Single coded

Not back

And what period of time does this rent payment cover?

Please choose one answer only

- 1 Calendar month
- 2 Any other period
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q079 - RENTPERIOD**,2

Q079A - RENTPERIOD3: RENTPERIOD3

Single coded

Not back

Is this?

Please choose one answer only

Normal

999

<u>Normai</u>	
1	One week
2	Two weeks
3	Three weeks
4	Four weeks
5	Two calendar months
6	Eight times a year
7	Nine times a year
8	Ten times a year
9	Three months/13 weeks
10	Six months/26 weeks
11	One year/12 months/52 weeks
12	Less than one week
13	One off/lump sum
14	Other (please specify) *Open

Ask only if **Q004 - TENUREA**,2,3

Q078 - MORTGAGE: MORTGAGE

Numeric

Not back | Min = 0 | Max = 0

What is the total payment on your mortgage?

997 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Researcher notes: Please could you place a pound symbol to the left of the answer box

Ask only if **Q004 - TENUREA**,2,3

Q082 - MORGPERIOD: MORGPERIOD

Single coded

Not back

And what period of time does this payment cover?

Please choose one answer only

Normal

- Calendar month
 Any other period
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q082 - MORGPERIOD**,2

Q083 - MORGPERIOD3: MORGPERIOD3

Single coded

Not back

Is this?

Please choose one answer only

- 1 One week
- 2 Two weeks
- 3 Three weeks
- 4 Four weeks
- 5 Two calendar months
- 6 Eight times a year
- 7 Nine times a year
- 8 Ten times a year
- 9 Three months/13 weeks
- 10 Six months/26 weeks
- 11 One year/12 months/52 weeks
- 12 Less than one week
- 13 One off/lump sum
- 14 Other (please specify) *Open
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q001 - Screen**,1

Q084 - ADDNEEDS: ADDNEEDS

Multi coded

Not back | Min = 1

Do any of the following apply to you or anyone in your household? This includes problems due to old age.

Please choose all answers that apply

Normal

- A long-term illness, physical or mental health problem or disability which limits your daily activities or the work you can do
- Any caring responsibilities for a member of your immediate family, or, a close relative outside of your household who has any long-standing illness, physical or mental health problem or disability
- Any hearing or visual impairments or other communication needs, which limit your daily activities or the work you can do
- 997 None of the above
- 998 Don't know *Fixed *Exclusive
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q001 - Screen**,1

Q085 - INJURY: INJURY

Single coded

Not back

Do you or anyone in your household have an injury or any other temporary problems which affect your ability to use your heating system?

Please choose one answer only

Normal

- 1 Yes
- 2 No
- 999 Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q001 - Screen**,1

Q086 - SUPPORT: SUPPORT

Single coded

Not back

Do you or anyone in your household get extra support or assistance from your gas or heating supplier?

Examples of extra support can include: help in reading or understanding your energy bills, relocation of a prepayment meter to ensure you can use it safely, or priority support in an energy emergency.

Please choose one answer only

- 1 Yes
- 2 No
- 3 Don't know
- 999 prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q001 - Screen**,1

Q087 - PROTCHAR: Protected Characteristics

Single coded

Not back

The next few questions of this survey are about your personal characteristics including your ethnicity, relationship status, sexual orientation, health and religion. This data will be used by our client for data classification purposes only. Your responses will remain confidential in line with our privacy policy and will not be used to identify you. No data which could be used to identify you will be shared beyond the Kantar Public research team.

If you would prefer not to answer a question you can select "Prefer not to say" at that question.

If answering these questions makes you uncomfortable, you can skip them by selecting "No, I do not agree".

Normal

- 1 Yes, I agree
- 2 No, I do not agree

Ask only if Q087 - PROTCHAR,1

Q088 - ETHNICITY: ETHNICITY

Single coded

Not back

Which of the following categories would best describe your ethnicity?

- English/Welsh/Scottish/Northern Irish/ British
 Irish
 Gypsy, Traveller or Irish Traveller
 Any other White background
- 5 White and Black Caribbean
- 6 White and Black African
- 7 White and Asian
- 8 Any other Mixed/ Multiple ethnic background
- 9 Indian
- 10 Pakistani
- 11 Bangladeshi
- 12 Chinese
- 13 Any other Asian background
- 14 African
- 15 Caribbean
- 16 Any other Black /African/ Caribbean background
- 17 Arab
- 18 Other
- 999 Prefer not to say *Fixed *Exclusive

Ask only if Q087 - PROTCHAR,1

Q089 - RELATIONSHIP: RELATIONSHIP

Single coded

Not back

What is your marital status?

Normal

- 1 Single
- 2 Married or in a civil partnership
- 3 Co-habiting
- 4 Separated, but sill legally married or in civil partnership
- 5 Divorced or civil partnership dissolved
- 6 Widowed or surviving partner of civil partnership
- 7 Other
- 999 Prefer not to say *Fixed *Exclusive

Ask only if **Q087 - PROTCHAR**,1

Q090 - ORIENTATION: ORIENTATION

Single coded

Not back

Which of the following best describes your sexual orientation?

Normal

- 1 Heterosexual or Straight
- 2 Gay or Lesbian
- 3 Bisexual
- 4 Other
- 999 Prefer not to say *Fixed *Exclusive

Ask only if Q087 - PROTCHAR,1

Q091 - DISABILITY: DISABILITY

Single coded

Not back

Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?

- 1 Yes
- 2 No
- 999 Prefer not to say *Fixed *Exclusive

Ask only if Q087 - PROTCHAR,1

Q092 - RELIGION: RELIGION

Single coded

Not back

What is your religion?

Normal

- 1 No religion
- 2 Christian (including Church of England, Catholic, Protestant and all other Christian denominations)
- 3 Buddhist
- 4 Hindu
- 5 Jewish
- 6 Muslim
- 7 Sikh
- 8 Any other religion
- 999 Prefer not to say *Fixed *Exclusive

Ask only if **Q001 - Screen**,2

Q093 - FIRMOGS: FIRMOGS

Text

Not back

To finish off, we would like to ask you some questions about your organisation. These will be used for analysis purposes only.

Ask only if **Q001 - Screen**,2

Q094 - SECTOR: SECTOR Single coded

Not back

[IF TENUREB=1,2,997,998] Which of the following categories best describes the business or activities of your organisation?

[IF TENUREB=3] Which of the following categories best describes the business or activities of the organisation you manage the property for?

Normal

1	Professional, Scientific and Technical Activities
2	Wholesale and Retail trade; Repair of Motor Vehicles and motorcycles
3	Construction
4	Information and Communication
5	Accommodation and Food Service Activities
6	Manufacturing
7	Administrative and Support Service Activities
8	Transportation and Storage
9	Agriculture, Forestry and Fishing
10	Arts, Entertainment and Recreation
11	Real Estate Activities
12	Human Health and Social Work Activities
13	Education
14	Financial and Insurance Activities
15	Water Supply; Sewerage, Waste Management and Remediation activities
16	Mining and Quarrying
17	Other Service Activities
18	Electricity, Gas, Steam and Air Conditioning Supply
19	Public Administration and Defence; Compulsory Social Security
20	Other (please specify) *Open
998	Don't know *Fixed *Exclusive

Ask only if **Q001 - Screen**,2 AND NOT (TenureB=3)

Q095 - LENGTRAD: LENGTRAD Single coded

Not back

For how long has this organisation been operating?

Normal	
1	Less than a year
2	More than 1 up to 2 years
3	More than 2 up to 5 years
4	More than 5 up to 10 years
5	More than 10 years
998	Don't know *Fixed *Exclusive
999	Prefer not to say [hidden in CAWI] *Fixed *Exclusive

Ask only if **Q001 - Screen**,2 AND NOT (TenureB=3)

Q096 - STAFFNUM: STAFFNUM

Single coded

Not back

Approximately how many employees does your organisation have?

Normal

1 0	- Sole	Trader
-----	--------	--------

8 1-9

4 10-49

5 50-249

7 250+

998 Don't know *Fixed *Exclusive

Ask only if **Q001 - Screen**,2 AND NOT (TenureB=3)

Q097 - TURNOVER: TURNOVER

Single coded

Not back

What is your annual turnover?

Normal

- 1 Less than £250,000
- 2 Over £250,000 but not more than £500,000
- 3 Over £500,000 but not more than £1 million
- 4 Over £1 million but not more than £10 million
- 5 Over £10 million but not more than £50 million
- 6 Over £50 million but not more than £100 million
- 7 Over £100 million but not more than £150 million
- 8 Not applicable
- 999 Don't know *Fixed *Exclusive
- 997 Prefer not to say (hidden in CAWI) *Fixed *Exclusive

B009 - DEMOGRAPHICS: DEMOGRAPHICS

End block

B010 - RECONTACT: RECONTACT	Begin block					
QXXX - VOUCHER:	Single coded					
Not back						
As a thank you for taking part in this survey, we'd like to send you a £5 voucher which we will send out in the next 2 weeks. Would you prefer to receive an electronic voucher via email or physical voucher by post? Both vouchers can be used at a variety of high street shops.						
Please select one	answer only					
Normal						
1 Email						
2 Post						
3 I would prefer not to receive a voucher - I	do not want to share my contact details					
Ask only if QXXX -	VOLICHER 1					
QXXX - EMAIL:	Open					
Not back						
Please enter the best email address to send your v	oucher to.					
Ask only if QXXX -	VOUCHER,2					
QXXX - ADDRESS:	Open					
Not back						
Please enter the best postal address to send your voucher to.						
rease effect the best postal dadress to serial your	rodeffer to:					
Address Line 1						
Town/City						
Postcode						

Q098 - RECONTACT1: RECONTACT1

Single coded

Not back

The Department for Business, Energy and Industrial Strategy (BEIS) would like to talk to a small number of people in more detail about their circumstances and experiences. Involvement in this stage is also completely voluntary – you will be able to choose if you want to take part when you are contacted.

