

Household Energy End-use Project 2

Householder Survey

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Interview admin

Interviewer	
Household reference number	
Date	
Time start	
Time end	
Interview notes	

Introduction

The aim of this interview is to find out a bit more about how you use energy in your home. This information will help us understand the data being collected by the energy monitoring equipment and sensors.

You don't have to answer all the questions and may stop the interview at any time. (You can respond with "Don't know" or "Prefer not to say" to any question).

All information collected as part of this study will be treated as confidential, held securely by Statistics New Zealand and BRANZ, and only be used for statistical or research purposes.

We do not identify individuals in published statistics or research.

The interview should take about 45-60 minutes.

Do you have any questions?

Are you happy to proceed?

Occupancy

1. Looking at Show Card 1, **for about how many years have you lived at your current (this) address?**

- ☐ Less than 1 year
- ☐ 1 year or more but less than 3 years
- ☐ 3 years or more but less than 5 years
- ☐ 5 years or more but less than 10 years
- ☐ 10 years or more
- ☐ Don't know
- ☐ Refused

2. Looking at Show Card 2, **Generally speaking, during winter, at which times of day is someone usually at home... [think about all members of the household, whether someone works from home etc]**

2.1. On weekdays?

- ☐ All or most of the time (ONE CODE ONLY)
- ☐ 6am to 9am
- ☐ 9am to 12pm
- ☐ lunchtime (12pm to 2pm)
- ☐ afternoons (2pm to 5pm)
- ☐ evenings (5pm onwards)
- ☐ Highly variable (ONE CODE ONLY)
- ☐ DK
- ☐ Refused

2.2. On weekends?

- ☐ All or most of the time (ONE CODE ONLY)
- ☐ 6am to 9am
- ☐ 9am to 12pm
- ☐ lunchtime (12pm to 2pm)
- ☐ afternoons (2pm to 5pm)
- ☐ evenings (5pm onwards)
- ☐ Highly variable (ONE CODE ONLY)
- ☐ DK
- ☐ Refused

Appliance use

1.1 Heating main living area

Interviewer intro text: The next few questions are about how often, when and how you heat different rooms of the home in winter, starting with the **main living area** (if there is more than one living area, the main living area is deemed the largest):

3. In which month do you usually start heating and stop heating your main living area [If not lived in this home for a winter, ask generally]

- ☐ Start heating: _____[month]
- ☐ Stop heating: _____[month]
- ☐ Heat all year round
- ☐ Never heat main living area
- ☐ Don't know
- ☐ Refused

4. More about heating main living area:

4.1. Show Card 3: How often do you usually heat your main living area in winter? [select only one]

- ☐ Every day
- ☐ Most days
- ☐ Some days
- ☐ Hardly ever
- ☐ Never [interviewer to select Never for next two parts to this question]
- ☐ DK
- ☐ Refused

4.2. Show Card 4: At what times of the day do you usually heat your main living area in winter? [select all that apply]

- ☐ Mornings
- ☐ Afternoons
- ☐ Evenings
- ☐ Overnight
- ☐ Never
- ☐ DK
- ☐ Refused

4.3. Looking at Show Card 5, What appliances do you use to heat your main living area? [select all that apply]

- | | |
|--|--|
| <input type="checkbox"/> Heat pump | <input type="checkbox"/> Ducted heat pump |
| <input type="checkbox"/> Fixed electric heater | <input type="checkbox"/> Central heating – gas |
| <input type="checkbox"/> Electric night-store | <input type="checkbox"/> Central heating – electric |
| <input type="checkbox"/> Enclosed Wood burner | <input type="checkbox"/> Central heating – pellet burner |
| <input type="checkbox"/> Pellet burner | <input type="checkbox"/> Underfloor heating – electric |
| <input type="checkbox"/> Open fire | <input type="checkbox"/> Underfloor heating - gas |
| <input type="checkbox"/> Coal burner | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Fixed gas - flued | <input type="checkbox"/> NA never heated |
| <input type="checkbox"/> Fixed gas – unflued | <input type="checkbox"/> DK |
| <input type="checkbox"/> Portable electric | <input type="checkbox"/> Refused |
| <input type="checkbox"/> Portable gas heater | |

5. Can you apply a temperature setting to your main living area (e.g. with a thermostat for heat pump or central heating)?

- ☐ Yes
- ☐ No
- ☐ N/A no heating/ do not heat
- ☐ DK
- ☐ Refused

5.1. If yes: What temperature do you usually set your main living area at in degrees Celsius?

_____ [numeric] °C

- ☐ DK
- ☐ Refused

6. Do you use a timer to control when your heating comes on and goes off, or turn it on/off manually? [For example, using a heat pump controller, storage heater timers, central heating programmer etc]

- ☐ Yes
- ☐ No
- ☐ No timer control
- ☐ N/A no heating/ do not heat
- ☐ DK
- ☐ Refused

1.2 Heating other rooms (excluding bedrooms)

7. Excluding bedrooms for now, are any other rooms or areas (e.g. kitchen, hallways, bathrooms etc) in the house usually heated at some time in winter?

- ☐ Yes
☐ No
☐ N/A – studio
☐ DK
☐ Refused

8. [If yes to Q7:] Record which rooms, frequency, timing and method of heating [exc bedrooms which are asked separately] (enter data in table below; refer to following table for question options)

Room name [refer to property set up]	8.1 How often Show Card 3	8.2 Times of day Show Card 4	8.3 Appliance(s) Show Card 5

8.1. Show Card 3: How often is it usually heated? [select one]	8.2. Show Card 4: At what times of day is it usually heated? [select all that apply]	8.3. What appliances are used to heat? [Show Card 5, select multiple]
1. Every day 2. Most days 3. Some days 4. Hardly ever 5. DK 6. Refused	1. Mornings 2. Afternoons 3. Evenings 4. Overnight 5. DK 6. Refused	1. Heat pump 2. Fixed electric heater 3. Electric night-store 4. Enclosed Wood burner 5. Pellet burner 6. Open fire 7. Coal burner 8. Fixed gas - flued 9. Fixed gas – unflued 10. Portable electric 11. Portable gas heater 12. Ducted heat pump 13. Central heating – gas 14. Central heating – electric

