

Supplemental Information

Supplement 1: Full online survey

Supplement 2: Validation checks with table

Supplement 3: Non-parametric statistically analysis results

Supplement 4: Perceived reasons for energy price hikes in 2022

Supplement 1: Full online survey



come



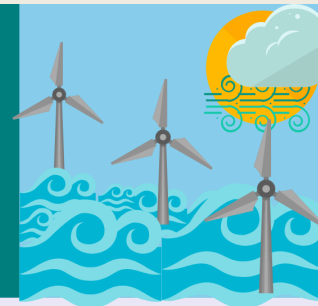
Investigating the impact of energy security and climate change on becoming a prosumer!

You are invited to read the information below. Then click 'NEXT' for further instructions.

Thank you!



Participate in our study!



Study invitation

We would like to invite you to take part if you are 18 to 70 years old and live in the United Kingdom. In addition, you should be partly or completely responsible for your household's energy bills.

What is this study about?

Thanks to smart phones and the internet, it is easier than ever for people to connect to others online and to be able to buy goods and services quickly and easily.

In the future, you will be able to use your smart phone and the internet to buy and sell electricity.

We want to better understand if householders would want to buy and sell their electricity if they could. Finding this out is important because it could affect energy security and climate change.



What is involved if I decide to take part?

You should only participate if you want to; choosing not to take part will not disadvantage you in any way.

Before you decide, it is important for you to read the Participant Information Sheet carefully and discuss it with others if you wish.

After you click 'NEXT', you will be able to download the Participant Information Sheet to find out more!

This study will take 5 to 10 minutes. ***If you are doing this study on a mobile phone, the text and tasks will display better if you rotate your screen.***

You can withdraw from the study at any time by closing your browser.

Please note: Not everyone can take part in this particular study. **To be eligible you must be able to answer YES to all of the following:**

- **I am 18 to 70 years old**
- **I am wholly or partly responsible for my household's energy bills**
- **I live in the United Kingdom**

If you answer **NO** to any of the above, please close your browser now.

Please download and read the [Participant Information Sheet](#) for full details about this study, then click 'NEXT' to proceed to the study.

Informed Consent_2023

CONSENT FORM

Title of the Project: Investigating the impact of energy security and climate change on becoming a prosumer.

Researchers: Sheina Orbell, Riccardo Russo, Denise Wallace, Richard Philpot, Neive Wright

Statement of consent

Please read each statement carefully and click a box at the bottom of the page to continue.

1. I confirm that I am 18 years or older.
2. I agree to participate in the research project "Investigating the impact of energy security and climate change on householders' intentions to switch to becoming prosumers" being carried out by Sheina Orbell, Riccardo Russo, Denise Wallace, Richard Philpot and Neive Wright.
3. This agreement has been given voluntarily and without coercion.
4. I have been given full information about the study and contact details of the researchers.
5. I have read and understood the information provided above.
6. I agree to have my anonymised data shared on publicly accessible repositories.
7. I agree to be contacted in the future by the researchers.
8. I have had the opportunity to ask questions about the research and my participation in it.
9. I consent to having my anonymised data processed as described in the Participant Information Sheet, Ethics ID: ETH2324-1385 (Version 1).

I confirm I am 18 to 70 years and live in the United Kingdom. I have read all of the above statements and agree to take part in this study.

- ☐ **Yes I agree to take part**
- ☐ **No I do not agree to take part**

screen-out question: non-bill payers are excluded from this study

Are you responsible (or jointly responsible) for the household energy bills?

- ☐ I am entirely responsible for the household energy bills
- ☐ I am responsible for some of the household energy bills
- ☐ I am not at all responsible for the household energy bills

Prolific_ID

What is your Prolific ID?

Please note that this response should auto-fill with the correct ID

Age and Gender

What is your age?

(e.g. if you are 57 years old, enter the number 57 in the box)

What is your gender?

- ☐ Female
- ☐ Male
- ☐ Non-binary
- ☐ I would like to describe my gender identity using the box below:

Ethnicity

What is your ethnic group?

Choose one option that best describes your ethnic group or background.

White

- ☐ English / Welsh / Scottish / Northern Irish / British
- ☐ Irish
- ☐ Gypsy or Irish Traveller
- ☐ Any other White background

Mixed/Multiple ethnic groups

- ☐ White and Black Caribbean
- ☐ White and Black African
- ☐ White and Asian
- ☐ Any other Mixed/Multiple ethnic background

Asian/Asian British

- ☐ Indian
- ☐ Pakistani
- ☐ Bangladeshi
- ☐ Chinese
- ☐ Any other Asian background

Black/ African/Caribbean/Black British

- ☐ African
- ☐ Caribbean
- ☐ Any other Black/African/Caribbean background

Other ethnic group

- ☐ Please describe your ethnic group

Education

The next set of questions is about your qualifications.

Have you completed an apprenticeship?

- ☐ yes
- ☐ no

Do you have a qualification at degree level or above? (e.g. Bachelor's degree, Master's degree, PhD, PGCE, chartership, NVQ level 4 or 5)

- ☐ yes
- ☐ no

Do you have an NVQ or equivalent qualification? National Vocational Qualifications or 'NVQs' are competency and skills-based qualifications that can be achieved in school, college or at work.

- ☐ NVQ level 3, BTEC National, OND or ONC, City and Guilds Advanced Craft
- ☐ NVQ level 2, BTEC General, City and Guilds Craft
- ☐ NVQ level 1 or equivalent
- ☐ None of these apply

Do you have an AS, A level or equivalent qualification?

- ☐ 2 or more A levels, 4 or more AS levels
- ☐ 1 A level, 2-3 AS levels
- ☐ 1 AS level
- ☐ None of these apply

Do you have a GCSE or equivalent qualification?