Would you be willing for Kantar Public to contact you again in the next six months to invite you to participate in this research?

participate in this research? These contact details will not be linked to your responses to this survey.								
You can change your mind at any time by emailing energyusesurvey2022@kantar.com.								
	Please choose one answer only							
Norma	Normal							
1	Yes							
2	No							
	Ask only if Q098	B - RECONTACT1,1						
Q099 -	TELEPHONE: TELEPHONE	Open						
Not ba	<u>ck</u>							
Please p	provide a telephone number that you wo	ould be happy to be contacted on.						
	Ask only if Q098	3 - RECONTACT1,1						
Q100 -	NAME: NAME	Open						
Not ba	<u>ck</u>							
Please provide your name in the box below.								

Ask only if Q098 - RECONTACT1,1						
Q101 - EMAIL: EMAIL	Open					
Not back						
Please provide your email address in the box below.						

Q102 - DATALINK: DATALINK

Single coded

Not back

It is sometimes possible to link the information you provided in this survey with other datasets held by the government to help us further understand people's experiences of using and paying for energy, which will help the Government protect the rights of consumers like you.

To do this, we will need to securely send personal information (name and address) to other government departments holding the data. Once linked, all personal information will be removed from the linked dataset.

All research using this linked dataset will be anonymous – your confidentiality will be maintained at all times. The research will be carried out by the Department for Business, Energy and Industrial Strategy (BEIS) (including researchers approved by BEIS); and used for research purposes only.

Are you happy for your data to be linked in this way?

Please choose one answer only

Normal

1 Yes

2 No

IF SCREEN=2

QXXX SOFTLAUNCH

OPEN

Thank you very much for your time today. We are still working on the design of the questionnaire and your input would be very helpful. Were there any questions that were difficult to understand, or which you thought should have been worded differently?

OPEN RESPONSE BOX

No – the questions were fine

Don't know

Prefer not to say

Q103 - CLOSE: CLOSE Text

Not back

This is the end of the survey. Thank you for taking part in the Energy Use Survey 2022.

B010 - RECONTACT: RECONTACT End block

Annex B: Operators Questionnaire

Introduction

Good morning/afternoon/evening, my name is...and I am calling from Kantar Public, the independent social research company. We specialise in conducting research for government and other public sector organisations

IF NECESSARY: All our clients are from government or the not for profit sector such as regulators and charities

Please could I confirm if I am speaking to [NAME OF ORGANISATION]

- If yes, continue
- If no, check and end call

We are carrying out a survey for BEIS, the Department for Business, Energy and Indu11strial Strategy, to help them understand more about the operation of heat networks (communal and district heating) such as those you are responsible for. Your participation in this research will provide BEIS with valuable information regarding the operation of heat networks across the country. Questions will include areas such as approaches to billing, installation and general awareness of the heat network marketplace.

Please can I speak to the person in your organisation who is best placed to answer these questions regarding your heat networks?

IF NECESSARY: Please can I speak to the person who oversees heat networks in your organisation?

IF NECESSARY: If the organisation owns or operates heat networks across the country, please can I speak to the person who oversees the heat networks in [LOCATION]

IF MENTIONS THAT HAVE ALREADY PARTICIPATED IN A SURVEY: BEIS are running another survey among Heat Network operators and owners, for which you may be contacted. The two surveys are different, and if you have already participated in the other BEIS survey we would still like you to participate today.

The interview length depends on your answers but on average lasts 20 minutes, your answers will remain confidential unless you give your consent otherwise, and you have a right to withdraw at any time.

Your assistance would be much appreciated, can we go ahead now?

Continue	1	CONTINUE
Send email	2	THANK AND CLOSE

REASSURANCES TO USE IF NECESSARY

- We obtained your contact details from BEIS. They provided a selection of heat network owners and operators from their regulatory databases.
- o The aim of this research is to understand your experience as a heat network owner or operator.
- The survey will take around 20 minutes to complete.
- Any information you give us will be used for research purposes only and your answers will not be passed on to BEIS in any way that would allow you or your organisation to be identified.
- You have the right to have a copy of your data, change your data, or withdraw from the research at any point. If you'd like to do this, you can consult our website at kantar.com/uki/surveys.
- Kantar Public is a member of the Market Research Society and as such has to comply with its Code of Practice, which is available to view on the MRS website.

If you have any questions about the research, you can contact Kantar at: energyusesurvey2022@kantar.com, or call 0800 046 9038

If starting the survey:

Thank you for agreeing to participate in this voluntary research.

I just want to reassure you that your answers will remain confidential unless, if asked, you give your consent otherwise. For quality control and training purposes, this interview may be monitored or recorded and will be processed in line with our privacy policy. Only Kantar will have access to the recording.

Business model / Demographics

ASK ALL

ORGANISATION TYPE

A1. Which of the following best describes yourself/your organisation?

SINGLE CODE

- 1. Housing association
- 2. Local authority
- 3. Private landlord
- 4. Facility management company
- 5. Heating supplier (please specify)
- 6. Energy Service Company (ESCO)
- 7. Charity / Non-governmental organisation
- 8. Educational institution
- 9. Public health institution
- 10. Other public body or government department
- 11. Other (please specify)

ASK ALL

HEAT NETWORK MANAGEMENT

A9. Which of the following best describes who is responsible for managing your heat network(s)? [NOTE FOR INTERVIEWER] Ensure respondents are answering on behalf of the heat networks they have ownership of

SINGLE CODE

- 1. I operate and own the heat network myself
- 2. I am contracted by someone to operate the heat network
- 3. [DO NOT SHOW IF A1=6] I appoint an energy service company (ESCo) to be responsible
- 4. I sub-contract to another non-ESCo energy company
- 5. I sub-contract the running and maintenance to organisations with specific expertise, such as dedicated heat service companies
- 6. I sub-contract the running and maintenance to another source (please specify)
- 7. Other arrangement (please specify)

ASK ALL

DUM1

- 1. Owner (A9=1,3,4,5,6,7)
- 2. Operator (A9=2)

ASK IF HN OWNER (DUM1,1)

ORGANISATION OWNERSHIP

A2. Which of the following best describes your organisation?

SINGLE CODE

- 1. Publicly owned
- 2. Privately owned
- 3. Public-private joint venture
- 4. Other (please specify)

ASK IF HN OWNER (DUM1,1) COST MODEL

A3. Which of the following best describes how you / your organisation operates?

Please consider your organisation as a whole, rather than your heat networks SINGLE CODE

- 1. Profit generating
- 2. On a cost recovery principle (such as not-for-profit organisations)
- 3. Don't know
- 4. Prefer not to say

ASK IF PROFIT GENERATING (A3=1)

INCOME GENERATED

A4. Which of the following best describes the income generated from your heat network(s) (communal or district heating):

We want to understand the income generated from your heat networks, rather than your organisation as a whole.

SINGLE CODE

- 1. Generates a profit / surplus
- 2. Generates a loss
- 3. Don't know
- 4. Prefer not to say

ASK IF HN OWNER (DUM1,1) EMPLOYEES

A5. What is the approximate number of people employed by your organisation - including yourself? [IF A1=1, 3-10: If your organisation is a subsidiary please only consider your organisation and not your parent organisation or other subsidiaries.]

[IF A1=2: Please only think of your department within your local authority, not the authority in its entirety.]

SINGLE CODE

- 1. 1
- 2. 2 to 4
- 3. 5 to 9
- 4. 10 to 19
- 5. 20 to 49
- 6. 50 to 99
- 7. 100 to 249
- 8. 250 or more
- 9. Don't know

ASK ALL

TEXT SCREEN

For the next set of questions, we are asking you about the properties you are responsible for that currently have a heat network (communal or district heating). Please do not include any properties without a heat network in your responses to these questions. [DUM1,1 If you are responsible for multiple heat networks, please only consider the heat networks for which you have ownership.] [IF DUM1,2: If you are responsible for operating multiple heat networks, please consider all of these that you manage on behalf of [NAME OF ORGANISATION].

ASK ALL

NUMBER OF HEAT NETWORKS

A6. How many heat networks do you [IF DUM1,1: have ownership of] [IF DUM1,2: operate]?

[IF DUM1,1: Please only consider heat networks for which you consider yourself to be the 'owner']

NUMERIC

Don't know

ASK IF DO NOT KNOW NUMBER OF HEAT NETWORKS (A6=Don't know)

NUMBER OF HEAT NETWORKS BANDED

A6A. Please could you tell me the approximate number of heat networks [IF DUM1,1: have ownership of] [IF DUM1,2: operate]?

SINGLE CODE

- 1. 1
- 2. 2-4
- 3. 5-9
- 4. 10-20
- 5. 21-49
- 6. 50-99
- 7. 100 or more
- 8. Don't know

ASK ALL

DUM2

- 1. Operates one heat network (A6=1 OR A6A=1)
- 2. Operates multiple heat networks (A6>1 OR A6A=2-7)
- 3. Don't know (A6A=8)

ASK ALL

PROPERTY TYPE

A7A. Which of the following types of property do your heat networks supply heating, cooling or hot water to?