8.1. Show Card 3: How often is it usually heated? [select one]	8.2. Show Card 4: At what times of day is it usually heated? [select all that apply]	8.3. What appliances are used to heat? [Show Card 5, select multiple]
		15. Central heating – pellet burner 16. Underfloor heating – electric 17. Underfloor heating - gas 18. Other _____ 19. NA never heated [auto-filled if Never to Q4] 20. DK 21. Refused

1.3 Heating bedrooms

9. Now thinking about how often, when and how bedrooms are heated in winter, starting with the bedroom you usually sleep in:

9.1. Which bedroom of the house do you usually sleep in? This is just to help us match up the information from this survey with the information recorded in the building audit. *[Note to interviewer: record bedroom number as per the floor plan]*

Bedroom number: _____ *[number]*

- ☐ Don't know
- ☐ Refused

9.2. Show Card 3: How often do you usually heat your bedroom in winter?

- ☐ Every day
- ☐ Most days
- ☐ Some days
- ☐ Hardly ever
- ☐ Never
- ☐ DK
- ☐ Refused

9.3. Show Card 4: At what times of the day do you usually heat your bedroom in winter?

- ☐ Mornings
- ☐ Afternoons
- ☐ Evenings
- ☐ Overnight
- ☐ Never
- ☐ DK
- ☐ Refused

9.4. Looking at Show Card 5, What appliances do you use to heat your bedroom?

- | | |
|--|--|
| <input type="checkbox"/> Heat pump | <input type="checkbox"/> Ducted heat pump |
| <input type="checkbox"/> Fixed electric heater | <input type="checkbox"/> Central heating – gas |
| <input type="checkbox"/> Electric night-store | <input type="checkbox"/> Central heating – electric |
| <input type="checkbox"/> Enclosed Wood burner | <input type="checkbox"/> Central heating – pellet burner |
| <input type="checkbox"/> Pellet burner | <input type="checkbox"/> Underfloor heating – electric |
| <input type="checkbox"/> Open fire | <input type="checkbox"/> Underfloor heating - gas |
| <input type="checkbox"/> Coal burner | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Fixed gas - flued | <input type="checkbox"/> NA never heated |
| <input type="checkbox"/> Fixed gas – unflued | <input type="checkbox"/> DK |
| <input type="checkbox"/> Portable electric | <input type="checkbox"/> Refused |
| <input type="checkbox"/> Portable gas heater | |

9.5. Who usually sleeps in this (your) bedroom? (how many adults, how many children aged 6-17, how many children aged 5 or under)

Adults: _____ [number]

Child(ren) (6-17): _____ [number]

Child(ren) under 6: _____ [number]

- ☐ Unoccupied
- ☐ DK
- ☐ Refused

10. Now thinking about heating in the other bedrooms in the house...

10.1. Show Card 3: How often is it usually heated?	10.2. Show Card 4: At what times of day is it usually heated?	10.3. What appliances are used to heat? [Show Card 5]	10.4. Who usually sleeps in this bedroom?
1. Every day 2. Most days 3. Some days 4. Hardly ever 5. Never 6. DK 7. Refused	1. Mornings 2. Afternoons 3. Evenings 4. Overnight 5. Never 6. DK 7. Refused	1. Heat pump 2. Fixed electric heater 3. Electric night-store 4. Enclosed Wood burner 5. Pellet burner 6. Open fire 7. Coal burner 8. Fixed gas - flued 9. Fixed gas – unflued 10. Portable electric 11. Portable gas heater 12. Ducted heat pump 13. Central heating – gas 14. Central heating – electric 15. Central heating – pellet burner 16. Underfloor heating – electric 17. Underfloor heating - gas 18. Other _____ 19. NA never heated 20. DK 21. Refused	A. Adults B. Child(ren) (6-17) C. Child(ren) under 6 97. Unoccupied 98. DK 99. Refused

Enter data here:

Bedroom no. [Refer to property set up]	10.1 How often Show Card 3	10.2 Times of day Show Card 4	10.3 Appliances Show Card 5	10.4 Occupants

11. Looking at Show Card 6, do you use or do any of these things to help keep warm in your home in Winter? [select as many as apply]

- ☐ Electric/heated blanket(s)
- ☐ Hot water bottle(s)
- ☐ Extra blanket(s) / winter duvet
- ☐ Extra layers (clothes, slippers)
- ☐ Close curtains
- ☐ Use draft stoppers
- ☐ Bubble wrap/insulation on windows
- ☐ Have a hot shower/bath
- ☐ Go to bed earlier
- ☐ Sleep in one room
 - Which room? [enter room(s) names] _____
- ☐ Close off/don't use some rooms
 - Which room(s)? [enter room(s) names]
- ☐ Other: _____
- ☐ None
- ☐ DK
- ☐ Refused

1.4 Cooling

INTRO TEXT FOR INTERVIEWER: This section of the survey asks about things you might do to help keep cool and the home a comfortable temperature in summer.

12. Show Card 3: In summer, how often do you use a heat pump / air conditioner for cooling in the living area? [select one]

- ☐ Every day
- ☐ Most days
- ☐ Some days
- ☐ Hardly ever
- ☐ Never
- ☐ N/A - no heat pump/air con unit
- ☐ DK
- ☐ Refused

13. Show Card 3: In summer, how often do you use a heat pump / air conditioner for cooling in the bedroom(s)? [select one]

- ☐ Every day
- ☐ Most days
- ☐ Some days
- ☐ Hardly ever
- ☐ Never
- ☐ N/A - no heat pump/air con unit
- ☐ DK
- ☐ Refused

14. Show Card 3: In summer, how often do you use a heat pump / air conditioner for cooling any other rooms or parts of the house? [select one]

- ☐ Every day
- ☐ Most days
- ☐ Some days
- ☐ Hardly ever
- ☐ Never
- ☐ N/A - no heat pump/air con unit
- ☐ DK
- ☐ Refused

15. Show Card 8: do you regularly do any of these things to help keep your home cool in summer?

- ☐ Leave windows open all day
- ☐ Leave windows open all night
- ☐ Open windows and doors to create a cross-breeze
- ☐ Close curtains/blinds
- ☐ Use awning/louvres
- ☐ Use electric fans (include ceiling fans)
- ☐ Use heat pump/air conditioner on fan setting (not cooling)
- ☐ Other _____
- ☐ None of the above
- ☐ DK
- ☐ Refused

1.5 Ventilation (managing moisture)

INTRO TEXT FOR INTERVIEWER: This section of the survey asks about things you might do to help ventilate the home to manage moisture.

