

The Voice of Warwickshire Panel

Report 2: Climate & Energy Survey

produced by Business Intelligence Service

Author: Kate Price

May 2022



Contents

1.	Background	3
2.	Method	3
3.	Key Messages.....	4
	Interest in and knowledge of climate change	4
	Energy use in the home	4
	Reducing energy use in the home.....	4
	Renewable energy	5
	Electric Vehicles.....	6
	Communicating about energy and other climate change initiatives.....	6
	Climate change impact and adaption	6
4.	Questionnaire results	7
	4.1 Respondent Profile.....	7
	4.2 Interest in and knowledge of climate change and WCC policies and initiatives .	9
	4.3 Energy Use in the Home	12
	4.4 Reducing energy use in the home.....	18
	4.5 Renewable Energy	20
	4.6 Electric Vehicles.....	34
	4.7 Communicating about energy and other climate change initiatives.....	38
	4.8 Climate change impact and adaption	40
	Appendix 1	50

1. Background

The Voice of Warwickshire panel was launched in October 2021 when residents in Warwickshire were invited to register to join the panel. The panel gives residents in Warwickshire an opportunity to share their views on the big issues in Warwickshire, like health and wellbeing, climate change and sustainability, community safety, education, transport, economic growth, inequalities and inclusion, and more.

This report summarises the results of the second survey sent to all panel members. This survey was intended to gather the panels' views on and knowledge of climate and energy.

2. Method

An online survey was hosted on the Citizen Space 'Ask Warwickshire' site via a private link only available to panel members. All members of the panel were asked how they would prefer to complete surveys when they initially signed up to join the panel. The majority (>99%) of panel members opted to complete online surveys with five members advising they would prefer to complete paper-based surveys. Those opting for paper-based surveys were sent the survey along with a freepost return envelope. The other panel members were sent an email to participate in the online survey with two reminder emails being sent to those who had not yet completed the survey. In total, the survey was distributed to 1,013 members of the Voice of Warwickshire panel (note: the membership has since decreased slightly to 1,009).

The survey ran from 18 February 2022 to 13 March 2022.

[Appendix 1](#) provides the survey questions.

3. Key Messages

Interest in and knowledge of climate change

- Overall, 91.2% (n=538) of respondents indicated they were interested or very interested in climate change.
- A total of 53.6% (n=356) respondents said they were either very knowledgeable or knowledgeable on reducing carbon footprint and achieving net zero.
- Overall, 12.2% (n=72) of respondents indicated they were part of a group with an interest in climate change, with Greenpeace the most common response.
- A total of 46.4% (n=203) of respondents advised they were aware of WCCs commitment to be a net zero council by 2030. A large proportion, 86.4%, indicated they were not aware of the virtual forest scheme.

Energy use in the home

- When asked how important a number of statements were when thinking about energy use, 95.9% (n=566) advised their families health and wellbeing was very important or important. Being warm and comfortable and keeping family, clothes and house clean were also seen as important or very important by over 90% of respondents.
- The most used energy saving measure was the use of low energy light bulbs; 86.8% of respondents used these. This was followed by efficient use of heating controls/only using heat when needed.
- Reasons for not using energy saving measures included availability of appropriate technology, time constraints and ineffective washing of clothes at lower temperatures.
- Respondents suggested a range of other measures that could be taken to reduce energy use in the home including good insulation, curtains and blinds to keep warmth in and turning lights off.
- The most common energy saving features in homes of respondents were double/triple glazing (92.4%) and insulation (89.8%). A minority of respondents had heat pumps or Mechanical Ventilation with Heat Recovery/Heat Recovery ventilation, although around a third of respondents were interested in these.
- Overall, 60.5% of respondents said they do not use smart devices in their home to save energy with 28.3% saying they do. Smart thermostats were the most common smart device used.
- Just 17.6% of respondents were aware of the Energy Saving Register Trust that lists energy efficient products.

Reducing energy use in the home

- Overall, 64.4% of respondents said “financial support/ grants to make home improvements” would support them to reduce energy in the home with 54.2% saying “advice and information of what could be done” would be helpful.