SINGLE CODE

- 1. Residential
- 2. Non-residential
- 3. Both
- 4. Don't know [Screen out]

ASK ALL

NETWORK TYPE

A7B. Which of the following best describes the heat network(s) you [IF DUM1,1: have ownership of] [IF DUM1,2: operate]?

MULTI CODE

- 1. Communal network(s) (Networks that commonly service one or two buildings in close proximity)
- 2. District network(s) (Networks with multiple properties over a large distance)
- 3. Don't know [Exclusive]

ASK IF OWNS A COMMUNAL NETWORK (A7B=1)

NUMBER OF COMMUNAL

A7C. How many communal heat networks (networks that commonly service one or two buildings in close proximity) do you [IF DUM1,1: have ownership of] [IF DUM1,2: operate]?

OPEN NUMERIC

1. Don't know

ASK IF OWNS A DISTRICT NETWORK (A7B=2)

NUMBER OF DISTRICT

A7D. How many district heat networks (networks with multiple properties over a large distance) do you [IF DUM1,1: have ownership of] [IF DUM1,2: operate]?

OPEN NUMERIC

1. Don't know

ASK IF OWNS A DISTRICT NETWORK (A7B=2)

DISTRICT BUILDINGS

A7E. How many buildings does your district heat network(s) supply heating, cooling or hot water to?

If you [IF DUM1,1: have ownership of] [IF DUM1,2: operate] more than one district heat network please provide the number of buildings supplied by the largest one

[NOTE FOR INTERVIEWER] Please confirm respondent is considering the number of buildings and not the number of dwellings

OPEN NUMERIC

1. Don't know

ASK IF RESPONSIBLE FOR RESIDENTIAL PROPERTIES (A7A PROPERTY TYPE=1 OR 3) RESIDENTIAL TENANTS

A8A. Please could you tell me the approximate number of residential dwellings that are supplied by your heat network(s)? Please provide the total number of dwellings across all residential properties with a heat network

SINGLE CODE

- 1. 1-4
- 2. 5-9
- 3. 10-49
- 4. 50-99
- 5. 100-499
- 6. 500-999
- 7. 1000 or more
- 8. Don't know

ASK IF RESPONSIBLE FOR NON-RESIDENTIAL PROPERTIES (A7A PROPERTY TYPE=2 OR 3) NON-RESIDENTIAL OCCUPANTS

A8B. Please could you tell me the approximate number of occupants in the non-residential properties supplied by your heat network(s)?

Please provide the total number of occupants across all non-residential properties with a heat network. Each organisation in your non-residential properties should count as an occupant.

SINGLE CODE

1. 1-4

- 2. 5-9
- 3. 10-49
- 4. 50-99
- 5. 100-499
- 6. 500-999
- 7. 1000 or more
- 8. Don't know

ASK ALL

INSTALLATION DATE

A11. When was your heat network installed? If you [IF DUM1,1: have ownership of] [IF DUM1,2: operate] more than one heat network, please think about the one that was installed most recently. SINGLE CODE

- 1. The heat network was already fitted to the property
- 2. In the past 6 months
- 3. In the past year
- 4. In the past 1 2 years
- 5. In the past 3 5 years
- 6. 5 or more years ago
- 7. Don't know

ASK IF HAS HAD HEAT NETWORK INSTALLED (A11=2-6)

INSTALLATION METHOD

A12. Which of the following best describes how your heat network(s) were installed? *If you* [IF DUM1,1: have ownership of] [IF DUM1,2: operate] *more than one heat network, please select all the options that apply*

MULTICODE

- 1. Heat network was built with the property (new build)
- 2. Heat network was already fitted in the property
- 3. I / my organisation fitted the heat network
- 4. Don't know

ASK ALL

TEXT SCREEN

For the next set of questions, [DUM1,1 if you are responsible for multiple heat networks, please only consider the heat networks for which you have ownership.] [IF DUM1,2: if you are responsible for operating multiple heat networks, please consider all of these that you manage on behalf of [NAME OF ORGANISATION].

ASK ALL

HEATING SOURCES

A13A. What heating sources are used for your heat network(s)? If your heat network(s) uses multiple heating sources, please state all of these

[NOTE FOR INTERVIEWER] Prompt with answer list if necessary but otherwise allow respondent to provide an answer

MULTI CODE

1. Combined heat and power (CHP) gas system

- 2. Gas-powered boiler or other gas-powered system
- 3. Ground-sourced heat pump
- 4. Water-sourced heat pump
- 5. Air-sourced heat pump
- 6. Solar thermal heat source
- 7. Biomass heat source
- 8. Waste networks
- 9. Deep geothermal networks
- 10. Electric-powered system
- 11. Oil-powered system
- 12. Other heating source (please specify)
- 13. Don't know [Exclusive]

ASK ONLY IF MORE THAN ONE CODE SELECTED AT A13A ONLY SHOW ANSWER CODES SELECTED AT A13A HEATING SOURCES

A13B. Which of the following heating sources are **primarily** used for your heat network(s)?

[NOTE FOR INTERVIEWER] Prompt with answer list if necessary but otherwise allow respondent to provide an answer

SINGLE CODE

- 1. Combined heat and power (CHP) gas system
- 2. Gas-powered boiler or other gas-powered system
- 3. Ground-sourced heat pump
- 4. Water-sourced heat pump
- 5. Air-sourced heat pump
- 6. Solar thermal heat source
- 7. Biomass heat source
- 8. Waste networks
- 9. Deep geothermal networks
- 10. Electric-powered system
- 11. Oil-powered system
- 12. Other heating source (please specify)
- 13. Don't know [Exclusive]

ASK IF NOT USING A LOW CARBON HEAT SOURCE (A13 \pm 1-7)

LIKELIHOOD TO SWITCH TO LOW-CARBON

A14. How likely are you to switch your heat networks to a low-carbon heat source at the end of your generation asset lifetime?

Low carbon heat sources help to reduce carbon dioxide emissions by using renewable or low carbon technologies, for example: heat pumps, CHP gas system, solar thermal heat source, biomass heat source, waste network / deep geothermal network

SINGLE CODE

- 1. Not at all likely
- 2. Not likely
- 3. Neither likely nor unlikely
- 4. Likely
- 5. Extremely likely

ASK IF NOT USING A LOW CARBON HEAT SOURCE (A13 \pm 1-7)

LIKELIHOOD TO SWITCH TO LOW-CARBON

A15. What are the key reasons you have not installed a low carbon heat source for your heat networks?

Low carbon heat sources help to reduce carbon dioxide emissions by using renewable or low carbon technologies, for example: heat pumps, CHP gas system, solar thermal heat source, biomass heat source, waste network / deep geothermal network

MULTI CODE

- 1. High upfront cost
- 2. Difficulty installing
- 3. High level of maintenance required
- 4. Heat pump is less effective in cold weather
- 5. Additional planning permission required to install heat pump
- 6. Other (please specify)
- 7. None of the above [Exclusive]
- 8. Don't know [Exclusive]

ASK IF NOT USING A LOW CARBON HEAT SOURCE (A13 \pm 1-7)

DRIVERS TO LOW CARBON

A16. Would any of the following make you more likely to install a low carbon heat source for your heat networks at the end of your generation asset lifetime?

Low carbon heat sources help to reduce carbon dioxide emissions by using renewable or low carbon technologies, for example: heat pumps, CHP gas system, solar thermal heat source, biomass heat source, waste network / deep geothermal network

MULTI CODE

- 1. Reduction in the upfront cost
- 2. Advice / support installing the heat pump
- 3. Free / low-cost advice on maintenance of the heat pump
- 4. Additional sources for heat network should heat pump fail / be ineffective in cold weather
- 5. Ease in accessing planning permission to install heat pump
- 6. Other (please specify)
- 7. None of the above, I would not re-consider my likelihood of installing a heat pump [Exclusive]

ASK IF NOT USING LOW CARBON HEAT SOURCE AND LIKELY TO SWITCH (A13 \pm 1-7 AND A14=3-5) CHANGE TO LOW CARBON

A17. Are you planning to change the heating source of your heat network(s) to a low carbon heat source (for example a ground-sourced, water-sourced, or air-sourced heat pump)?

Low carbon heat sources help to reduce carbon dioxide emissions by using renewable or low carbon technologies, for example: heat pumps, CHP gas system, solar thermal heat source, biomass heat source, waste network / deep geothermal network

SINGLE CODE

- 1. Yes I am in the process of making this change
- 2. Yes I intend to make this change in the next 6 months
- 3. Yes I intend to make this change in the next year
- 4. Yes I intend to make this change in the next 1 2 years
- 5. Yes I intend to make this change but it will not be within the next 2 years
- 6. Yes I intend to make this change at the end of my generation asset life time (Specify: # years)
- 7. No I do not intend to make this change
- 8. Don't know

ASK ALL

CHANGE TO NUMBER OF HEAT NETWORKS

A18. Do you anticipate the number of heat networks you [IF DUM1,1: have ownership of] [IF

DUM1,2: operate] to change in the next 12 months?