16. Show Card 7: In the last seven days, during or after showering or bathing, how often did you open windows to let moist air out of the bathroom? [[select one]

- ☐ every time
- ☐ most times
- ☐ sometimes
- ☐ hardly ever
- ☐ never
- ☐ DK
- ☐ RF

17. Show Card 7: In the last seven days, during or after showering or bathing, how often did you use mechanical extract ventilation? [select one]

- ☐ every time
- ☐ most times
- ☐ sometimes
- ☐ hardly ever
- ☐ never
- ☐ no mechanical extract ventilation
- ☐ DK
- ☐ RF

18. Show Card 7: In the last seven days, during or after cooking, how often did you open windows to let moist air out of the kitchen? [select one]

- ☐ every time
- ☐ most times
- ☐ sometimes
- ☐ hardly ever
- ☐ never
- ☐ Not cooked any hot meals in last 7 days
- ☐ DK
- ☐ RF

19. Show Card 7: In the last seven days, during or after cooking, how often did you use mechanical extract ventilation? [select one]

- ☐ every time

- ☐ most times
- ☐ sometimes
- ☐ hardly ever
- ☐ never
- ☐ no mechanical extract ventilation
- ☐ Not cooked any hot meals in last 7 days
- ☐ DK
- ☐ RF

20. Show Card 3: In the last seven days, how often did you air out your bedroom? [By air out, we mean open windows wide for at least 10-15 minutes]

[select one]

- ☐ every day
- ☐ most days
- ☐ some days
- ☐ hardly ever
- ☐ never
- ☐ DK
- ☐ RF

21. Do you have a dehumidifier?

- ☐ Yes
- ☐ No
- ☐ DK
- ☐ RF

22. [If yes to Q21:] Show Card 3: In winter, how often do you usually use the dehumidifier? [select one]

- ☐ every day
- ☐ most days
- ☐ some days
- ☐ hardly ever
- ☐ never
- ☐ DK
- ☐ Refused

23. In which room(s) of the house do you usually use the dehumidifier?

_____ [name rooms]

1.6 Water heating and hot water use

Interviewer intro text: I'm now going to ask you about how you use hot water in your home. To help us understand how and when hot water is used, the survey asks about how often showers and baths are used.

We will work through this together thinking, about how often each person in the household used the shower or bath in the last week, and at what times of day. This information will then be used to work out a total number of showers and baths for the household, which is what will be recorded in the survey.

24. Refer to Handout if needed: In the last 7 days, how often was the **SHOWER** used in this household: in the morning and in the evening? Please think about everyone in your household and use of all showers.

24.1. in the morning?

In the morning (a.m):	_____ [numeric] <input type="checkbox"/> N/A no shower <input type="checkbox"/> DK <input type="checkbox"/> Refused
In the evening (p.m):	_____ [numeric] <input type="checkbox"/> N/A no shower <input type="checkbox"/> DK <input type="checkbox"/> Refused

24.2. in the afternoon/evening?

In the morning (a.m):	_____ [numeric] <input type="checkbox"/> N/A no shower <input type="checkbox"/> DK <input type="checkbox"/> Refused
In the evening (p.m):	_____ [numeric] <input type="checkbox"/> N/A no shower <input type="checkbox"/> DK <input type="checkbox"/> Refused

25. Refer to Handout if needed: In the last 7 days, how often was the **BATH** used in the morning and in the evening? Please think about everyone in your household and use of all baths.

25.1. in the morning (a.m)

In the morning (a.m):	_____ [numeric] <input type="checkbox"/> N/A no bath <input type="checkbox"/> DK <input type="checkbox"/> Refused
In the evening (p.m):	_____ [numeric] <input type="checkbox"/> N/A no bath <input type="checkbox"/> DK <input type="checkbox"/> Refused

25.2. in the afternoon/evening (p.m).

In the morning (a.m):	_____ [numeric] <input type="checkbox"/> N/A no bath <input type="checkbox"/> DK <input type="checkbox"/> Refused
In the evening (p.m):	_____ [numeric] <input type="checkbox"/> N/A no bath <input type="checkbox"/> DK <input type="checkbox"/> Refused

1.7 Laundry

Interviewer intro text: This section of the survey asks about how you wash and dry clothes in your home.

26. Looking at Show Card 9, In a typical week, how many loads of washing are done in this household? [select one. Only count washing done within the home – don't count laundry loads done at laundrette/other]

- ☐ None (e.g. washing done offsite e.g., laundromat/ professional service, other person's house)
- ☐ Less than one load per week
- ☐ 1 load
- ☐ 2 loads
- ☐ 3 - 4 loads
- ☐ 5 - 6 loads
- ☐ 7 loads
- ☐ More than 7 loads
- ☐ N/A no washing machine
- ☐ Don't know
- ☐ Refused

27. Show Card 10: What setting do you usually set your washing machine to?
[Select one]

- ☐ Hot wash
- ☐ Warm wash
- ☐ Cold wash
- ☐ N/A no washing machine
- ☐ N/A no washing done in household
- ☐ Don't know
- ☐ Refused

28. Show Card 11: At what time(s) of day is washing usually done in this household? [select as many as apply]

- ☐ Mornings
- ☐ Afternoons
- ☐ Evenings
- ☐ Overnight
- ☐ Whenever it's needed
- ☐ N/A no washing machine
- ☐ N/A no washing done in household
- ☐ Don't know
- ☐ Refused

29. Do you have an automatic clothes drier (a tumble drier)? [Select one]

- ☐ Yes
- ☐ No
- ☐ DK
- ☐ Refused

30. [Skip logic: If yes to clothes drier (Qo)]: Is the drier vented to the outside?