- ☐ 5 or more GCSEs (A*-C, 9-4), O levels (passes) or CSEs (grade 1)
- ☐ Any other GCSEs, O levels or CSEs (any grades)
- ☐ Basic Skills course

☐ None of these apply

Do you have any other qualifications? *This could be equivalent qualifications achieved anywhere outside England and Wales.*

Select all that apply

- ☐ Yes, in England or Wales
- ☐ Yes, anywhere outside of England and Wales
- ☐ None of these apply

Do you have any other qualifications?

- ☐ Other (please specify in the box provided)
-
- ☐ No qualifications

Annual income

We would like to better understand the relationship between annual income and spending choices.

Please select the option below that best describes your current annual **household** income (this value can be from any source such as wages, benefits, savings, pension, trust fund, etc).

- ☐ less than £20,000 per year
- ☐ £20,001 to £40,000 per year
- ☐ £40,001 to £60,000 per year
- ☐ £60,001 to £80,000 per year
- ☐ £80,001 to £120,000 per year
- ☐ more than £120,000 per year

Please selection the option that best describes how sufficient your monthly financial resources are to pay for fixed expenses (e.g. rent or mortgage, utilities, food, etc.)

	Very insufficient	Insufficient	Just enough	Sufficient	Very sufficient
My monthly financial resources are:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Experiment Introduction

Please read this very carefully before you continue.

When you click 'NEXT' you will be presented with some information about what a 'consumer' is and what a 'prosumer' is.

It is vital that you read this information carefully and try to keep in mind what a prosumer is so that you understand the scenario.

Experiment screen1 (explanations) Security 1st Counter Balance

What is a prosumer?

A '**consumer**' pays a utility company to supply them with energy from the grid.



Some households generate their own energy by installing solar panels, heat pumps or wind turbines and storing the energy from these devices in a battery. They are '**producers**'.

Households that are both producers and consumers are known as '**prosumers**'. They buy energy from the utility company when needed and contribute to the energy supply when they generate their own energy in excess of their needs and sell this energy back to the grid.

When you press 'NEXT' you will be given a scenario to read.

This will take a few minutes.

Your task is to read through the whole scenario **carefully**...think about it, then answer the questions about it at the end.

Take as little or as much time as you need to give your answers.

1_No Threat / No Environmental Impact

**Please take your time to read this scenario carefully
before answering the questions that follow.**

Becoming a prosumer will have **no effect on the supply or price of energy.**

Becoming a prosumer will have **no effect on CO₂ emissions, environmental protection** or unwanted climate change.



Please confirm that you have read the scenario and that you will answer all the following questions based on the above scenario which says that:
Becoming a prosumer will have no effect on the supply and price of energy OR on CO₂ emissions, environmental protection and unwanted climate change.

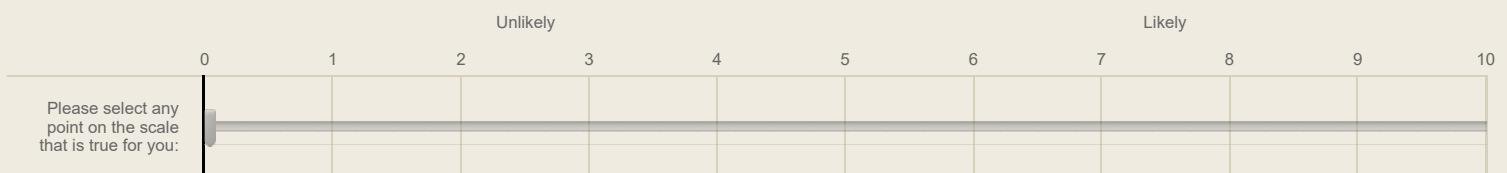
Please select 'Yes' to indicate that you have read the scenario and click 'NEXT' to continue.

☐ Yes I have read the scenario.

Please answer the following questions to express your view about becoming a prosumer.

All your answers must be based on the scenario that you have just read.

If I was in a position to do so, I would become a prosumer.



I would become a prosumer if I was in a position to do so.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
Please select the option that best fits with your view:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To complete the sentence below, please read each statement carefully and choose the one that best fits with your view.

If I was in a position to become a prosumer,

- ☐ I definitely would not.
- ☐ I probably would not.
- ☐ I probably would.
- ☐ I definitely would.

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting your household.

Please indicate how much you agree or disagree with the following statements.

For my household, becoming a prosumer would be...

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting the country.

Please indicate how much you agree or disagree with the following statements.

For the country, becoming a prosumer would be....

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2_No Threat / High Environmental Impact

Please take your time to read this scenario carefully before answering the questions that follow.

Becoming a prosumer will have **no effect on the supply or price of energy**.

Becoming a prosumer will **reduce CO₂ emissions**, protect the environment and minimise unwanted climate change.



Please confirm that you have read the scenario and that you will answer all the following questions based on the above scenario which says that:

Becoming a prosumer will have no effect on supply or price of energy.
Becoming a prosumer will reduce CO₂ emissions, protect the environment and minimise unwanted climate change.

Please select 'Yes' to indicate that you have read the scenario and click 'NEXT' to continue.

☐ Yes I have read the scenario.

Please answer the following questions to express your view about becoming a prosumer.

All your answers must be based on the scenario that you have just read.

If I was in a position to do so, I would become a prosumer.

Unlikely

Likely

0

1

2

3

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Please select any point on the scale that is true for you:

I would become a prosumer if I was in a position to do so.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
Please select the option that best fits with your view:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To complete the sentence below, please read each statement carefully and choose the one that best fits with your view.

If I was in a position to become a prosumer,

- ☐ I definitely would not.
- ☐ I probably would not.
- ☐ I probably would.
- ☐ I definitely would.