Please think of the aggregate across all of your heat networks

SINGLE CODE

- 1. Yes I anticipate installing new heat networks
- 2. Yes I anticipate acquiring existing heat networks
- 3. Yes I anticipate removing heat networks that are currently installed
- 4. Yes I anticipate no longer being responsible for operating heat networks
- 5. No I do not anticipate any changes
- 6. Don't know

ASK ALL

MANAGEMENT OF ENERGY PURCHASE DECISIONS

A19. How regularly, if at all, do you review the heating supplier for your heat network(s)? Please think of the aggregate across all your heat networks

SINGLE CODE

- 1. Every 6 months or less
- 2. Every year
- 3. Every two years
- 4. More than every two years
- 5. Never
- 6. Don't Know

Billing

ASK ALL

TEXT SCREEN

Please continue to only think about the properties you are responsible for that currently have a heat network

ASK ALL

CONTRACT DOCUMENTS

B1. When, if at all, do you supply your tenants/occupants with a heat network contract?

This may include a document like a Heat Supply Agreement.

SINGLE CODE

- 1. When the tenant/occupant moves in
- 2. Prior to the tenant/occupant moving in
- 3. I do not provide a heat network contract
- 4. Don't know

ASK ALL

BILL PAYMENTS

B2. What billing options, if any, do you provide tenants/occupants to pay for heating, hot water and cooling?

Please think about all the billing options you provide across all your heat networks

[NOTE FOR INTERVIEWER] Only read out answer codes if needed to prompt

MULTI CODE

- 1. Pre-payment meter or pre-payment card (where credit is topped up on a key, card or online account)
- 2. A monthly direct debit
- 3. A direct debit paid at other intervals
- 4. Telephone payments
- 5. Other (please specify)
- 6. None of the above [Exclusive]
- 7. Don't know [Exclusive]

ASK ALL

BILL SUMMARIES

B3. Do you provide a bill, account summary, statement or something else, which details how much your tenants/occupants pay for heating, hot water and cooling?

MULTI CODE

- 1. Yes by letter
- 2. Yes by email
- 3. Yes through an app or online account /system
- 4. Yes something else (please specify)
- 5. No [Exclusive]
- 6. Don't know [Exclusive]

ASK ALL

BILL COSTS

B4A. Which of the following costs, if any, are included in your tenant's/occupant's bills? MULTI CODE

- 1. Fuel costs
- 2. Capital cost for heating/cooling technologies (supplying the network)
- 3. Capital costs for the network (such as pipes for the heat network. This may be a recovery cost of initial capital cost for the network).
- 4. Cost for operating the network
- 5. Costs for maintaining or repairing the network or heating/cooling technologies.
- 6. Other fixed cost (please specify)
- 7. None of the above [Exclusive]
- 8. Don't know [Exclusive]

ASK IF B4A (BILL COSTS)=2-6

UPFRONT COST RECOVERY

B4B. Over what period do you intend to recover any upfront costs in full (such as capital costs for the network or generation technologies) through tenant/occupant bill payments?

- 1. Less than 10 years
- 2. 10 19 years
- 3. 20 29 years
- 4. 30 39 years
- 5. 40 years or more
- 6. Don't know

7. Not Applicable – I do not recover upfront costs through tenant/occupant bills

ASK ALL

BILL CALCULATIONS

B4C. How do you calculate the amount that tenants/occupants pay for heating, hot water and cooling based on their usage?

SINGLE CODE

- 1. Actual tenant/occupant use through a tenant/occupant-level meter
- 2. It's based on estimated tenant/occupant use
- 3. It's based on how much the property uses, divided tenants/occupants through a property-level meter
- 4. Some other way (please specify)

ASK ALL

ADDITIONAL SERVICES

B8. Which of the following additional services are included within the bill issued to tenants'/occupants' for their heating, hot water and cooling charges?

MULTI CODE

- 1. Maintenance and servicing of heating and hot water
- 2. The cost of replacing the boiler / heating system if needed
- 3. Temporary heating if heating fails (for example providing electric heaters to use)
- 4. Cost of meter installation
- 5. Cost of issuing billing (e.g., reading meter, processing payment)
- 6. Other building charge (not related to heating, cooling or hot water)

7.

- 8. Something else (please specify)
- 9. Don't know [Exclusive]

ASK ALL

BILL DISTRIBUTION

B5. Are billing amounts set for the property as a whole or per individual tenant/occupant?

SINGLE CODE

- 1. Individual tenant/occupant
- 2. Property as a whole
- 3. [SHOW IF MULTIPLE HEAT NETWORKS (DUM2=2)] It varies across the heat networks I have ownership of
- 4. Don't know

ASK ALL

TARIFF REVIEW

B6. How often, if at all, do you review the tariffs / pricing structures that are used to calculate the charges for your heat network(s)?

SINGLE CODE

- 1. Quarterly
- 2. Twice a year
- 3. Yearly
- 4. Less regularly than every year (Please specify)
- 5. Whenever a tenant/occupant queries the tariffs/pricing structures

- 6. I would never review the tariffs/pricing structures
- 7. Don't know

ASK IF REVIEWS TARIFFS (B6=1-5)

TARIFF CHANGE

B7. When, if at all, did you last change these tariffs or pricing structures?

SINGLE CODE

- 1. In the past 3 months
- 2. In the past 6 months
- 3. In the past year
- 4. Less recently than in the past year
- 5. I have never changed the tariffs/pricing structures
- 6. Don't know

ASK ALL

MISSED PAYMENTS

B9. How do you collect missed payments for heating, cooling or hot water?

MULTI CODE

- 1. Establish a payment plan with the tenant/occupant
- 2. Install a pre-payment meter in the property
- 3. Other (please specify)
- 4. None of the above [Exclusive]
- 5. I have not needed to collect missed payments [Exclusive]
- 6. Don't know [Exclusive]

Customer interaction

ASK ALL

TEXT SCREEN

Please continue to only think about the properties you are responsible for that currently have a heat network

ASK ALL

CUSTOMER SERVICE DETAILS

C1. Do you/your organisation provide customer service contact details to your tenants/occupants? Customer service contact details relate to details for a dedicated heat network customer service MULTI CODE

- 1. Yes I provide a phone number
- 2. Yes I provide an email address
- 3. Yes I provide an online address that includes an online chat function
- 4. No [Exclusive]
- 5. I / My organisation do not have customer service contact details [Exclusive]

ASK IF DOES NOT PROVIDE CUSTOMER SERVICE DETAILS (C1=4)

REASON DETAILS NOT PROVIDED

C2. Which of the following reasons best describe why you/your organisation do not provide customer service contact details?

SINGLE CODE

1. I provide my personal number for tenants/occupants to contact me

- 2. I am not aware of any requirements to provide customer service contact details
- 3. Other (Please specify)
- 4. Don't know

ASK IF PROVIDES CUSTOMER SERVICE DETAILS (C1=1-3)

WHERE DETAILS ARE INCLUDED

C3. Are the customer service contact details included in any of the following?

MULTI CODE

- 1. All documentation received by the tenant/occupant
- 2. All billing information
- 3. Other documentation (please specify)
- 4. Details are shared in another way (please specify)
- 5. Don't know [Exclusive]

ASK ALL

REGULARITY OF CONTACT FROM CUSTOMERS

C4. How regularly are you/your organisation contacted by tenants / occupants regarding a problem with their heating, cooling or hot water?

SINGLE CODE

- 1. More than once per week
- 2. Once per week
- 3. Once every two weeks
- 4. Once per month
- 5. Once every 2 to 3 months
- 6. Once every 6 months
- 7. Less often than once every 6 months
- 8. I have never been contacted regarding an issue with heating or hot water

ASK ALL

COMPLAINTS PROCEDURE

C5. Do you/your organisation have a formalised complaints procedure in the event that tenants/occupants of your properties wish to make a complaint about their heating, hot water or cooling?

By complaints procedure we mean dedicated forms or channels, such as phone numbers, for tenants to use

SINGLE CODE

- 1. Yes
- 2. No
- 3. Don't know

ASK ALL

VOLUNTARY STANDARDS

C6. Are you a member of any heat network voluntary standards schemes?

MULTI CODE

- 1. Yes The Heat Trust
- 2. Yes Another voluntary scheme (please specify)
- 3. No, I am not a member of any heat network voluntary schemes [Exclusive]

ASK ALL

VULNERABLE CUSTOMER REGISTERS

C7. Do you maintain a register of vulnerable customers?

Vulnerable customers are customers who are significantly less able to protect themselves or their interests in the energy market and/or significantly more likely to suffer detriment than a typical customer

SINGLE CODE

- 1. Yes
- 2. No
- 3. Don't know

ASK IF MAINTAINS A REGISTER OF VULNERABLE CUSTOMERS (C7=1)

VULNERABLE CUSTOMER SUPPORT

C8. Which of the following, if any, do you offer in order to support vulnerable customers? MULTI CODE

- 1. Regular meter reading services
- 2. Advanced notice of power outages
- 3. Priority support in an emergency, for example an unplanned heating outage
- 4. Nominee scheme (Vulnerable customer nominates someone to receive communications and bills)
- 5. Help with pre-payment meter access
- 6. Accessible information, such as account information / bills in large print
- 7. Language support, e.g. braille or support for people who do not speak English
- 8. Other (Please specify)
- 9. I do not offer any additional support to vulnerable customers [Exclusive]

Heating Outages

ASK ALL

TEXT SCREEN

Please continue to only think about the properties you are responsible for that currently have a heat network

ASK IF OPERATES ONE HEAT NETWORK (DUM2=1 OR 3)

HEATING OUTAGE EXPERIENCED 1

D1A. In the past 12 months, have any of your tenants/occupants experienced a loss of heating from unplanned heating outages?