[Select one]

- ☐ Yes
- ☐ No
- ☐ Condensing drier
- ☐ DK
- ☐ Refused

31. [Skip logic: If yes to clothes drier (Qo)]:

31.1. Show Card 12: How often do you use the clothes dryer to dry your washing in summer? [Select one]

- ☐ Always
- ☐ Often
- ☐ Sometimes
- ☐ Hardly ever
- ☐ Never
- ☐ DK
- ☐ Refused

31.2. Show Card 12: How often do you use the clothes dryer to dry your washing in winter? [Select one]

- ☐ Always
- ☐ Often
- ☐ Sometimes
- ☐ Hardly ever
- ☐ Never
- ☐ DK
- ☐ Refused

32. Drying clothes outside:

32.1. Show Card 12: **How often do you dry your washing outside in winter?** [Select one]

- ☐ Always
- ☐ Often
- ☐ Sometimes
- ☐ Hardly ever
- ☐ Never
- ☐ DK
- ☐ Refused

32.2. Show Card 12: **How often do you dry your washing outside in summer?** [Select one]

- ☐ Always
- ☐ Often
- ☐ Sometimes
- ☐ Hardly ever
- ☐ Never
- ☐ DK
- ☐ Refused

33. Drying clothes inside:

33.1. Show Card 12: **How often do you dry your washing inside the home in winter?** [e.g. on a clothes airer, next to heaters. Select one]

- ☐ Always
- ☐ Often
- ☐ Sometimes
- ☐ Hardly ever
- ☐ Never
- ☐ DK
- ☐ Refused

33.2. Show Card 12: **How often do you dry your washing inside the home in summer?** [e.g on a clothes airer. Select one]

- ☐ Always
- ☐ Often
- ☐ Sometimes
- ☐ Hardly ever
- ☐ Never
- ☐ DK
- ☐ Refused

33.3. [IF Yes to dry washing inside at sometime:] Where in the house do you usually dry washing when drying it inside the home? [select as many as apply]

_____ [name rooms]

33.4. [IF Yes to dry washing inside at sometime:] Show Card 13: Do you do any of the following when drying washing inside? [select as many as apply]

- ☐ Open windows
- ☐ Open exterior doors
- ☐ Use mechanical extract ventilation
- ☐ Use a dehumidifier
- ☐ None of the above
- ☐ Don't know
- ☐ Refused

1.8 In the kitchen – cooking and washing dishes

Intro: This section of the survey asks about cooking habits and dish washing.

34. Looking at Show Card 14, in the last seven days, which of these were used to cook hot meals? [Think about all meals cooked in the household. Select all that apply]

- | | |
|--|--|
| <input type="checkbox"/> Electric hob | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Electric oven | <input type="checkbox"/> None of these |
| <input type="checkbox"/> Gas hob | <input type="checkbox"/> No hot meals in last seven days |
| <input type="checkbox"/> Gas oven | <input type="checkbox"/> DK |
| <input type="checkbox"/> Microwave | <input type="checkbox"/> Refused |

35. Show Card 15 At what time(s) of the day are hot meals usually cooked in the house? [select as many as apply]

- ☐ Mornings (breakfast/brunch)
- ☐ Afternoon (lunch)
- ☐ Evening (tea/supper)
- ☐ It varies
- ☐ Don't usually have any hot/home-cooked meals
- ☐ Don't know
- ☐ Refused

36. Do you have a dishwasher? [select one]

- ☐ Yes
- ☐ No
- ☐ DK
- ☐ Refused

37. [SKIP LOGIC – if Yes to dishwasher question 36]: Looking at Show Card 16, How often is the dishwasher used in a typical week? [select one]

- ☐ More than once a day
- ☐ Once a day
- ☐ Most days (5-6 times a week)
- ☐ Some days (3-4 times a week)
- ☐ Once or twice a week (1-2 times a week)
- ☐ Less than once a week
- ☐ Never
- ☐ DK
- ☐ Refused

1.9 Electric vehicles

38. Do you have an electric vehicle which you charge at home? [SELECT ONE]

- ☐ Yes
- ☐ No
- ☐ DK
- ☐ Refused

39. [SKIP LOGIC - If yes to elec vehicle Q38] At what time(s) of the day do you usually charge your Electric Vehicle at home? [select all that apply]

- ☐ Morning
- ☐ Daytime
- ☐ Evening
- ☐ Overnight
- ☐ DK
- ☐ Refused

Energy bills

Interviewer intro text: I am now going to ask about household energy bills. It will be useful to have a copy of an electricity (and gas if applicable) bill to hand if possible.

1.10 Electricity

40. Are you or someone else in this household responsible for paying the electricity bill? [select one]

- ☐ Yes (go to Q41)
- ☐ No (i.e. paid by someone outside of the household) [Go to Q46]
- ☐ DK
- ☐ Refused

41. Show Card 17: How do you pay your electricity bills? [select one]

- ☐ Direct debit (automatic payment) – actual use
- ☐ Direct debit (automatic payment) - smooth pay
- ☐ Pay on receipt of bill – online
- ☐ Pay on receipt of bill – cash or cheque
- ☐ Pre-payment meter
- ☐ Advance/flexible payment
- ☐ Other – please specify: _____
- ☐ DK
- ☐ Refused

42. How much do you pay per unit of electricity:

42.1. Day rate:	_____ cents/kWh <input type="checkbox"/> DK <input type="checkbox"/> Refused
42.2. Night rate	_____ cents/kWh <input type="checkbox"/> N/A no night rate <input type="checkbox"/> DK <input type="checkbox"/> Refused
42.3. Controlled rate	_____ cents/kWh <input type="checkbox"/> N/A no controlled rate <input type="checkbox"/> DK <input type="checkbox"/> Refused