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting your household.

Please indicate how much you agree or disagree with the following statements.

For my household, becoming a prosumer would be...

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting the country.

Please indicate how much you agree or disagree with the following statements.

For the country, becoming a prosumer would be....

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3_General Threat / No Environmental Impact

Please take your time to read this scenario carefully before answering the questions that follow.

Becoming a prosumer will help ensure an **uninterrupted supply** of energy at an **affordable price** even if a threat to energy security occurs.

Becoming a prosumer will have **no effect on CO₂ emissions**, environmental protection or unwanted climate change.



Please confirm that you have read the scenario and that you will answer all the following questions based on the above scenario which says that:

Becoming a prosumer will help ensure uninterrupted supply of energy at an affordable price even if a threat to energy occurs.
Becoming a prosumer will have no effect on CO₂ emissions, environmental protection or unwanted climate change.

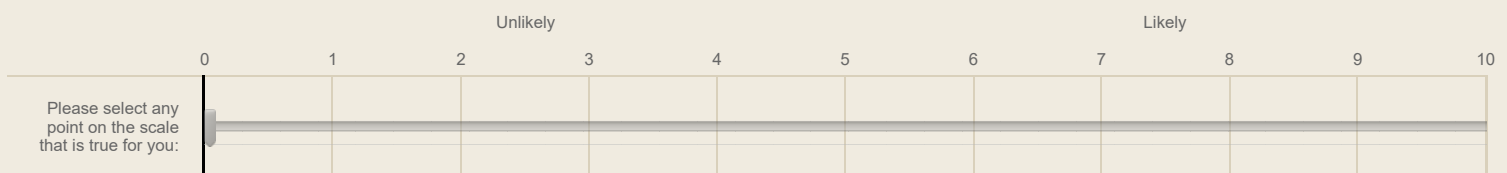
Please select 'Yes' to indicate that you have read the scenario and click 'NEXT' to continue.

☐ Yes I have read the scenario.

Please answer the following questions to express your view about becoming a prosumer.

All your answers must be based on the scenario that you have just read.

If I was in a position to do so, I would become a prosumer.



I would become a prosumer if I was in a position to do so.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
Please select the option that best fits with your view:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To complete the sentence below, please read each statement carefully and choose the one that best fits with your view.

If I was in a position to become a prosumer,

- ☐ I definitely would not.
- ☐ I probably would not.
- ☐ I probably would.
- ☐ I definitely would.

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting your household.

Please indicate how much you agree or disagree with the following statements.

For my household, becoming a prosumer would be...

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting the country.

Please indicate how much you agree or disagree with the following statements.

For the country, becoming a prosumer would be....

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4_General Threat / High Environmental Impact

Please take your time to read this scenario carefully before answering the questions that follow.

Becoming a prosumer will help ensure an **uninterrupted supply** of energy at an **affordable price** even if a threat to energy security occurs.

Becoming a prosumer will also **reduce CO₂ emissions**, protect the environment and minimise unwanted climate change.



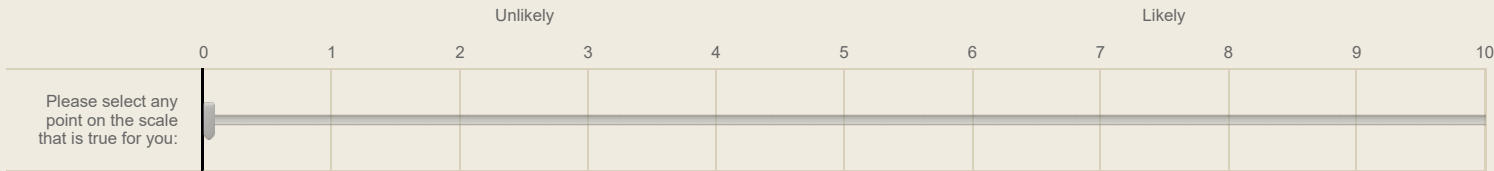
Please confirm that you have read the scenario and that you will answer all the following questions based on the above scenario which says that:

Becoming a prosumer will help ensure uninterrupted supply of energy at an affordable price even if a threat to energy security occurs.
Becoming a prosumer will reduce CO₂ emissions, protect the environment and minimise unwanted climate change.

Please select "Yes" to indicate that you have read the scenario and click "NEXT" to continue.
☐ Yes I have read the scenario.

Please answer the following questions to express your view about becoming a prosumer.
All your answers must be based on the scenario that you have just read.

If I was in a position to do so, I would become a prosumer.



I would become a prosumer if I was in a position to do so.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
Please select the option that best fits with your view:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To complete the sentence below, please read each statement carefully and choose the one that best fits with your view.

If I was in a position to become a prosumer,

- ☐ I definitely would not.
- ☐ I probably would not.
- ☐ I probably would.
- ☐ I definitely would.

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting your household.

Please indicate how much you agree or disagree with the following statements.

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Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting the country.

Please indicate how much you agree or disagree with the following statements.

For the country, becoming a prosumer would be....

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is a prosumer?

A '**consumer**' pays a utility company to supply them with energy from the grid.



Some households generate their own energy by installing solar panels, heat pumps or wind turbines and storing the energy from these devices in a battery. They are '**producers**'.

Households that are both producers and consumers are known as '**prosumers**'. They buy energy from the utility company when needed and contribute to the energy supply when they generate their own energy in excess of their needs and sell this energy back to the grid.

When you press 'NEXT' you will be given a scenario to read.

This will take a few minutes.

Your task is to read through the whole scenario **carefully**...think about it, then answer the questions about it at the end.

Take as little or as much time as you need to give your answers.