SINGLE CODE

- 1. Yes once
- 2. Yes more than once
- 3. No
- 4. Don't know

ASK IF OPERATES MORE THAN ONE HEAT NETWORK (DUM2=2)

HEATING OUTAGE EXPERIENCED 2

D1B. In the past 12 months in how many, if any, of your heat networks have your tenants/occupants experienced a loss of heating from unplanned heating outages?

NUMERIC

^{98.} None

^{99.} Don't know

ASK IF EXPERIENCED A LOSS OF HEATING (D1A=1,2 OR D1B>0)

LENGTH OF HEATING OUTAGE

D2. IF EXPERIENCED ONE LOSS OF HEATING (D1A=1 OR D1B=1): How long did this unplanned loss of heating last?

IF EXPERIENCED MORE THAN ONE LOSS OF HEATING (D1A=2 OR D1B>1): Thinking about the unplanned losses of heating over the past 12 months, how long did these typically last? SINGLE CODE

- 1. Under 2 hours
- 2. 2-6 hours
- 3. 7-12 hours
- 4. 12-24 hours
- 5. Up to 3 days
- 6. 3 7 days
- 7. More than 1 week
- 8. Don't know

ASK ALL

PLANNED INTERRUPTIONS

D3. In the past 12 months, have any of your tenants/occupants experienced a loss of heating from planned heating outages?

SINGLE CODE

- 1. Yes once
- 2. Yes more than once (Specify: ____ outages)
- 3. No
- 4. Don't know

ASK IF EXPERIENCED A LOSS OF HEATING (D1A HEATING OUTAGE EXPERIENCED1 =1,2 OR D1B HEATING OUTAGE EXPERIENCED2 >0 OR D3 PLANNED INTERRUPTIONS=1,2)

OUTAGE COSTS

D4. Which of the following best describes how the costs incurred by a planned or unplanned heating outage are met?

SINGLE CODE

- 1. Tenants/occupants meet the costs in a one-off bill payment
- 2. Tenants/occupants meet the costs through a short-term increase in the cost of bills
- 3. Costs are divided across myself / my organisation and tenants/occupants
- 4. I / my organisation meet the costs
- 5. Don't know

ASK IF EXPERIENCED A PLANNED LOSS OF HEATING (D3 PLANNED INTERRUPTIONS=1,2) OUTAGE PROVISIONS

D5. Which of the following, if any, do you provide to your tenants/occupants when planning interruptions to their heating supply?

Please consider all of your heat networks

MULTI CODE

- 1. An outage or notice agreement
- 2. Alternative sources of heating
- 3. Compensation for additional electricity used if an alternative heating source (e.g., an electric fan heater) is used
- 4. Compensation after a threshold of outages has been reached (for example if tenants/occupants experience 12 outages)

- 5. Provide additional compensation (Specify)
- 6. Provide rebates on heating/hot water/cooling elements of rent payments
- 7. Other (Please specify)
- 8. I do not provide anything when planning interruptions [Exclusive]

Regulations, Rights, and Powers

ASK ALL TEXT SCREEN

Please continue to only think about the properties you are responsible for that currently have a heat network

ASK ALL

REGULATIONS AWARENESS

E1. Which of the following, if any, are you aware of?

MULTI CODE

- 1. Heat Network (Metering and Billing) Regulations (HMBR)
- 2. Heat Network Market Framework (HNMF)
- 3. Heat Network Zoning (HNZ)
- 4. Heat Networks Delivery Unit (HNDU)
- 5. Green Heat Network Fund (GHNF)
- 6. Heat Networks Investment Project (HNIP)
- 7. Heat Network Efficiency Scheme (HNES)
- 8. Renewable Heat Incentive (RHI)
- 9. Heat Networks: Code of Practice for the UK (CP1)
- 10. None of these [Exclusive]

ASK IF AWARE OF CP1 (E1=9)

CP1 COMPLIANCE

E2. The Heat Networks: Code of Practice for the UK (also known as CP1) established a set of standards for Heat Network operators like yourself.

CP1 included standards for: Correct sizing of plant and network, achieving low network heat losses, achieving low return temperatures, use of variable flow control principles, optimizing the use of low-carbon heat sources to supply the network, managing risks and controlling environmental impacts, and providing customers with affordable heat and a reliable service

To what extent are you /your organisation compliant with these standards?

SINGLE CODE

- 1. Fully compliant
- 2. Partially compliant
- 3. Not at all compliant
- 4. Don't know
- 5. Prefer not to say

ASK IF AWARE OF HMBR REGULATIONS (E1=1)

HMBR AWARENESS

E3. Which of the following aspects of Heat Network (Metering and Billing) Regulations are you aware of?

MULTI CODE

- 1. Definition of a heat network operator / supplier
- 2. Requirement to notify the government that a heat network is being operated
- 3. Requirement to install heat meters and heat cost allocators where necessary or cost effective
- 4. Building classes that require some operators to install metering devices (Viable, Open, Exempt)
- 5. Requirement to ensure metering devices are accurate and replace them where necessary
- 6. Requirement to ensure bills and billing are accurate and based on actual consumption
- 7. None of the above [Exclusive]
- 8. Don't know [Exclusive]
- 9. Prefer not to say [Exclusive]

ASK ALL

HNDU ASSISTANCE

E4. Which of the following, if any, have you received support from for the development or operation of your heat network(s)?

MULTI CODE

- 1. Heat Networks Development Unit (HNDU),
- 2. Heat Networks Investment Project (HNIP)
- 3. Green Heat Network Fund (GHNF)
- 4. Heat Network Efficiency Scheme (HNES)
- 5. Renewable Heat Incentive (RHI)
- 6. Other (please specify)
- 7. None of these [Exclusive]
- 8. Don't know [Exclusive]

ASK ALL

REGULATION IMPACT

E5. What are the impacts, if any, of current heat network regulations on yourself or your organisation?

MULTI CODE

- 1. A requirement to install heat meters or heat cost allocators
- 2. A requirement to complete a viability exercise to determine if I should install heat meters or heat cost allocators
- 3. Requirement to notify tenants/occupants of changes to their heat network
- 4. There has been no impact of heat network regulations on myself or my business [Exclusive]

ASK IF AWARE OF HNMF (E1=2)

LEVEL OF AWARENESS

E6. Which of the following elements, if any, of the upcoming market framework for heat networks are you aware of?

MULTI CODE

- 1. Requirements to get authorised by the future regulator
- 2. Optional licensing to gain extra rights and powers
- 3. Requirements on transparency and quality of service
- 4. Regulatory powers to investigate heat network pricing
- 5. Future requirements on minimum technical standards
- 6. Future step-in rights in the event a supplier leaves the market
- 7. Future powers to set decarbonisation targets
- 8. None of the above [Exclusive]

9. Don't know [Exclusive]

ASK ALL

LIKELIHOOD TO APPLY FOR RIGHTS AND POWERS

E7. How likely would you be to apply for optional licensing from the future Regulator, which would define your organisation as a statutory undertaker and obtain extra rights and powers for the purposes of developing or operating a heat network?

These optional rights and powers could include access rights, street works, under roadway, linear obstacle and permitted development rights. [IF NECESSARY: More information about option rights and powers can be found at this link: https://www.gov.uk/government/consultations/heat-networks-building-a-market-framework]

SINGLE CODE

- 1. Not at all likely
- 2. Not likely
- 3. Neither likely nor unlikely
- 4. Likely
- 5. Very likely
- 6. Don't know

ASK ALL

RIGHTS AND POWERS GRANTED

E8A. How often in the past 12 months, if at all, have you obtained or attempted to obtain any of the following?

NUMERIC

1.	Access to privately owned land or property (e.g., to install equipment or develop the
	network)
2.	Apply for Street works (either through a street works license or permit system)
3.	Permission to lay pipes under the roadway
4.	Permission to cross linear obstacles (such as railway lines, tramways, or canals)
5.	Planning permission to maintain, develop or expand your heat network(s)

- 6. Don't know [Exclusive]
- 7. None of the above [Exclusive]

ASK IF TRIED TO OBTAIN ANY RIGHTS OR POWERS (ANY ROW AT E8A >0) ONLY SHOW EACH ROW IF RESPECTIVE CODE AT E8A>0

RIGHTS AND POWERS UNABLE TO ACCESS

E8B. In the past 12 months, have you been unable to obtain any of the following? MULTICODE

- 1. Access to privately owned land or property (e.g., to install equipment or develop the network)
- 2. Apply for Street works (either through a street works license or permit system)
- 3. Permission to lay pipes under the roadway
- 4. Permission to cross linear obstacles (such as railway lines, tramways, or canals)
- 5. Planning permission to maintain, develop or expand your heat network(s)
- 6. None of the above [Exclusive]
- 7. Don't know [Exclusive]

ASK IF HAS BEEN UNABLE TO ACCESS RIGHTS AND POWERS (E8B=1-5) REASONS FOR LACK OF ACCESS TO RIGHTS AND POWERS

E8C. Which of following, if any, were impacts of being unable to access the following rights and powers?

[PIPE IN CODES SELECTED AT E8B]

SINGLE CODE

- 1. Unable to carry out required maintenance
- 2. Unable to carry out planned expansion/development of the network
- 3. Delays in the maintenance/development of the network
- 4. Seeking of an alternative arrangement to resolve the issues
- 5. Re-application for the permission/access
- 6. Other (please specify)
- 7. None of the above [Exclusive]
- 8. Don't know [Exclusive]

ASK ALL

ENERGY SUPPLIER OR OPERATOR LEFT

E9A. In the past 5 years has the heating supplier of your heat network left the market? SINGLE CODE

- 1. Yes
- 2. No
- 3. Don't know

ASK IF ENERGY SUPPLIER LEFT MARKET (E9A=1)

ENERGY SUPPLIER LEFT

E9B. Which of the following actions, if any, were required when the energy supplier of your heat network left the market?