42.4. How much is the fixed daily charge?

Day rate:	_____ cents/day <input type="checkbox"/> N/A no fixed daily rate <input type="checkbox"/> DK <input type="checkbox"/> Refused
------------------	--

43. Show Card 18: **When did you last switch electricity provider and/or payment plan?** [select one]

- ☐ Within the last month
- ☐ Within the last 6 months
- ☐ Within the last 12 months
- ☐ Within the last 2 years
- ☐ More than 2 years ago
- ☐ Never switched
- ☐ DK
- ☐ Refused

44. How much was your most recent electricity bill?

Amount (\$)	_____ <i>[numeric]</i> <input type="checkbox"/> Don't know <input type="checkbox"/> Refused
For how many days?	_____ <i>[numeric]</i> <input type="checkbox"/> Don't know <input type="checkbox"/> Refused
During which month?	_____ <i>[Enter month]</i> <input type="checkbox"/> Don't know <input type="checkbox"/> Refused

45. Show Card 19: How would you rate your household's electricity consumption? [select one]

- ☐ Very high
- ☐ Above average
- ☐ Average
- ☐ Below average
- ☐ Very low
- ☐ DK
- ☐ Refused

46. Does your payment plan include any free 'hour(s) of power' or free power days or 'Power Shouts'? [select one]

- ☐ Yes – Free power days (Go to Q48)
- ☐ Yes – Free hour(s) of power (Go to Q47)
- ☐ Yes – Power Shouts
- ☐ No (Go to Q48)
- ☐ DK (Go to Q48)
- ☐ Refused (Go to Q48)

47. [Skip logic: If yes to Q46] At what time(s) of day is your free hour(s) of power?

_____ [Enter hour(s) in 24:00 format]

48. Do you receive the Winter Energy Payment?

- ☐ No
- ☐ Yes
- ☐ DK
- ☐ Refused

48.1. [skip logic: If yes to WEP Q48]: Does receiving the Winter Energy Payment affect how you use energy in winter?

- ☐ Yes
- ☐ No
- ☐ DK
- ☐ Refused

48.2. IF YES: Please explain how or what difference it makes:

1.11 Mains gas

49. Do you have a mains gas supply? [this is gas piped to the house – it does not include LPG tanks] [select only one]

- ☐ No [If no, no further questions about mains gas] (go to Q55)
- ☐ Yes
- ☐ DK
- ☐ Refused

50. Are you or someone else in this household responsible for paying the gas bill? [select one]

- ☐ Yes
- ☐ No (i.e. paid by someone outside of the household – go to Q55)
- ☐ DK
- ☐ Refused

51. Show Card 17:How do you pay your gas bills? [select one]

- ☐ Direct debit (automatic payment) – actual use
- ☐ Direct debit (automatic payment) – smooth pay
- ☐ Pay on receipt of bill – online
- ☐ Pay on receipt of bill – cash or cheque
- ☐ Pre-payment meter
- ☐ Advance / flexible payment
- ☐ Other – please specify: _____
- ☐ DK
- ☐ Refused

52. How much do you pay per unit of gas:**52.1. Day (Variable) rate:**

- ☐ Unit rate: _____ cents/kWh
- ☐ DK
- ☐ Refused

52.2. Fixed daily charge

- ☐ Daily rate: _____ cents/day
- ☐ N/A no fixed daily rate
- ☐ DK
- ☐ Refused

53. How much was your most recent gas bill?

Amount (\$)	_____ <i>[numeric]</i> <input type="checkbox"/> Unknown <input type="checkbox"/> Refused
For how many days?	_____ <i>[numeric]</i> <input type="checkbox"/> Unknown <input type="checkbox"/> Refused
During which month?	_____ <i>[enter month]</i> <input type="checkbox"/> Unknown <input type="checkbox"/> Refused

54. Show Card 18: When did you last switch gas provider and/or payment plan? [select one]

- ☐ Within the last month
- ☐ Within the last 6 months
- ☐ Within the last 12 months
- ☐ Within the last 2 years
- ☐ More than 2 years ago
- ☐ Never switched
- ☐ DK
- ☐ Refused

1.12 LPG Bottled Gas

55. Does this household use LPG Bottled Gas? [whether for heating, hot water and/or cooking. Don't include barbecue gas bottles] [select only one]

- ☐ Yes
- ☐ No (go to Q58)
- ☐ DK
- ☐ Refused

56. Are you or someone else in this household responsible for paying for the bottled gas? [select one]

- ☐ Yes
- ☐ No (i.e. paid by someone outside of the household) (go to Q58)
- ☐ DK
- ☐ Refused

57. How much do you pay for your LPG bottled gas?

Monthly bottle rental charge	<div>_____ [numeric] \$/month</div> <input type="checkbox"/> N/A no monthly charge <input type="checkbox"/> DK <input type="checkbox"/> Refused
Gas bottle refill/swap charge	<div>_____ [numeric] \$/bottle</div> <input type="checkbox"/> DK <input type="checkbox"/> Refused
Approximately how many refills/swap per year?	<div>_____ [numeric] bottles/year</div> <input type="checkbox"/> DK <input type="checkbox"/> Refused
Bottle size	<div>_____ kg</div>

1.13 Solid fuels

58. Are any of the following used for heating in this household?

- ☐ Wood
- ☐ Coal
- ☐ No (Go to Q61)
- ☐ DK
- ☐ Refused

59. Are you or someone else in this household responsible for paying for this? [select one]

- ☐ Yes
- ☐ No (i.e. paid by someone outside of the household)
- ☐ DK
- ☐ Refused

60. How much do you pay for your solid fuel supply?

	Wood	Coal
Amount paid	_____ [numeric] \$ <input type="checkbox"/> Freely sourced <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ [numeric] \$ <input type="checkbox"/> Freely sourced <input type="checkbox"/> DK <input type="checkbox"/> Refused
For what volume	_____ [numeric] cubic meters <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ [numeric] cubic meters <input type="checkbox"/> DK <input type="checkbox"/> Refused
Approximately how many loads per year	_____ [numeric] loads/year <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ [numeric] loads/year <input type="checkbox"/> DK <input type="checkbox"/> Refused

Home improvements

Interviewer intro text: I'm now going to ask about a range of home improvement measures that may have been made to your home or you may be planning to do.