- Very few respondents were aware of or made use of schemes available to residents to help reduce energy use in the home. Of those listed Warwickshire Switch and Save was used by the most respondents (9.8%) followed by Warm Homes (3.7%).
- Respondents were asked if there were any other things Warwickshire County Council could do to support them in using less energy in the home - provision of grants and assessments was the most popular response (n=126).

Renewable energy

- A total of 83.9% of respondents said they were aware that electricity can be purchased from energy providers that generate renewable or zero carbon electricity, with 41.7% of respondents already purchasing electricity from such providers.
- The majority of respondents (91.7%) said they were aware you can generate your own renewable electricity by installing (PV) solar panels; 11.4% of respondents said they already have photovoltaic solar panels installed. 16.4% said they would be interested in having them installed and 31.4% said they would be interested but cannot afford this option.
- 79.0% of respondents were aware that they could generate their own hot water by installing solar thermal panels. Just 3.7% said they already have them; 20.2% respondents would be interested in having installed and 20.8% would be interested but cannot not afford.
- 82.0% were aware that they can generate their own hot water/heat your home by installing ground source heat pumps but very few (0.8%) had these installed, with 13.2% respondents advising they would be interested and 30.9% saying they would be interested but can't afford this option.
- 72.4% were aware that they can generate their own hot water/heat your home by installing air source heat pumps but very few (2.2%) had these installed, with 16.4% respondents advising they would be interested and 29.7% saying they would be interested but can't afford this option.
- 59.8% were aware that they can store their own renewably generated electricity by installing battery storage in their home. 2.2% of respondents said they already have battery storage installed - over half said they would be interested (23.9%) or interested but can't afford (27.6%).
- Awareness of schemes available to Warwickshire residents to encourage the use of or generation of renewable energy was generally low - Domestic Renewable Heat Incentive (10.9%), Smart Export Guarantee (7.2%), Switch and Save scheme (38.8%) and Solar Together Warwickshire (11.7%).
- Respondents were asked how supportive they were of various methods of generating renewable energy locally. They were most supportive of the generation of energy from waste locally (86.4%) and least supportive of nuclear energy to generate energy locally (46.0%).

Electric Vehicles

- Almost two thirds of respondents (63.2%) were either supportive or very supportive of moves to speed up the switch to electric vehicles and other less polluting forms of transport.
- Cost of vehicles and availability of charging points were mentioned most frequently as barriers to increasing ownership of electric vehicles.
- 8.1% respondents advised they owned an electric vehicle whilst 15.4% said they were considering or planning to buy one.
- A total of 138 respondents who owned or drive an electric vehicle or were considering buying/planning to buy one were asked if they had sold or exchanged a petrol/diesel vehicle during the last year - 25.4% (n=35) had done so. The majority of respondents (89.1%) said that they did or would charge a vehicle at home and the most popular public charging points were 'specific charging stations (79.0%) and 'in towns/shopping centres' (76.8%).

Communicating about energy and other climate change initiatives

- 62.5% respondents advised letters and leaflets through the post were the most effective way of communicating about climate change initiatives with 61.5% saying emails.
- Overall, 90.0% of respondents advised they would find a list of grants available useful or very useful to find out about saving energy and other climate initiatives. A directory of suppliers, case studies and 'How to' videos were also seen as very useful or useful by over 60% of respondents.
- Energy companies (51.9%) were the most common organisation/website used to gain knowledge about saving energy and climate change. Act on Energy was selected by the lowest proportion of respondents (7.1%).

Climate change impact and adaption

- Just over a third of respondents (37.4%) said that changes in weather were what they were most concerned about.
- Respondents were next asked for their opinion on what types of local support could be provided to reduce the effect of climate change impacts. Advice was the most common response followed by grants and improved public transport.
- The main direct impact of climate change mentioned were change in weather and flooding.

4. Questionnaire results

There were 590 responses to the survey (including paper-based surveys), a response rate of 58.2%.

4.1 Respondent Profile

Figure 1 and Table 1 provide details on where panel members responding live in Warwickshire. The place of residence of panel members responding to the survey is broadly similar to the population of Warwickshire (aged 18+) with respondents from Warwick District slightly overrepresented.