**Please take your time to read this scenario carefully
before answering the questions that follow.**

Becoming a prosumer will have **no effect on CO₂ emissions, environmental protection** or unwanted climate change.

Becoming a prosumer will also have **no effect on the supply or price of energy.**



Please confirm that you have read the scenario and that you will answer all the following questions based on the above scenario which says that:

Becoming a prosumer will have no effect on CO₂ emissions, environmental protection and unwanted climate change OR the supply and price of energy.

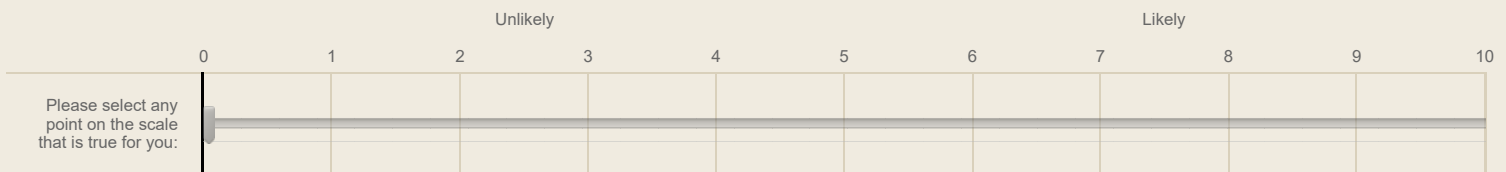
Please select 'Yes' to indicate that you have read the scenario and click 'NEXT' to continue.

☐ Yes I have read the scenario.

Please answer the following questions to express your view about becoming a prosumer.

All your answers must be based on the scenario that you have just read.

If I was in a position to do so, I would become a prosumer.



I would become a prosumer if I was in a position to do so.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
Please select the option that best fits with your view:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To complete the sentence below, please read each statement carefully and choose the one that best fits with your view.

If I was in a position to become a prosumer,

- ☐ I definitely would not.
- ☐ I probably would not.
- ☐ I probably would.
- ☐ I definitely would.

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting your household.

Please indicate how much you agree or disagree with the following statements.

For my household, becoming a prosumer would be...

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting the country.

Please indicate how much you agree or disagree with the following statements.

For the country, becoming a prosumer would be....

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10_High Environmental Impact / No Threat

Please take your time to read this scenario carefully before answering the questions that follow.

Becoming a prosumer will **reduce CO₂ emissions**, protect the environment and minimise unwanted climate change.

Becoming a prosumer will have **no effect on the supply or price of energy**.



Please confirm that you have read the scenario and that you will answer all the following questions based on the above scenario which says that:

Becoming a prosumer will reduce CO₂ emissions, protect the environment and minimise unwanted climate change.
Becoming a prosumer will have no effect on supply or price of energy.

Please select "Yes" to indicate that you have read the scenario and click "NEXT" to continue.
☐ Yes I have read the scenario.

Please answer the following questions to express your view about becoming a prosumer.
All your answers must be based on the scenario that you have just read.

If I was in a position to do so, I would become a prosumer.

Unlikely

Likely

0

1

2

3

4

5

6

7

8

9

10

Please select any point on the scale that is true for you:

I would become a prosumer if I was in a position to do so.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
Please select the option that best fits with your view:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To complete the sentence below, please read each statement carefully and choose the one that best fits with your view.

If I was in a position to become a prosumer,

- ☐ I definitely would not.
- ☐ I probably would not.
- ☐ I probably would.
- ☐ I definitely would.

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting your household.

Please indicate how much you agree or disagree with the following statements.

For my household, becoming a prosumer would be...

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting the country.

Please indicate how much you agree or disagree with the following statements.

For the country, becoming a prosumer would be....

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11_No Environmental Impact / General Threat

Please take your time to read this scenario carefully before answering the questions that follow.

Becoming a prosumer will have **no effect on CO₂ emissions**, environmental protection or unwanted climate change.

Becoming a prosumer will help ensure an **uninterrupted supply** of energy at an **affordable price** even if a threat to energy security occurs.



Please confirm that you have read the scenario and that you will answer all the following questions based on the above scenario which says that:

Becoming a prosumer will have no effect on CO₂ emissions, environmental protection or unwanted climate change.

Becoming a prosumer will help ensure uninterrupted supply of energy at an affordable price even if a threat to energy occurs.

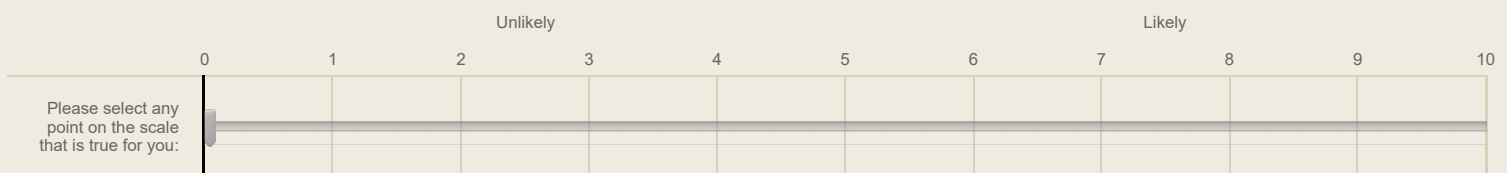
Please select 'Yes' to indicate that you have read the scenario and click 'NEXT' to continue.

☐ Yes I have read the scenario.

Please answer the following questions to express your view about becoming a prosumer.

All your answers must be based on the scenario that you have just read.

If I was in a position to do so, I would become a prosumer.



I would become a prosumer if I was in a position to do so.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
Please select the option that best fits with your view:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To complete the sentence below, please read each statement carefully and choose the one that best fits with your view.