61. Looking at Show Card 20, have you or your landlord made any of these changes to this house since you have lived here?

(Select which ones and record approximately when was this done.)

Show card 21: **When was this done?**

Measures	When?	Record when this was done from the following options:
<input type="checkbox"/> Insulated the roof space (full or topped up)		1) Within last year 2) 1 – 2 years ago 3) 3 – 5 years ago 4) 5 – 10 years ago 5) More than 10 years ago 6) Unsure 7) Refused
<input type="checkbox"/> Insulated the subfloor		
<input type="checkbox"/> Insulated the walls		
<input type="checkbox"/> Installed double glazing		
<input type="checkbox"/> Installed secondary glazing		
<input type="checkbox"/> Installed a new heat pump		
<input type="checkbox"/> Installed a new hot water cylinder/system		
<input type="checkbox"/> Fitted hot water cylinder wrap		
<input type="checkbox"/> Lagged (insulated) hot water pipes		
<input type="checkbox"/> Changed light bulbs to LEDs		
<input type="checkbox"/> Installed mechanical extract ventilation in the bathroom		
<input type="checkbox"/> Installed mechanical extract ventilation (e.g. rangehood) in the kitchen		
<input type="checkbox"/> Installed a whole-house mechanical ventilation system		
<input type="checkbox"/> Fitted floor coverings (carpet)		
<input type="checkbox"/> Installed solar hot water panels		
<input type="checkbox"/> Installed solar PV electricity panels		
<input type="checkbox"/> Added a water proof membrane between ground and house		
<input type="checkbox"/> Installed a low flow shower head		
<input type="checkbox"/> Fitted thermally lined/heavy curtains		
<input type="checkbox"/> Other: _____		

**62. Looking at Show Card 20, again, are you/your landlord *planning* to make any of these changes to this house in the next 12 months?
Select which ones from list in app (checkboxes)**

Measures
<input type="checkbox"/> Insulate the roof space (full or topped up)
<input type="checkbox"/> Insulate the subfloor
<input type="checkbox"/> Insulate the walls
<input type="checkbox"/> Install double glazing
<input type="checkbox"/> Install secondary glazing
<input type="checkbox"/> Install a new heat pump
<input type="checkbox"/> Install a new hot water cylinder/system
<input type="checkbox"/> Fit hot water cylinder wrap
<input type="checkbox"/> Lag (insulated) hot water pipes
<input type="checkbox"/> Change light bulbs to LEDs
<input type="checkbox"/> Install mechanical extract ventilation in the bathroom
<input type="checkbox"/> Install mechanical extract ventilation (e.g. rangehood) in the kitchen
<input type="checkbox"/> Install a whole-house mechanical ventilation system
<input type="checkbox"/> Fit floor coverings (carpet)
<input type="checkbox"/> Install solar hot water panels
<input type="checkbox"/> Install solar PV electricity panels
<input type="checkbox"/> Insulate the roof space (full or topped up)
<input type="checkbox"/> Insulate the subfloor
<input type="checkbox"/> Insulate the walls
<input type="checkbox"/> Other: _____

63. Looking at Show Card 22, how would you describe the state of repair of your house or flat? [SELECT ONE]

- ☐ No repairs / maintenance needed [go to Q66]
- ☐ Minor repairs / maintenance needed
- ☐ Moderate repairs / maintenance needed
- ☐ Major repairs / maintenance needed
- ☐ DK
- ☐ Refused

64. Thinking about the repairs and maintenance which are most urgent, looking at Show Card 23, how long have these repairs or maintenance been needed for? [SELECT ONE]

- ☐ Less than 1 month
- ☐ 1 month or more but less than 6 months
- ☐ 6 months or more but less than 1 year
- ☐ 1 year or more but less than 2 years
- ☐ 2 years or more
- ☐ DK
- ☐ Refused

65. *FILTER QUESTION: Interviewer select: Householder is owner-occupier?*

- ☐ Yes -> 65.1
- ☐ No -> 65.3

65.1. [For owner-occupiers] Looking at Show Card 24, what are the reasons this repair or maintenance hasn't been done? [Select all that apply]

- ☐ Don't know how best to repair/ maintain
- ☐ It costs too much
- ☐ It takes too much time/effort/energy
- ☐ It will be too disruptive
- ☐ Other things more important to do
- ☐ Not considered urgent yet
- ☐ Just been put off
- ☐ Other – please state: _____
- ☐ DK
- ☐ Refused

65.2. [For owner-occupiers] Looking at Show Card 25, when do you expect these repairs to be done? [Select all that apply]

- ☐ Within next 6 months
- ☐ within 6 – 12 months
- ☐ next year (more than 12 months time, less than 24 months time)
- ☐ in 2 -3 years time
- ☐ in 4 – 5 years time
- ☐ in 5 – 10 years time
- ☐ more than 10 years time
- ☐ never
- ☐ Don' know
- ☐ Refused

65.3. *[for tenants]* **Looking at Show Card 26, what are the reasons this repair or maintenance hasn't been done?** [Select all that apply]

- ☐ the landlord has not been contacted yet
- ☐ the landlord has not done the work yet
- ☐ the landlord is not willing to get the work done
- ☐ cannot agree with the landlord about how to do the repair / maintenance
- ☐ cannot agree with the landlord about who should do the repair / maintenance
- ☐ other - please state: _____
- ☐ DK
- ☐ RF

Interviewer intro text: I am now going to read out several statements about things you might think about when using energy in the home.

66. Show Card 27: How important are each of these things to you when thinking about using energy in the home from Very Important, Somewhat Important, or Not Important?

	Very important	Somewhat important	Not important	Don't know	Refused
keeping energy costs low					
being comfortable					
using energy efficiently					
reducing carbon emissions					

Comfort, damp and mould

Interviewer intro text: This section of the survey asks about comfort and problems with damp and mould in the home.