MULTI CODE

- 1. Identifying a new energy supplier
- 2. Notifying tenants/occupants of a change of supplier
- 3. Don't know [Exclusive]
- 4. None of the above [Exclusive]

ASK IF ENERGY SUPPLIER LEFT MARKET (E9A=1)

CUSTOMER IMPACT

E9C. Did the change of supplier cause a disruption in the supply of your tenant's/occupant's heating and hot water?

SINGLE CODE

- 1. Yes
- 2. No
- 3. Don't know

ASK ALL

STEPS TO NO LONGER OPERATE

E10. Which, if any of the following steps are already in place or would be taken if you were no longer able to operate a heat network?

MULTI CODE

1. There are contractual arrangements in place which would ensure to continued operation of the heat network

- 2. There are no contractual arrangements in place, but we would be likely to appoint a new organisation to permanently take over operation
- 3. Other (please specify)
- 4. Don't know [Exclusive]

Closing questions

ASK ALL

RECONTACT

Thank you for participating in this survey. Your views will help BEIS continue to support heat network owners and operators. Over the next 6 months we will be conducting further research for BEIS on these topics. Would you be happy for someone from Kantar Public to invite you to participate in this research?

- 1. Yes
- 2. No

ASK ALL

CONTACT DETAILS

F1. Would you be willing for us to share your contact details with the Department for Business, Energy and Industrial Strategy (BEIS) and any research contractors appointed by BEIS for research in the future? These contact details will not be linked to your responses to this survey. Your details will only be used for future research and will not be linked to any of your survey responses.

SINGLE CODE

- 3. Yes, Kantar Public can share my contact details with BEIS and their appointed research contractors
- 4. No, Kantar Public cannot share my contact details with BEIS and their appointed research contractors

ASK IF CONTACT DETAILS =1

TELEPHONE

F2. Please provide a telephone number that you would be happy to be contacted on. OPEN

99. Prefer not to say

ASK IF CONTACT DETAILS =1

NAME

F3. Please confirm your name OPEN

99. Prefer not to say

ASK IF CONTACT DETAILS =1

EMAIL

F4. Please confirm your email address OPEN

99. Prefer not to say

ASK ALL

F5.

Thank and Close

Annex C: Consumers Invitation Letter

The Resident(s)

<ADDRESS LINE 1>

<ADDRESS LINE 2>

<ADDRESS LINE 3>

<add><address_line_4>

<POSTCODE>

Date: XX March 2022

Our ref.: 262322992 / <SERIAL>

Dear Sir/Madam,

Department for Business, **Energy and Industrial Strategy**

1 Victoria Street

SW1H 0ET

This is an invitation to take part in the Energy Use Survey 2022, which is an official Government study. This is your opportunity to tell us about using and paying for energy, which will help the Government protect the rights of energy users like you. As a thank you for taking part you will be sent a £5 voucher.

The survey should take no more than 20 minutes to complete. You can complete it online using the details below:

Go to this website:

www.energyusesurvey2022.co.uk

Enter your username: [serial]

Enter your passcode:

[passcode]

If this is a residential property, any adult in your household can take part, as long as they have some knowledge of recent household bills. If this is a non-residential property, we would like your views if you regularly use this building and have some knowledge of recent energy bills. You may want to consult with a colleague who has responsibility for paying utility bills.

This study is being carried out by Kantar Public, an independent research company, on behalf of the Department for Business, Energy and Industrial Strategy (BEIS). All research is carried out in line with the Market Research Society Code of Conduct and your answers will be kept confidential and used for research purposes only. To view the Kantar Privacy Policy, please visit uk.kantar.com/surveys. If you have any questions, accessibility requirements, or difficulties completing the survey or if you would like to request a postal questionnaire please contact Kantar Public by emailing energyusesurvey2022@kantar.com or calling 0800 046 9038. You can also ask a friend, family member or carer to help you.

On behalf of BEIS, I would like to thank you in advance for your help with this important research.

Yours sincerely,

Project Director, Heat Networks Department for Business, Energy and Industrial Strategy





Why did we choose your address?

As it is not possible to ask everyone to take part in the survey, we select a sample of addresses to represent the entire country. Your address was selected at random from a list of private addresses held by the Royal Mail.



What does it mean to "have some knowledge of recent bills"?

To take part you must be at least partly involved in decisions about how utilities bills are paid and managed, for example energy and water bills.



Why are my views important?

We need people from all age groups and backgrounds to take part. Your views are important to us as without them we may not have a representative picture of people's energy needs.



Who is conducting the survey?

The survey is being conducted on behalf of the Department for Business, Energy and Industrial Strategy (BEIS) by Kantar Public, an independent research agency.

BEIS is the government department responsible for ensuring the country has secure energy supplies that are reliable, affordable and clean.



Is this survey confidential?

Yes. Your contact details will be held securely at all times and your responses will be treated confidentially. The information that is collected will only be used for research purposes. Your name and address details are kept separate from your answers and will not be passed on to BEIS or to any other organisation. No individual, household or organisation will be identifiable from the results and you will not receive any 'junk mail' as a result of taking part.

For more information on how we keep your information safe please refer to Kantar's Privacy Policy: https://www.kantar.com/uki/surveys

How is my data kept secure?

All information will be processed in compliance with the Data Protection Act 2018 and General Data Protection Regulation for the performance of official authority and public interest.

Should you have any specific concerns or queries please contact Kantar at:

energyusesurvey2022@kantar.com.

How do I collect the voucher?



Once you have completed the survey you will be asked to provide your email address, following which Kantar Public will email you with a voucher code to be redeemed in return for a Love2Shop voucher at:

https://www.love2shoprewards.co.uk/login.php

If you complete the survey by post, we will post your £5 voucher.

How will the information be used?

The information will be used to produce statistics and reports that help government decision making regarding energy use.



What are my rights?

Completion of this survey is voluntary, and you can stop taking part at any time. We will ask about your experiences using and paying for energy. We will also ask you for sensitive information such as your ethnicity, but you don't have to answer these questions. For more information see:

https://ico.org.uk/for-the-public/



If you are not happy with the way we are processing your data, you have the right to lodge a complaint to the Information Commissioner's Office about our practices at: https://ico.org.uk/concerns/

Annex D: Operators Invitation Letter

<address_line_1>
<address_line_2>
<address_line_3>
<address_line_4>
<postcode>

Date: XX April 2022

Our ref.: 139236 / <SERIAL>

Dear <Salutation>,

Department for Business, Energy and Industrial Strategy

1 Victoria Street

SW1H 0ET

Department for Business, Energy, and Industrial Strategy (BEIS) Heat Network Operators Survey

We are writing to ask for your help with an important independent study being carried out among heat network suppliers and operators on behalf of the department for BEIS.

Your participation will help BEIS better support operators of heat networks like you.

BEIS would like to understand more about the operation of heat networks (communal and district heating) in the properties you are responsible for.

Why take part?

- ✓ We'll use your views to continue to inform the development of future heat network regulations
- ✓ Yours answers will let us know what further support the industry needs from the Government.
- ✓ The research is quick and easy. The telephone interview will take around 20 minutes.

We would like to speak to the individual in your organisation who is best placed to answer questions about your experiences of operating heat networks, including approaches to billing, installation and general awareness of the heat network marketplace.

If you would like to take part but have limited time to do so, please email energyusesurvey2022@kantar.com with the best time and number to contact you on.

BEIS have commissioned Kantar Public to speak to a selection of heat network operators on their behalf. The interviews will take place by telephone over the next few weeks and will last around 20 minutes. The information you provide for this study will be used for research purposes only. Kantar Public will not provide BEIS with the names of anyone that takes part.

For more information about how Kantar Public keeps your information safe, please see their privacy policy, which you can find on this website: kantar.com/uki/surveys.

If you do not want to be contacted or have any other queries, you can call the free phone number 0800 046 9038 or email energyusesurvey2022@kantar.com. Please remember to quote the reference number on the top left corner of this letter.

Yours sincerely,

Project Director, Heat Networks, BEIS

Annex E: Consumer Topic Guide

BEIS Heat Networks Consumer and Operators

Domestic Topic Guide

35-45mins, online via Zoom (or phone if preferred)

Background for fieldwork team

Heat is often regarded as a relatively neglected area of energy and decarbonisation policy. Focus in recent years has tended to be on electricity generation and growth of renewables. Yet around half of all UK energy is used for heating, and the proportion of natural gas used for heating dwarfs the amount used to generate electricity.

Heat networks are an important way of increasing the number of households and commercial buildings heated by low carbon sources, of reducing fuel cost and fuel poverty, and improving energy security. The majority of low-cost energy efficiency measures have already been undertaken, leaving district and communal heating as vital parts of the solution. It is estimated that around 18% of UK heat will need to come from heat networks by 2050 if the UK is to meet its carbon targets cost effectively.

BEIS commissioned Kantar Public to undertake a quantitative survey of attitudes towards heat networks of domestic and non-domestic consumers, and operators. These discussions are part of the follow-on qualitative research to provide deeper insights into domestic consumers' experiences and perceptions of their heat network. Domestic consumers are one of three audiences BEIS wish to speak to in this phase, alongside non-domestic consumers, and operators of heat-networks.