If I was in a position to become a prosumer,

- ☐ I definitely would not.
- ☐ I probably would not.
- ☐ I probably would.
- ☐ I definitely would.

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting your household.

Please indicate how much you agree or disagree with the following statements.

For my household, becoming a prosumer would be...

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting the country.

Please indicate how much you agree or disagree with the following statements.

For the country, becoming a prosumer would be....

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12_High Environmental Impact / General Threat

Please take your time to read this scenario carefully before answering the questions that follow.

Becoming a prosumer will **reduce CO₂ emissions**, protect the environment and minimise unwanted climate change.

Becoming a prosumer will also help ensure an **uninterrupted supply** of energy at an **affordable price** even if a threat to energy security occurs.



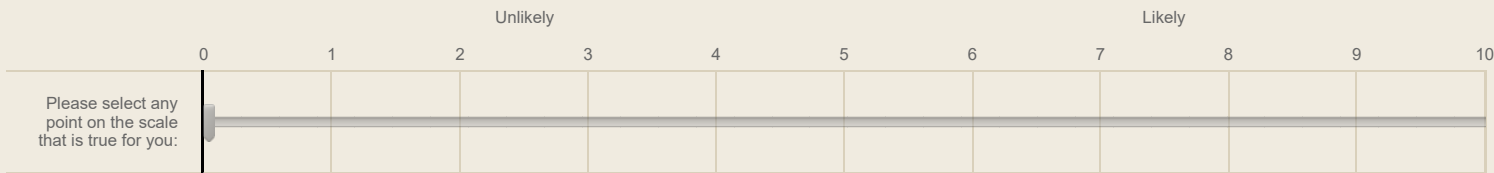
Please confirm that you have read the scenario and that you will answer all the following questions based on the above scenario which says that:

Becoming a prosumer will reduce CO₂ emissions, protect the environment and minimise unwanted climate change.
Becoming a prosumer will help ensure uninterrupted supply of energy at an affordable price even if a threat to energy occurs.

Please select "Yes" to indicate that you have read the scenario and click "NEXT" to continue.
☐ Yes I have read the scenario.

Please answer the following questions to express your view about becoming a prosumer.
All your answers must be based on the scenario that you have just read.

If I was in a position to do so, I would become a prosumer.



I would become a prosumer if I was in a position to do so.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
Please select the option that best fits with your view:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To complete the sentence below, please read each statement carefully and choose the one that best fits with your view.

If I was in a position to become a prosumer,

- ☐ I definitely would not.
- ☐ I probably would not.
- ☐ I probably would.
- ☐ I definitely would.

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting your household.

Please indicate how much you agree or disagree with the following statements.

For my household, becoming a prosumer would be...

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on the scenario you read in this study, what is your opinion about how you see 'prosuming' impacting the country.

Please indicate how much you agree or disagree with the following statements.

For the country, becoming a prosumer would be....

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beneficial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comprehension Check - what is a prosumer?

What is a prosumer? Please select one answer.

- ☐ A prosumer is someone who sells things.
- ☐ A prosumer is someone who buys things.
- ☐ A prosumer is someone who buys and sells things.
- ☐ I don't know.

living situation/dwelling questions

Thank you for your answers - You're nearly done!

We would like to understand your living situation. Please answer all the following questions.

What type of accommodation do you live in?

- ☐ House or bungalow
- ☐ Flat, maisonette or apartment (includes purpose-built flats and flats within converted buildings)

- ☐ Caravan or other mobile or temporary structure

Does your household own or rent your current accommodation?

- ☐ Owns outright
- ☐ Owns with a mortgage or loan
- ☐ Part-owns and part-rents (shared ownership)
- ☐ Rents (with or without housing benefit)
- ☐ Lives here rent-free

Do you have a heat pump in your home?

- ☐ yes
- ☐ no

Do you have solar panels on the roof of your home?

- ☐ yes
- ☐ no

Do you have a wind turbine on your property?

- ☐ yes
- ☐ no

Which of the following most closely describes the area where you live?

- ☐ Major city
- ☐ City
- ☐ Town
- ☐ Village
- ☐ Hamlet or isolated dwelling

Regarding the following statements, please say how much you agree or disagree

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
I identify with my local region	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am environmentally conscious.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Perceived 'environmental benefit'

What comes to mind when you think about environmental protection? (please select one)

- ☐ Minimising unwanted climate change.
- ☐ Reducing CO₂ emissions.
- ☐ Minimising unwanted climate change and reducing CO₂ emissions.
- ☐ Other
-
- ☐ I don't know.

Perceived 'threat to energy security'

What comes to mind when you think about a threat to energy security? (please select one)

- ☐ Not being able to use electricity whenever I need it.
- ☐ Not being able to use electricity whenever I need it at a price that I can afford.
- ☐ Not being able to afford the electricity I need.
- ☐ Other
-
- ☐ I don't know

Energy Price Rises in 2022

A government report revealed that UK household energy bills in 2022-23 increased to the highest levels on record.

We want to understand your personal view of the most likely causes of rising energy bills.