67. Looking at Show Card 28, thinking back to last winter [2021], was your house or flat colder than you would like? [select one]

- ☐ Yes – always
- ☐ Yes – often
- ☐ Yes – sometimes
- ☐ No (Go to Q69)
- ☐ I have not spent a winter living in this house or flat (Go to Q71)
- ☐ DK
- ☐ Refused

68. Looking at Show Card 29, What were the reasons for your house being colder than you would like? [select all that apply]

- ☐ Trying to keep cost of heating down
- ☐ Any heat just disappears (it doesn't warm up or stay warm despite heating)
- ☐ Like to have windows open
- ☐ It is healthy to keep your body cooler
- ☐ Other household members like it cooler
- ☐ Not enough heaters / heaters insufficient
- ☐ Doesn't get enough sun
- ☐ Preference / habit not to heat (not because of costs)
- ☐ Trying to use less energy for environmental reasons
- ☐ Other: _____
- ☐ DK
- ☐ Refused

69. Show Card 28: In winter, does any part of your house or flat get cold enough that you can see your breath? [SELECT ONE]

- ☐ Yes – always
- ☐ Yes – often
- ☐ Yes – sometimes
- ☐ No
- ☐ I have not spent a winter living in this house or flat
- ☐ DK
- ☐ Refused

70. Show Card 28: In winter, does any part of your house or flat ever get cold enough that you shiver? [SELECT ONE]

- ☐ Yes – always
- ☐ Yes – often
- ☐ Yes – sometimes
- ☐ No
- ☐ I have not spent a winter living in this house or flat
- ☐ DK
- ☐ Refused

71. Looking at Show Card 28, thinking back to last summer, was your house or flat ever warmer than you would like? [select one]

- ☐ Yes – always
- ☐ Yes – often
- ☐ Yes – sometimes
- ☐ No
- ☐ I have not spent a summer living in this house or flat
- ☐ DK
- ☐ Refused

72. Does any part of your home get mould growing on it, for example on the walls, ceiling, window frames, curtains or blinds? [SELECT ONE]

- ☐ Yes
- ☐ No
- ☐ DK
- ☐ Refused

73. Show Card 28: Is the mould seen in this house larger than this sheet of paper/showcard [A4]?

- ☐ Yes – always
- ☐ Yes - often
- ☐ Yes – sometimes
- ☐ No
- ☐ DK
- ☐ Refused

74. Show Card 28: Does any part of your home ever get condensation on windowsills or windowpanes in winter? [SELECT ONE]

- ☐ Yes – always
- ☐ Yes - often
- ☐ Yes - sometimes
- ☐ No never
- ☐ DK
- ☐ Refused

75. Show card 28: Would you say this house or flat is always damp, often damp, sometimes damp, or not damp at all?

- ☐ Yes – always
- ☐ Yes - often
- ☐ Yes - sometimes
- ☐ No never
- ☐ DK
- ☐ Refused

76. Show card 28: Would you say this house or flat is always draughty, often draughty, sometimes draughty, or not draughty at all?

- ☐ Yes – always
- ☐ Yes - often
- ☐ Yes - sometimes
- ☐ No never
- ☐ DK
- ☐ Refused

Energy attitudes and practices

Interviewer intro text: This section is about attitudes to energy use in the home and energy saving behaviours.

77. Show Card 30: In the past year have you ever gone without heating because you felt unable to pay for it?

- ☐ Yes - often
- ☐ Yes – occasionally
- ☐ No - never
- ☐ DK
- ☐ Refused

78. Does anyone in the household suffer from illness that requires energy use?

- ☐ Yes
- ☐ No
- ☐ DK
- ☐ Refused

79. I am going to read out several statements. Looking at the options on Show Card 31, please state how strongly you agree or disagree with each statement. [Select one]

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N/A	DK	Refused
I only buy appliances with high energy efficiency ratings even if they cost more								
I think about ways of saving energy in my home								
I pay much attention to how much my energy bill is each month								
I have made changes to reduce the amount of energy I use								
I have made changes to help make my home a more comfortable temperature								

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N/A	DK	Refused
I am satisfied with my main method of heating								
My home is a healthy place to live								
I would like my home to be warmer in winter								
Making choices about energy efficiency in the home is complex								

80. I am going to read out some actions and things you can do to save energy in the home. Looking at the options on Show Card 32, please state how often you do these things. [Select one]

	Never	Rarely	Sometimes	Often	Always	N/A	DK	Refused
Turn appliances off at the wall (not leaving on standby)								
Rinsing dishes with cold water								
Reduce / do not heat in unoccupied rooms								
Switch off lights in unoccupied rooms								
Wait for a full load before using washing machine								
Put on more clothing before turning heating up								
Take shorter showers								
Clean heat pump filters								
Only boil the water I need in the kettle/jug								
Turn off the TV if no one is watching it								

End of Survey

Show cards

Show Card 1

- Less than 1 year
- 1 year or more but less than 3 years
- 3 years or more but less than 5 years
- 5 years or more but less than 10 years
- 10 years or more
- Don't know
- Refused

Show Card 2 – Times of day someone usually at home during winter

- All or most of the time
- 6am to 9am
- 9am to 12pm
- lunchtime (12pm to 2pm)
- afternoons (2pm to 5pm)
- evenings (5pm onwards)
- Highly variable

Show Card 3 – How often (days)

- Every day
- Most days
- Some days
- Hardly ever
- Never

Show Card 4 – Times of day heat

- Mornings
- Afternoons
- Evenings
- Overnight
- Never

Show Card 5 – Heating appliances

- Heat pump
- Fixed electric heater
- Electric night-store

- Enclosed Wood burner
- Pellet burner
- Open fire
- Coal burner
- Fixed gas - flued
- Fixed gas – unflued
- Portable electric
- Portable gas heater
- Ducted heat pump
- Central heating – gas
- Central heating – electric
- Central heating – pellet burner
- Underfloor heating – electric
- Underfloor heating - gas
- Other