Figure 1: Place of residence of respondents

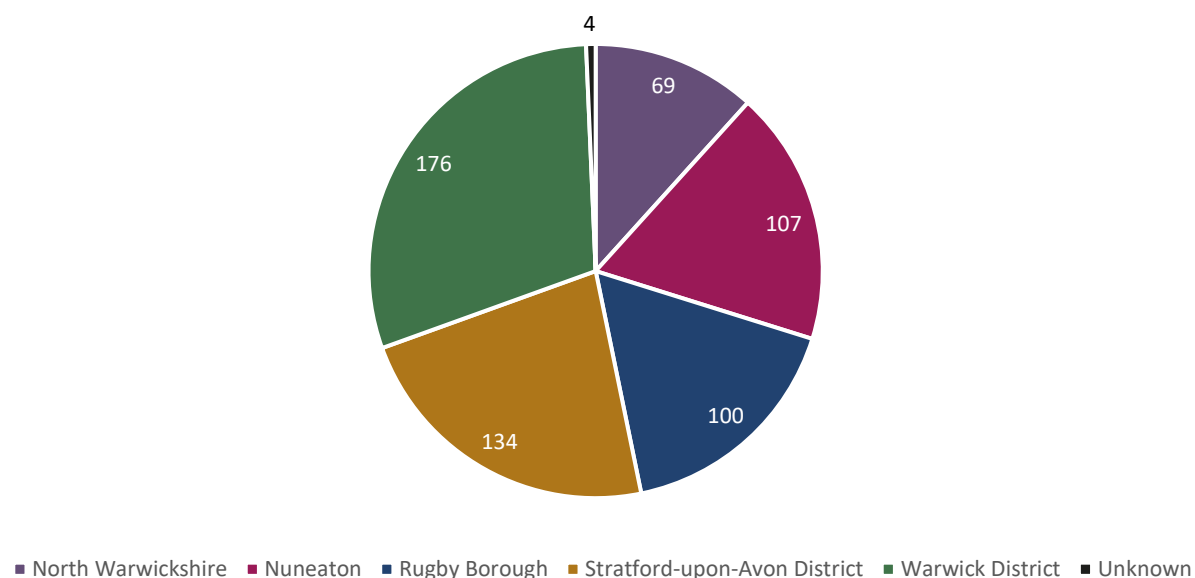


Table 1: Place of residence of respondents

District	Number of respondents	% of respondents	% total VoW panel *	% total Warwickshire**
North Warwickshire Borough	69	10.1%	11.2%	11.3%
Nuneaton and Bedworth Borough	107	18.1%	19.1%	21.9%
Rugby Borough	100	17.6%	17.2%	18.4%
Stratford-on-Avon District	134	23.3%	23.6%	23.1%
Warwick District	176	29.0%	29.0%	25.2%
Unknown	4	2.1%	-	-

*This is the current composition of the Voice of Warwickshire panel (March 2022)

**This is the composition of the Warwickshire population aged 18 and over based on mid-2020 population estimates

Table 2 shows the characteristics of panel members responding to the survey and compares this to the characteristics of the Voice of Warwickshire panel and Warwickshire population (aged 18+) where available.

Table 2 – Characteristics of respondents (590 respondents)

Characteristics		Panel respondents	% of panel respondents	% total of VoW panel	% total of Warwickshire
Gender	Female	392	51.0%	52.6%	51%
	Male	335	43.6%	44.3%	49%
	Non-binary	3	0.4%	0.4%	-
	Prefer not to say	10	1.3%	1.4%	-
	Prefer to self-describe	12	1.6%	1.3%	-
	Not answered	16	2.1%	-	-
Age in years	17-24	10	1.3%	1.6%	9.9%
	25-39	113	14.7%	18.7%	23.1%
	40-49	99	12.9%	14.3%	15.7%
	50-59	144	18.8%	18.6%	17.9%
	60-64	96	12.5%	12.1%	7.4%
	65-74	207	27.0%	24.5%	13.6%
	75+	71	9.2%	8.8%	12.5%
	Prefer not to say	11	1.4%	1.4%	-
	Not answered	17	2.2%	0%	-
Long standing illness or disability	Yes	123	16.0%	16.7%	20.1%
	No	609	79.3%	80.6%	80.0%
	Prefer not to say	20	2.6%	2.8%	-
	Not answered	16	2.1%	-	-
Ethnicity	Asian or Asian British - Bangladeshi	0	0%	0.0%	0.1%
	Asian or Asian British - Indian	11	1.4%	2.4%	2.9%
	Asian or Asian British - Pakistani	2	0.3%	0.4%	0.3%
	Black or Black British - African	3	0.4%	0.5%	0.4%
	Black or Black British - Caribbean	4	0.5%	0.5%	0.4%
	Chinese	4	0.5%	0.5%	-
	Gypsy or Traveller	1	0.1%	0.2%	0.1%
	Mixed - White and Asian	6	0.8%	0.7%	0.3%
	Mixed - White and Black Caribbean	4	0.5%	0.5%	0.1%
	Other Asian background	4	0.5%	0.5%	0.8%