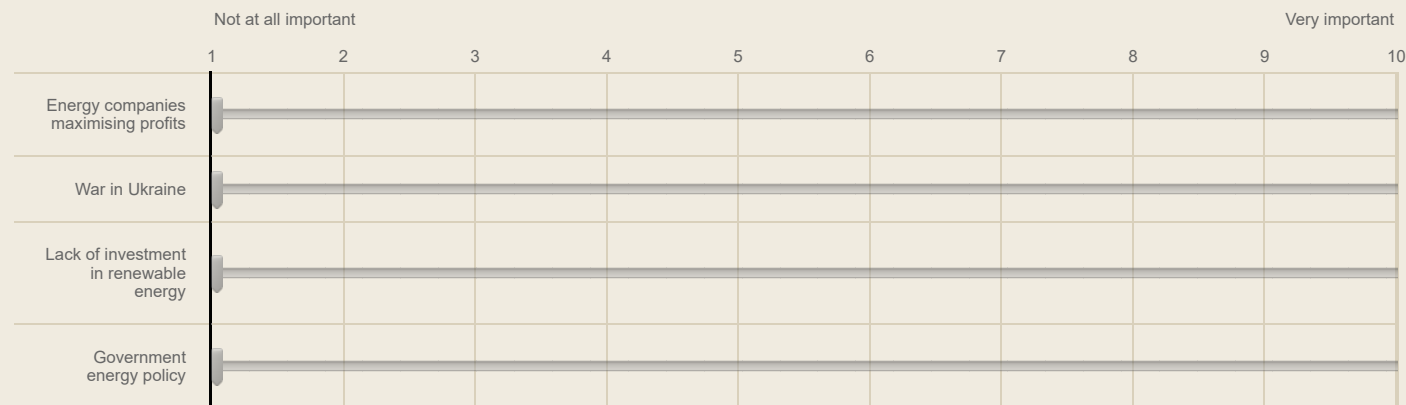
Please carefully read the items below that have been suggested by some as possible reasons. Click and drag the items into the order that most closely fits your own view. 1 will be what you see as the most important reason and 4 would be the least important reason.

There are no right or wrong answers.

- War in Ukraine
- Energy companies maximising profits
- Lack of investment in renewable energy
- Government energy policy

Below are 4 likely causes of rising energy bills.

Please use the scale to indicate how important you think each one is.



Survey Feedback opportunity

We value your feedback!

Was there anything about this study that wasn't clear? Anything you'd like to comment on?

Otherwise click 'NEXT' and your participation is complete (you will automatically be re-directed back to Prolific).

Thank you so much for your contribution to our study!

Supplement 2

Preliminary analyses and validity checks

Comprehension, attention and counter-balancing

Of 1,000 participants, 59 were excluded for failing the comprehension check. Proportions of attentive/inattentive participants across groups were statistically comparable ($p = 0.054$; $BF = 0.21$) and counter-balancing was also successful (p 's $\geq .05$; BF s ≤ 0.33). For the latter analysis, we submitted the three dependent variables, in turn, to a univariate ANOVA as follows: 2 (energy security: absent-threat, present-threat) x 2 (environmental protection: absent-benefit, present-benefit) x 2 (order: energy security threat first, environmental protection first). We report only the main effect and interaction effects for order here. The results for intention and country attitude were not statistically significant for the order main effect, two-way energy security x order and environmental protection x order interactions or the three-way energy security x environmental protection x order interaction (p 's $\geq .108$). The Bayesian ANOVA evidence supported the null in all cases (BF 's ≤ 0.03). For household attitude, the outcome was similar regarding the main effect and the energy security x order and the environmental protection x order interactions (p 's $\geq .488$, BF 's ≤ 0.04). However, the three-way energy security x environmental protection x order interaction was statistically significant ($F(1,933) 4.086$, $p = .044$, $\eta_p^2 = 0.004$) though did not survive Bonferroni correction ($\alpha: 0.05/3 = .0167$). The Bayesian ANOVA supported the null ($BF = 0.02$).

Randomisation

Randomised energy security/environmental protection sub-groups showed statistical equivalence regarding age, gender, education and annual income (p 's \geq

.515, BF's $\leq .01$) shown in Supplemental Table 1. Sub-groups were also comparable regarding ethnicity, perceived monthly affordability of bills, dwelling type and whether they owned/rented their accommodation (p 's $\geq .367$; BF's ≤ 0.04) (full details in supplement 1). In addition, 82.8% of participants (779/941) somewhat or strongly identified with their local region and 92% (864/941) somewhat or strongly agreed that they were environmentally conscious. Regarding local region, there was a statistically significant difference between groups ($\chi^2(3) 11.929$, $p = .008$). However, following Bonferroni corrections ($\alpha = .05/10 = .005$) and taking into account that the BF evidence was anecdotal (BF = 1.42), this result is unreliable. There were no significant associations regarding sub-group and being environmentally conscious.

Other sociodemographic variable comparisons

Supplemental Table 1 further shows comparisons for ethnicity, perceived monthly affordability of bills, dwelling type and whether respondents owned or rented which were statistically comparable ($ps \geq .367$, BF's ≤ 0.02). Regarding whether participants identified with their local region, 62.5% somewhat agreed while a further 20.5% strongly agreed. The remainder somewhat (13.9%) or strongly (3.3%) disagreed. Pearson's chi square test revealed a statistically significant association between proportions of agree/disagree responses of the four sub-groups ($\chi^2(3) 11.929$, $p = .008$), Cramer's V indicates an effect size of .113. However the equivalent Bayesian test revealed anecdotal evidence (BF = 1.42), suggesting an inconclusive result. When asked whether participants identified with being environmentally conscious, 64.1% somewhat agreed, 27.7% strongly agreed while the remainder somewhat/strongly disagreed (8.2%); sub-groups were statistically comparable regarding the matter ($p = .434$, BF = 0.04). Of 1000 respondents, 671 confirmed that they either owned their home outright (34.2%) or owned with a

mortgage (37.1%). Microgeneration technology such as solar panels, heat-pumps and wind turbines were not assessed as so few had been installed. Across sub-groups, heat-pumps had been installed by 3.7% (25/671) participants, solar panels by 5.5% (37/671) while 1% (7/671) had installed both heat-pumps and solar panels. No-one had installed wind turbines. In summary, we found no evidence for between-groups differences regarding ethnicity, perceived monthly affordability of bills, dwelling type, homeowner status or whether participants regarded themselves as environmentally conscious. Whether or not participants identified with their local region was inconclusive.