Research Aims

The survey (March-May 2022) found domestic consumers are more likely to be satisfied with their heating systems and have cheaper costs than consumers not on a heat network. However, they were also more likely to report outages and have made complaints than non-heat network consumers. This research will allow us to enrich the understanding of survey results by adding nuance and richness and fill evidence gaps from initial findings.

Qualitative interviews are designed to explore a range of questions, hypotheses and evidence gaps remaining after the quantitative survey.

The overall aim of this research strand is to enhance BEIS' understanding of domestic consumers' experiences of heat networks

The research objectives are to:

- Explore experiences and perceptions of heat networks, including billing, customer service and satisfaction
- Identify factors driving consumers' levels of satisfaction/dissatisfaction with heat networks, and with their suppliers
- Explore attitudes and behaviours around billing, how these differ and whether they are changing.
- Explore views around affordability, and experience of customer service, including how / whether this differs for vulnerable households
- Understand the level of concern with the cost-of-living crisis and cost of energy vs. if they were not in a heat network

Key research guestions to answer for domestic consumers:

- Do domestic consumers identify benefits to being part of a heat network?
- To what extent is the potential for heat networks to be fossil-fuels-free seen as current, or potential, benefit of being a heat network customer?
- For those that are satisfied/dissatisfied, what is driving this?
- With few understandings how bills are calculated, what are this audience's information needs?
- Do perceptions of affordability differ between vulnerable and non-vulnerable households?
- Does being on a heat network vs. not have any impact on level of concern with the costof-living crisis? What, specifically, is driving this?
- Do domestic consumers have any desire to decarbonise, and recognise the role of heat networks in this?

Please note, this guide is not a script and is intended to be used flexibly, with participant responses guiding the flow of the conversation, topics covered in the order that they naturally arise and probes used only when needed







1. Introduction

(2 minutes)

Introduce research, reassure about confidentiality and set tone of discussion

Warm up and introduction

- Introduce moderator and Kantar Public
- Research on behalf of BEIS
- Aim of the discussion is to understand their experiences and perceptions of heat networks, their satisfaction with the heat network in their home, any concerns about billing and how the cost-of-living crisis may have affected this

- Your views and experiences will be looked at together with those of other heat network consumers, as well as heat network operators. You will not be identified in reporting
- o Interview length 35-45 minutes
- Research is confidential and voluntary your personal details will not be shared with
 BEIS and participation will not affect your current or future relationship with BEIS
- Thank you leaflet check if received beforehand (in appointment confirmation email), else email after interview
 - Kantar's privacy policy can be accessed on our website: https://www.kantar.com/uki/surveys
- o Any questions?

Recording

Ask participant for permission to record, then start recording and confirm consent

2. Background

(10 minutes)

To build rapport and establish context regarding their background

Participant intro

o Name, age, location

Comprehension of heat networks and definition

Interviewer to read out definition if needed:

READ OUT HEAT NETWORK DEFINITION: "Most homes have their own boiler or a burner located inside the home to generate heating. For some homes, heating is provided by communal heating. This is where heating is provided by a shared boiler, or another heat source, that is located outside of your home but in or near the same building. The boiler provides heat to all homes within that building. An example of this is a block of flats with a shared communal boiler in the basement.

Other homes are on district heating systems. This is where heating is provided by a shared boiler or heat source that provides heating and hot water for multiple buildings. This could be multiple houses or multiple blocks of flats. Often, the central heat source has its own small building near these homes, sometimes called an 'energy centre'. Heat is provided to homes via a heat network and heat exchangers inside each person's home. Both types of shared heating systems are called Heat Networks."

• Introduction to heat networks

- o Do you think having a heat network is better than not having one? Why?
 - Benefits/downsides of having a heat network
 - SPONTANOUES THEN PROBE: bills, lack of outages, fairness of calculations, supplier, sustainability considerations
- Was the heat network already in your home or it was installed after you moved in?
 - If after moving in, when installation happened
 - If installed after moving in, how it compares to previous system
 - Did they know the home had a heat network prior to moving in
- Apart from your heat network, do you use any other sources for heating (e.g. gas fire)? Why/why not?

Interviewer to note participants' overall comprehension of heat networks

Heat networks and environmental concerns

- Are you aware of how heat networks compare with conventional heating systems from an environmental perspective? Why/why not?
- How important do you think is a green/low carbon production of heat, i.e. changing to more environmentally friendly heating sources?
 - Are HNs seen as an opportunity to reduce environmental impacts/carbon emissions

3. Billing & loss of heating

(5 minutes)

Exploring billing satisfaction, potential improvement suggestions and the loss of heating

· Explore satisfaction with billing

- o Are you satisfied with your billing method/process? Why/why not?
 - Probe on information included in billing, timeliness of billing
 - If not satisfied with method, what the preferred billing method is
 - If not satisfied, what can be done to address this

If they have ever had to go without heating or hot water

- Have you ever had to live with no heating or hot water whilst living in this property? If yes, what were the reasons for it?
 - What impact did not having heating or hot water have on you?
 - Probe on the impact of no heating on them personally, i.e., health implications, discomfort, stress
 - Probe on the impact of no heating on their property, e.g., mould
 - Whether they reached out to anyone for support and if yes who
 - o If no, whether they were aware they could get support
 - Whether this has affected their satisfaction with heat network, why/why not
 - What compensation (if any) they received.
 - o If yes, was it adequate?
 - o If no, what compensation would you like to have received?

4. Perceptions of affordability

(15 minutes)

Exploring participants perceptions of cost of living and affordability of their heating network

Moderator to take care to introduce sensitively and assure they don't have to answer if they would prefer not to

Cost of living crisis

- o Impact of cost of living: Many households are struggling with the impact of the 'cost-of-living crisis'.
- How easy/difficult do you find it to keep up with your heating and hot water costs, in the context of the cost-of-living crisis?
 - If unable to, how long they have struggled.
 - Whether they have approached their supplier for assistance and if yes what they received
 - Whether they have approached anyone other than supplier for assistance i.e. family and friends, voluntary organisations etc. and if yes what they received

- Ever missed a payment for heating and hot water
 - If yes, when and how many times.
 - What impact it had. Probe with disconnection/no heating and hot water, repercussions from supplier
 - If not already covered: Whether they received any extra help for energy costs from their supplier? What was that experience like
- o Have you sought any support or advice on rising heating costs? If yes, where from?
 - Was this helpful
 - Any support or advice that was not available that would help
 - Whether they are the recipient of targeted government help outside of £400 energy payment, if yes what
 - If they are satisfied with the extra help offered, why/why not

5. Satisfaction with heat networks

(10 minutes)

Exploring their satisfaction with their heat network

- Exploring satisfaction of heat network systems and suppliers
 - How satisfied/dissatisfied are you with your heat network? Why?
 - Any examples of great/satisfying experiences with your heat network system/supplier
 - Any examples of negative experiences with heat network system/supplier
 - If yes, how could be addressed in the future
 - Do you encounter any regular issues which cause frustration?
 - If yes, how they could be addressed
 - Do you see any other areas in which your heat network operator needs to improve on?
 If yes, what needs to happen
 - Have you ever complained about your heat network, and have you been satisfied with the response received? Why/why not?
 - If not, what could have been better handled about their complaint
 - o Has anything ever stopped you from complaining about your heat network?

6. Close

(3 minutes)

Discussing any final thoughts and closing conversation

- Any final thoughts?
- · Thanks, and close
 - o IF BEING PAID MERIT INCENTIVE:
 - You will receive £30 as a thank you for your participation in this research. Within 7 working days of completing the research, you will receive an email from Merit containing a code to access your incentive. MERIT is an online platform and offer a range of options to spend your money on:
 - E-VOUCHERS for a range of websites

- physical LOVE2SHOP CARDS that will be posted to you
- a PAYPAL payment to an account of your choice
- **RESEARCHER:** confirm and clearly note participant's full name and email address for receiving MERIT email. Double-check all info with participants.

Post-field work admin:

- Upload audio recording to secure project folder, labelled as follows: JN_PROJECT NAME #
 [respondent number] AND TYPE_ RESEARCHER INITIALS_DATE
- Complete analysis chart and save in secure project folder

Annex F: Operator Guide

BEIS Heat Networks Consumers and Operators

Operators Guide

45mins, online via Zoom (or phone if preferred)

Background for fieldwork team

Heat is often regarded as a relatively neglected area of energy and decarbonisation policy. Focus in recent years has tended to be on electricity generation and growth of renewables. Yet around half of all UK energy is used for heating, and the proportion of natural gas used for heating dwarfs the amount used to generate electricity.

Heat networks are an important way of increasing the number of households and commercial buildings heated by low carbon sources, of reducing fuel cost and fuel poverty, and improving energy security. The majority of low cost energy efficiency measures have already been undertaken, leaving district and communal heating as vital parts of the solution. It is estimated that around 18% of UK heat will need to come from heat networks by 2050 if the UK is to meet its carbon targets cost effectively.

BEIS commissioned Kantar Public to undertake a quantitative survey of attitudes towards heat networks of domestic and non-domestic consumers, and operators. These discussions are part of the follow-on qualitative research to provide deeper insights into operators' experiences and perceptions of their heat network. Operators are one of three audiences BEIS wish to speak to in this phase, alongside non-domestic and domestic consumers.