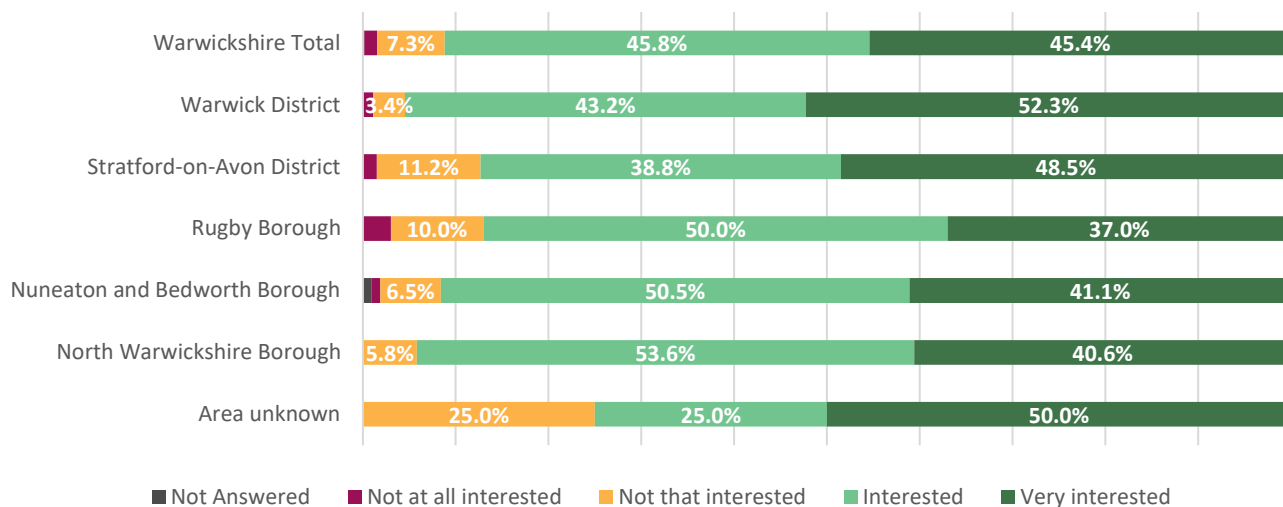
	Other mixed background	5	0.7%	0.7%	0.2%
	Other White background	34	4.4%	4.5%	3.3%
	White British	647	84.3%	84.3%	89.0%
	White Irish	8	1.0%	1.7%	1.1%
	Prefer not to say	12	1.6%	1.6%	-
	Prefer to self-describe	7	0.9%	1.0%	-
	Not answered	16	2.1%	-	-
Religion	Buddhist	4	0.5%	0.5%	0.3%
	Christian	373	48.6%	49.0%	66.3%
	Hindu	2	0.3%	0.7%	1.0%
	Islam	7	0.9%	1.3%	0.9%
	Judaism	2	0.3%	0.2%	0.1%
	Sikh	3	0.4%	0.8%	1.7%
	Spiritual	9	1.2%	1.2%	-
	Other religion or belief	18	2.3%	2.6%	0.4%
	No religion	284	37.0%	37.0%	22.7%
	Prefer not to say	44	5.7%	5.8%	-
	Not answered	22	2.9%	1.0%	6.6%
Sexual orientation	Asexual	14	1.8%	3.1%	-
	Bi/bisexual	14	1.8%	1.9%	-
	Heterosexual/straight	632	82.3%	81.9%	-
	Gay Man	10	1.3%	1.5%	-
	Gay woman/lesbian	7	0.9%	0.9%	-
	Pansexual	8	1.0%	1.1%	-
	Other	1	0.1%	0.1%	-
	Prefer not to say	59	7.7%	8.8%	-
	Not answered	23	3.0%	0.8%	-

4.2 Interest in and knowledge of climate change and WCC policies and initiatives

In this section of the survey respondents were asked about their interest and knowledge of climate change and several Warwickshire County Council (WCC) policies and initiatives.