Supplementary Table 1: Descriptive statistics for sociodemographic variables by energy security/environmental protection condition.

		absent threat/absent environ protection n=235	absent threat/present environ protection n=233	present threat/absent environ protection n=231	present threat/present environ protection n=242	p	BF ^d
Age ^a	Mean (SD)	45.69 (15.21)	46.52 (14.50)	47.09 (14.32)	46.79 (14.99)	0.764	0.01
Gender ^b	female:male	127:107	122:107	115:114	122:118	0.790	< 0.01
Education ^b	university/other tertiary education (n)	196	187	199	202	0.515	< 0.01
	secondary school (A-level or equivalent) (n)	20	23	19	24		
	secondary school (GCSE or equivalent) (n)	17	20	13	13		
	Other (n)	2	3	0	3		
Annual Income ^c	less than £20,000 per year (n)	24	32	23	33	0.974	< 0.01
	£20,001 to £40,000 (n)	80	72	76	79		
	£40,001 to £60,000 (n)	59	56	60	57		
	£60,001 to £80,000 (n)	31	33	39	35		
	80,001 to £120,000 (n)	30	28	25	25		
	more than £120,000 (n)	11	12	8	13		
Ethnicity ^a	white (n)	202	197	200	208	0.936	0.01
	non-white (n)	33	36	31	34		
Perceived Monthly Affordability of bills ^b	very insufficient (n)	5	6	2	7	0.923	< 0.01
	insufficient (n)	25	20	19	19		
	just enough (n)	83	77	79	79		
	sufficient (n)	95	106	103	110		
	very sufficient (n)	27	24	28	27		
Dwelling Type ^b	house/bungalow (n)	180	186	194	195	0.367	0.02
	flat/maisonnette/apartment (n)	54	47	37	47		
	caravan/mobile home/temporary structure (n)	1	0	0	0		
Own/Rent ^b	owns outright	80	79	75	88	0.628	< 0.01
	owns with mortgage/loan	89	95	87	78		
	part-owns/part-rents (shared ownership)	1	1	3	3		
	rents (with or w/o housing benefit)	63	54	64	72		
	lives rent-free	0	0	1	0		
I identify with my local region ^a	yes:no	186:49:00	202:31:00	202:29:00	189:53:00	0.008	1.42
I am environmentally conscious ^a	yes:no	212:23:00	218:15:00	209:22:00	225:17:00	0.434	0.04

* p < .05; ** p < 0.01

^a One-way ANOVA.

^b Pearson Chi Square for independence.

^c Chi Square for independence performed but we report Likelihood Ratio test results because of some small cell sizes.

^d Bayes Factors support a difference between groups when BF ≥ 3.0 and support the null when BF ≤ 0.33. Values between 3.0 and 0.33 represent inconclusive evidence.

Note: sample sizes varied slightly for different comparisons, therefore numerical values rather than percentages have been given in all cases except for age.

Supplement 3

Non-parametric results

Energy security threat absent: pairwise comparisons

Both frequentist and Bayesian Mann-Whitney U results ($Z = -6.636$, $p < .001$, $r = -0.31$; $BF > 100$) were consistent with the parametric results.

Energy security threat present: pairwise comparisons

For the non-parametric results, the frequentist Mann-Whitney U test similarly revealed a statistically significant difference for ctry attitudes ($Z = -2.652$, $p = .008$, $r = -.12$) but not intention or hh attitudes (p 's $\geq .119$). However, the Bayesian Mann-Whitney U result was inconclusive, providing anecdotal evidence for a benefit-present vs. benefit-absent difference: $BF = 2.24$.

Environmental protection benefit absent: pairwise comparisons

The non-parametric frequentist and Bayesian evaluations were congruent, providing evidence in favour of a between-groups difference for intention ($Z = -6.820$, $p < .001$, $r = -.32$; $BF > 100$), hh attitudes ($Z = -7.040$, $p < .001$, $r = -.33$; $BF > 100$) and ctry attitudes ($Z = -6.762$, $p < .001$, $r = -.31$; $BF > 100$).

Environmental protection benefit present: pairwise comparisons

The Mann-Whitney U frequentist and Bayesian tests for intention and ctry attitudes, consistent with the frequentist results, supported the null (p 's $\geq .111$; BF s ≤ 0.23). For hh attitudes, the frequentist Mann-Whitney U was statistically significant ($Z = -2.606$, $p = .009$, $r = -.12$), while the Bayesian comparison revealed anecdotal evidence ($BF = 2.76$).

Supplemental Table 2: Medians and Interquartile ranges (IQRs) for the energy security threat by environmental protection benefit simple main effects on intention, household attitudes and country attitudes to become a prosumer.

		Environmental benefit	
		<i>Benefit absent</i>	<i>Benefit present</i>
<i>Intention to prosume^a</i>			
Energy Security Threat	Median (IQR)	Median (IQR)	
<i>Threat absent</i>	-0.3 (-0.9 - 0.4)	0.0 (-0.3 - 0.9)	
<i>Threat present</i>	0.0 (-0.3 - 0.9)	0.4 (-0.1 - 0.9)	
<i>Attitude to household becoming prosumer</i>		<i>Benefit absent</i>	<i>Benefit present</i>
Energy Security Threat	Median (IQR)	Median (IQR)	
<i>Threat absent</i>	4.0 (3.0 - 4.8)	4.8 (4.0 - 5.3)	
<i>Threat present</i>	4.8 (4.0 - 5.3)	4.8 (4.3 - 5.5)	
<i>Attitude to the country becoming prosumer</i>		<i>Benefit absent</i>	<i>Benefit present</i>
Energy Security Threat	Median (IQR)	Median (IQR)	
<i>Threat absent</i>	4.0 (3.0 - 5.0)	5.0 (4.5 - 5.5)	
<i>Threat present</i>	4.8 (4.3 - 5.5)	5.0 (4.5 - 5.8)	

Threat absent (n=467); Threat present (n=474); Benefit absent (n=465); Benefit present (n=476).