Research Aims

- Understand the ways in which heat network operators own and operate heat networks
- Understand investment decision-making by operators
- Understand the impact of the cost-of-living crisis and rising energy costs from operators' perspective
- Enrich the understanding of the relationship between operators and consumers
- Explore the awareness and impact of regulations
- Explore insolvency risk and operators' understanding and potential use of step-in rights
- Explore attitudes towards decarbonised heat production

Research questions to answer for operators:

- What are the different types of ownership models for heat networks?
- What are operators' experiences of the relationship with consumers when it comes to communication, billing and support?
- To what extent is the potential for HNs to be fossil fuels free seen as current, or potential, benefit of being an HN operator?

- What is operators' experience with the supply chain of suppliers (i.e. when it comes to their capacity, quality, skills, diversity, competition, bottlenecks, etc.)?
- What drives operators' investment decisions?

Please note, this guide is not a script and is intended to be used flexibly, with participant responses guiding the flow of the conversation, topics covered in the order that they naturally arise and probes used only when needed

1. Introduction

(2 minutes)

Introduce research, reassure about confidentiality and set tone of discussion

Warm up and introduction

- Introduce moderator and Kantar Public
 - FREELANCERS introduce yourselves as 'working on behalf of Kantar Public' (not 'from Kantar Public')
- o Research on behalf of Department for Business, Energy and Industrial Strategy (BEIS)
- Aim of the discussion is to understand the operation of heat networks (communal and district heating). Your participation in this research will provide BEIS with valuable information regarding the operation of heat networks across the country.
- Interview length maximum of 45 min
- Research is confidential and voluntary your personal details will not be shared with BEIS and participation will not affect your current or future relationship with BEIS
- Incentive of £50 as a thank you for your time and participation
- Thank you leaflet check if received beforehand (in appointment confirmation email),
 else email after interview
 - Kantar Public's privacy policy can be accessed on our website: https://www.kantar.com/uki/surveys
- Any questions?

Recording

Ask participant for permission to record, then start recording and confirm consent

2. Background

(2 minutes)

Understanding the type of organisation and heat network

12. Participant intro

- a. Name, age
- b. Location
- c. Position within organisation

13. Confirmation of the type of organisation

- Housing association, Local authority, Private landlord, Facility management company, Heating supplier (please specify), Energy Service Company (ESCO), Charity / Non-governmental organisation, Educational institution, Public health institution Other public body or government department, Other (please specify))
- Confirmation of communal vs. district heat network
- Confirmation of the number of operated heat networks <u>Confirm if solely and</u> <u>directly responsible for managing the heat network</u>

o <u>Interviewer to use to inform level of detail asked / probed about topics like billing</u> and investment decisions

3. Heat network operations

(10 minutes)

Understanding the details of the heat network operations, ownership models and attitudes towards decarbonisation.

Understand the ownership model

Allow more time on this questions in cases where ownership is more nuanced or shared or where operation is smaller and interviewee is likely to have less to say around changes to primary energy source and supply chains.

- Who owns the network(s)?
- Why did you decide on using this ownership model?
 - o Advantages/disadvantages for operations
- Do you expect any changes in the ownership of your network in the future?

Understand evaluation of energy suppliers

- o Who is your energy supplier?
- o How do you evaluate/review your energy suppliers?
 - What KPIs they review

Understand maintenance responsibility

o Who is responsible for maintaining the heat networks?

Explore potential changes in primary energy source

By primary energy source we mean gas (most likely), combined gas, electric, biomass or other heating source

- What changes, if any, do you expect in your primary energy source over the next 12 months?
 - Probe: situation on the global energy market, energy security and sustainability
 - How it will affect their operation

Explore experience and issues with supply chain of energy supplier

- How reliable your energy supplier?
 - For example, if they are on time, at the expected cost
- What issues, if any, have you experienced with your energy supplier?
- (Probe if needed):
 - Capacity to take on demands
 - Quality of what is supplied
 - Level of skills offered
 - Level of choice of types of energy supplied and how it is provided
 - Level of choice between different suppliers
 - Any disruptions to your heat network supply
- o Do you experience disruptions to your Heat Network?
 - If so, in what ways do these affect your operations?

Decarbonised energy production

Explore attitudes towards decarbonised heat production

- How do considerations around trying to be more environmentally friendly/produce less carbon shape your HN operations, if at all?
 - Whether it is an important consideration for them. To what extent?

Do you think HNs can contribute towards 'net zero' goals, i.e. reducing environmental impacts? Why?

4. Operator-consumer relationship

(10 minutes)

Understanding interactions with consumers

o Explore the profile of households and properties within HNs

- o What is the typical household size and property type within your heat network?
 - To what extent households vary
- o What makes this household size/property type suitable for a heat network?

Explore approaches to billing and important cost elements

- If you know, which cost elements are typically included in your bills to consumers?
 Distinguish between operational and capital costs
 - Which changes (if any) do they observe in the share of each element?

If not known, who in (or outside) your organisation would have this information?

Probes for those with knowledge (if needed):

- Whether they offer a fixed or variable tariff (or both)? Why?
- Whether they use a cost recovery model. If yes, how it works
 (Note to interviewer, a cost recovery method is an accounting concept in which
 a business does not recognise profit related to a sale until the cash collected
 exceeds the cost of the good or service sold)
- Whether they monitor consumers deciding to disconnect from the network?
 - If yes, why?
 If not, why not

Explore interactions with consumers

- o What kind of interactions do you have with consumers? For what purpose?
 - If complaints not mentioned yet, what typical complaints they receive from consumers
 - Which communication channels are utilised and whether these differ
 - If supplied both domestic and non-domestic consumers, how interactions differ between domestic and non-domestic consumers

Understand the impact of the cost-of-living crisis

- Has the relationship with consumers changed in the past 6 months, particularly in relation to rising fuel costs? In what ways?
- o How does the cost-of-living crisis affect your operations?
 - Whether they need any support over the next 6 months
 - If yes, what this support should entail
- Have you changed your short- and long-term heat network operating plans in light of the energy crisis? How?
 - Whether consumers are likely to be impacted, if so, how?
- o What other dynamics/changes can you observe following from the crisis?
 - If necessary, probe with: more self-disconnection, decrease in energy usage, change in billing, change in your own costs

5. Investment decision-making

(5 minutes)

Understand the likely future trajectory of the heat network operations

Small / local heat networks may struggle to answer this section. Interviewer to establish whether any expansion planned, why/why not and skip additional probes if irrelevant.

Explore future investment trajectory, barriers to expansion and decision-making process

- o Are you seeking to expand your portfolio of HNs and/or extend your current HNs?
 - Tell me more about what goes into this decision.
 - Explore barriers to expansion/extension (e.g. supply chain)
- If expansion planned, how many new networks do you plan and why?
- If extension of existing HNs planned, how do you identify new opportunities?
- If no expansion and/or extension planned, why not?
 - Whether anything would make it more attractive to operate more heat networks
- o Could you walk me through the investment decision process?
 - Which stakeholders are involved
 - If it differs depending on whether it is an expansion or extension
- o How important is government funding for your future investment?
 - What government departments/agencies are important sources for funding
 - If not mentioned, what about BEIS

6. Regulatory frameworks & standards (10 minutes)

Exploring the (awareness of) regulatory framework and performance standards relevant to the operation of heat networks

Explore the relevance of regulations for HN operations

How do the various heat network regulations affect your operations?
 (Note to interviewer, potential regulations include, for example, HMBR (Heat Network (Metering and Billing) Regulations, RHI (Renewable Heat Incentive), CP1 (Heat Networks: Code of Practice for the UK, GHNF (Green Networks Delivery Unit))

Understand the process of addressing planned/unplanned outages

- Tell me more about planned and unplanned outages on your HN.
 - How often these occur
- What is the process to address these?
 - What, if any, support is provided for consumers in the case of outages
 - What they provide to consumers in the event of an outage
 - Any compensation regimes linked to Guaranteed Standards of Performance?
 - If not, whether they are looking into implementing such a regime?
 Why/why not?
 - Whether compensation payments are provided to consumers in the event of an unplanned outage
 - If not, why?
 - Any feedback from consumers regarding support

7. Step-in rights and risks of insolvency (5 minutes)

Understanding the impact of (potential) supplier's market exits for the operation of networks

Investigate the (potential) impact of market exits of suppliers

- Confirm from screener: Have any of your suppliers exited the market recently or over the past 5 years?
- By 'market exits', we refer to suppliers who have chosen to withdraw from heat networks to redirect business or in response to financial losses, for example
 - If yes, what actions did they take
 - If no, what actions would they take
- Did recent developments on the energy market change your contingency planning for supplier exits? If yes, how?
- o If supplier exited, did this cause any disruption to your operations/for consumers?
- (For landlords only) What requirements do you have to ensure the supply of heat to consumers?

8. Close (2 minutes)

Close the conversation and clarify the incentive details

- o Any final thoughts?
- Thanks and close
 - o IF BEING PAID MERIT INCENTIVE:
 - You will receive £50 as a thank you for your participation in this research. Within 7 working days of completing the research, you will receive an email from Merit_containing a code to access your incentive. PERKS are an online platform and offer a range of options to spend your money on:
 - **E-VOUCHERS** for a range of websites
 - physical LOVE2SHOP CARDS that will be posted to you
 - a PAYPAL payment to an account of your choice
 - **RESEARCHER**: confirm and clearly note participant's full name and email address for receiving PERKS email. Double-check all info with participants.

Post-field work admin:

- Upload audio recording to secure project folder, labelled as follows: JN_PROJECT NAME #
 [respondent number] AND TYPE RESEARCHER INITIALS DATE
- Complete analysis chart and save in secure project folder