Show Card 6 – Things you might do to help keep warm in the home in winter

- Electric/heated blanket(s)
- Hot water bottle(s)
- Extra blanket(s) / winter duvet
- Extra layers (clothes) slippers
- Close curtains
- Use draft stoppers
- Bubble wrap/insulation on windows
- Have a hot shower/bath
- Go to bed earlier
- Sleep in one room
- Close off/don't use some rooms
- Other

Show Card 7 – How often (times)

- every time
- most times
- sometimes
- hardly ever
- never

Show Card 8 – Things you might do to help keep cool in the home in summer

- Leave windows open all day

- Leave windows open all night
- Open windows and doors to create a cross-breeze
- Close curtains/blinds
- Use awning/louvres
- Use electric fans (include ceiling fans)
- Use heat pump/air conditioner on fan setting (not cooling)
- Other _____
- None of the above
- DK
- Refused

Show Card 9 – Loads of washing done in the household in a typical week

- None
- Less than one load of washing per week
- One load of washing per week
- Two loads of washing per week
- 3 - 4 loads of washing per week
- 5 – 6 loads of washing per week
- 7 loads of washing per week
- More than 7 loads of washing per week
- N/A no washing machine

Show Card 10 – Temperature setting for washing machine

- Hot wash
- Warm wash
- Cold wash
- N/A no washing machine
- N/A no washing typically done in the household

Show Card 11 – Times of day laundry typically done

- Mornings
- Afternoons
- Evenings
- Overnight
- Whenever it's needed
- N/A no washing machine
- N/A no washing done in household

Show Card 12 – Drying clothes (frequency)

- Never
- Rarely
- Sometimes
- Often
- Always
- Not applicable
- Don't know

Show Card 13 – Things you might do when drying washing inside

- Open windows
- Open exterior doors
- Use mechanical extract ventilation
- Use a dehumidifier
- None of these things

Show Card 14 – Appliances used for cooking hot meals in the home

- Electric hob
- Electric oven
- Gas hob
- Gas oven
- Microwave
- Other

Show Card 15 – Times of day hot meals cooked in the home

- Mornings (breakfast/brunch)
- Afternoon (lunch)
- Evening (tea/supper)
- It varies
- Don't usually have any hot/home-cooked meals
- Don't know
- Refused

Show Card 16 – How often dishwasher is used in a typical week

- More than once a day
- Once a day
- Most days (5 – 6 times a week)
- Some days (3 – 4 times a week)
- Once or twice a week (1 – 2 times week)

- Less than once a week
- Never

Show Card 17 – How do you pay your energy bill

- Direct debit (automatic payment) – actual use
- Direct debit (automatic payment) – smooth pay
- Pay on receipt of bill – online
- Pay on receipt of bill – cash or cheque
- Pre-payment meter
- Advance / flexible payment
- Other – please specify

Show Card 18 – When last switched Retailer or Payment Plan

- Within the last month
- Within the last 6 months
- Within the last 12 months
- Within the last 2 years
- More than 2 years ago
- Never switched

Show Card 19 – How you rate your households electricity use

- Very high
- Above average
- Average
- Below average
- Very low
- DK

Show Card 20 – Changes made to the home or planning to make

- Insulated the roof space
- Insulated the subfloor
- Insulated the walls
- Installed double glazing
- Installed a new heat pump

- Installed a new hot water cylinder
- Fitted hot water cylinder wrap
- Lagged (insulated) hot water pipes
- Changed light bulbs to LEDs
- Installed mechanical extract ventilation in the bathroom
- Installed mechanical extract ventilation (e.g. rangehood) in the kitchen
- Installed a whole-house mechanical ventilation system
- Fitted floor coverings (carpet/rugs)
- Installed solar hot water panels
- Installed solar PV electricity panels
- Installed a micro windfarm
- Added a water proof membrane between ground and house
- Installed a low flow shower head
- Fitted thermally lined/heavy curtains

Show Card 21 – When changes were made

- Within last year
- 1 – 2 years ago
- 3 – 5 years ago
- 5 – 10 years ago
- More than 10 years ago

Show Card 22 – State of repair of house/flat

- No repairs / maintenance needed
- Minor repairs / maintenance needed
- Moderate repairs / maintenance needed
- Major repairs / maintenance needed

Show Card 23 – How long repairs/maintenance been needed for

- Less than 1 month
- 1 month or more but less than 6 months
- 6 months or more but less than 1 year
- 1 year or more but less than 2 years
- 2 years or more
- Don't know

Show Card 24 – Reasons for not doing repairs or maintenance – owner occupier

- Don't know how best to repair/ maintain
- It costs too much
- It takes too much time / effort/ energy
- It will be too disruptive
- Other things more important to do
- Not considered urgent yet
- Just been put off
- Other

Show Card 25 – When are repairs expected to be done

- Within the next 6 months
- Within the next 12 months
- Next year (more than 12 months time, less than 2 years time)
- In 2 -3 years time
- In 4 – 5 years time
- In 5 – 10 years time
- In more than 10 years time
- Never
- Don't know

Show Card 26 – Reasons for not doing repairs or maintenance – rental

- The landlord has not been contacted yet
- The landlord has not done the work yet
- The landlord is not willing to get the work done
- Cannot agree with the landlord about how to do the repair / maintenance
- Cannot agree with the landlord about who should do the repair / maintenance
- Other
- Don't know

Show Card 27 – How important

- Very important
- Somewhat important
- Not important

Show Card 28 – How often

- Yes – always
- Yes – often
- Yes – sometimes
- No

Show Card 29 – Reasons house colder than would like

- Trying to keep cost of heating down
- Any heat just disappears (it doesn't warm up or stay warm despite heating)
- Like to have windows open
- It is healthy to keep your body cooler
- Other household members like it cooler
- Not enough heaters available in the house
- Doesn't get enough sun
- Chose not to heat (for reasons other than cost)
- Trying to use less energy for environmental reasons
- Other

Show Card 30 – Gone without heating because of cost

- Yes - often
- Yes – occasionally
- No - never

Show Card 31 – Agree/disagree

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- Not applicable
- Don't know

Show Card 32 – Frequency

- Never
- Rarely
- Sometimes
- Often
- Always

- Not applicable
- Don't know