^a Negative values indicate a lower level of intention to prosume; positive values indicate a higher level of intention to prosume.

Supplement 4

Perceived reasons for energy price hikes in 2022

A paucity in current knowledge relates to householders' perceptions about the source of energy costs, particularly regarding the unexpectedly high energy costs in 2022. We used rank aggregation to show a clear consensus regarding 4 possible reasons.

Rank aggregation indicated that participants converged on energy companies' profit-maximising as the biggest likely cause of the 2022 price hike. This outcome was based on the mean ranks for 'Energy companies maximising profits'; 'Government energy policy'; 'War in Ukraine'; and 'Lack of investment in renewable energy' which were 1.88; 2.67; 2.68; and 2.77, respectively. The optimal ranked list (Pihur, Datta, & Datta, 2009) was: 1) 'Energy companies maximising profits', 2) 'Government energy policy', 3) 'Lack of investment in renewable energy', 4) 'War in Ukraine'. Spearman's Footrule Distance was 3.90, indicating very good rank consensus between participants (Dinu & Manea, 2006).

We further showed that each reason differed significantly from the other. However, all received relatively high scores suggesting that although one reason, maximising profits won out, all four reasons are considered important. This evidence was based on a 4 (importance rating: 'Government energy policy', 'Lack of investment in renewable energy', 'Energy companies maximising profits', 'War in Ukraine') x 2 (energy security: present vs. absent) x 2 (environmental protection: present vs. absent) mixed ANOVA, treating the rating scale (1 – 'not important at all' to 10 – 'very important') as the dependent variable with reasons for energy price hike as within-subject variable and energy security and environmental protection as

between-subjects variables. We found a statistically significant main effect for importance rating only ($F(3, 2796) 62.914, p < .001, \eta_p^2 = .063$) confirmed by extremely strong Bayesian evidence ($BF > 100$). Follow-up frequentist and Bayesian Tukey pairwise comparisons are presented in Fig. 1s.

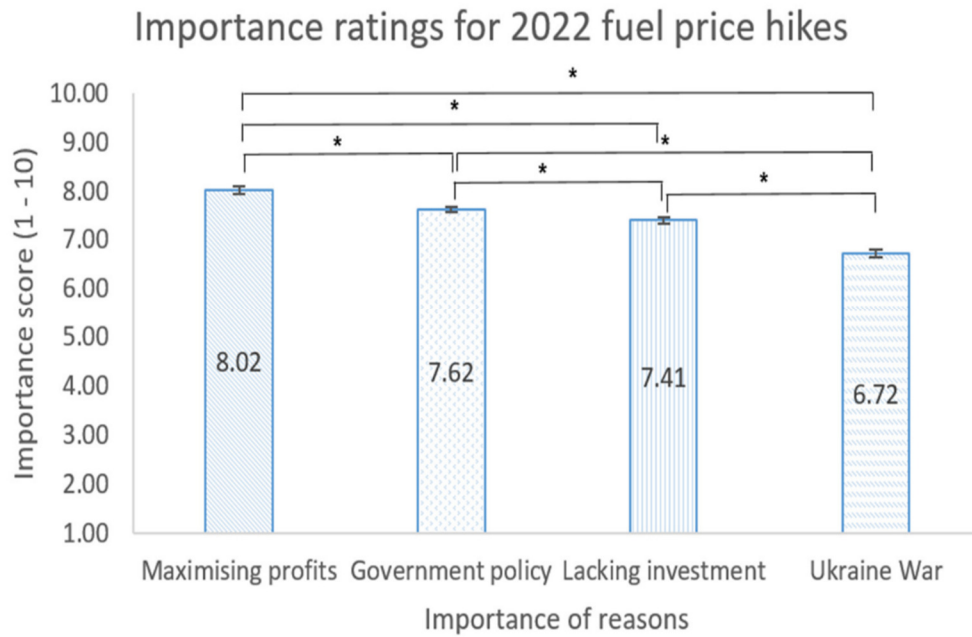


Fig.1s|Importance ratings for 2022 fuel price hikes follow-up analysis. Maximising profits was significantly more important than government policy, poor investment and the Ukraine War, respectively, ($M = 8.02, SE = 0.07 > M = 7.62, SE = 0.06 > M = 7.41, SE = 0.07 > M = 6.72, SE = 0.08$) (p 's $\leq .001$; BF 's > 100), as Fig. 4 shows. Government policy was significantly more important than poor investment ($p = .034$) but Bayesian evidence was anecdotal ($BF = 1.55$), indicating inconclusive evidence for a difference in importance between these two reasons. Government policy was significantly more important than the Ukraine war ($p \leq .001$; $BF > 100$). Poor investment was statistically significantly more important than the Ukraine war ($p < .001$; $BF > 100$). Regarding our independent factors, these differences did not significantly interact with energy security ($F(3, 2796) < 1, p = .686$; $BF < 0.01$), environmental protection ($F(3, 2796) < 1, p = .525$; $BF < 0.01$) or 3-way interaction between importance rating, energy security and environmental protection ($F(3, 2796) < 1, p = .775$; $BF < 0.01$). The main effects for energy security, environmental protection and their interaction were also not statistically significant (F 's ($1, 932$) $< 1, p$'s $\geq .377$; BF 's ≤ 0.02).