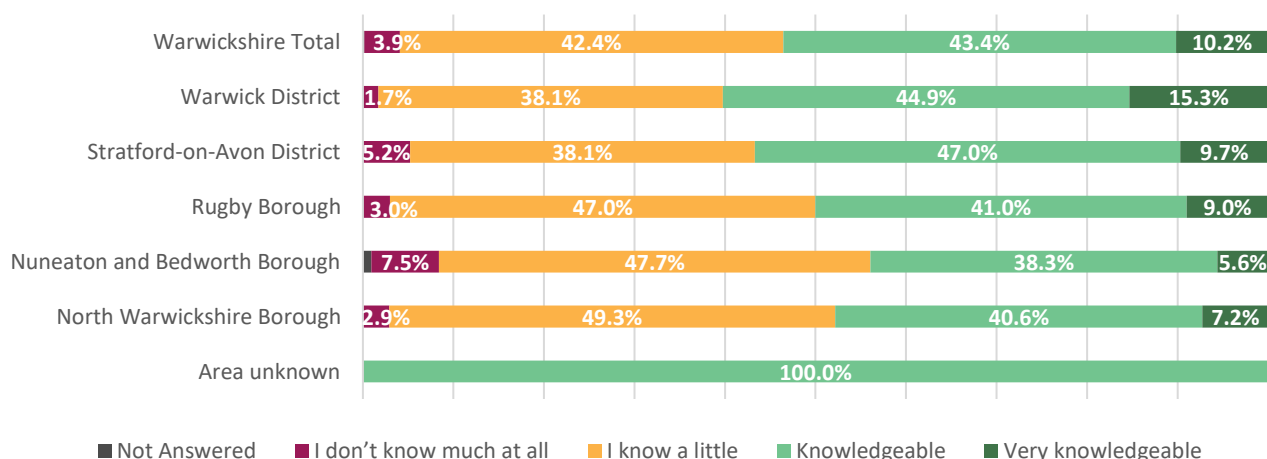
The respondents were asked what their interest level was in climate change - 589 respondents answered this question. Figure 2 shows a summary of responses to the first question by area of residence. Overall, 91.2% (n=538) of respondents advised they were interested or very interested in climate change. The interest was highest from respondents living in Warwick District (95.5%) and North Warwickshire (94.2%).

Figure 2: Percentage of responses to “How would you describe your interest in climate change?” by area of residence



The second question asked how respondents would describe their level of knowledge on reducing carbon footprint and achieving net zero. There were 589 responses to this question. A total of 53.6% (n=356) respondents advised they were either very knowledgeable or knowledgeable on reducing carbon footprint and achieving net zero. Figure 3 shows a summary of the responses to this question by area of residence.

Figure 3: Responses to “How would you describe your knowledge level with regards to reducing your carbon footprint and achieving net zero?” by area of residence



Respondents were asked if they were a part of a group with an interest in climate change. There were 72 responses to this question with 45 different groups and organisations listed. Table 3 shows the responses to this question.

Table 3: Responses to “If you are part of a group with an interest in climate change please specify”

Group	Total responses
Greenpeace	10
Warwickshire Wildlife Trust	5
Stratford Climate Action	4
Clean air for Warwickshire	4
Warwickshire Climate Alliance	3
Friends of the earth	3
Community Energy Warwickshire	2
Eco church	2
Warwickshire WI	2
Clean air group	2
Earth national	1
Action21	1
Ecomedics	1
Fairtrade	1
forge	1
Friends of Coten End	1
Global citizen	1
Green church	1
Green Party	1
Church	1
Heart of England Forest	1
HS2 rebellion	1
Ilmington 2020 a sustainable group	1

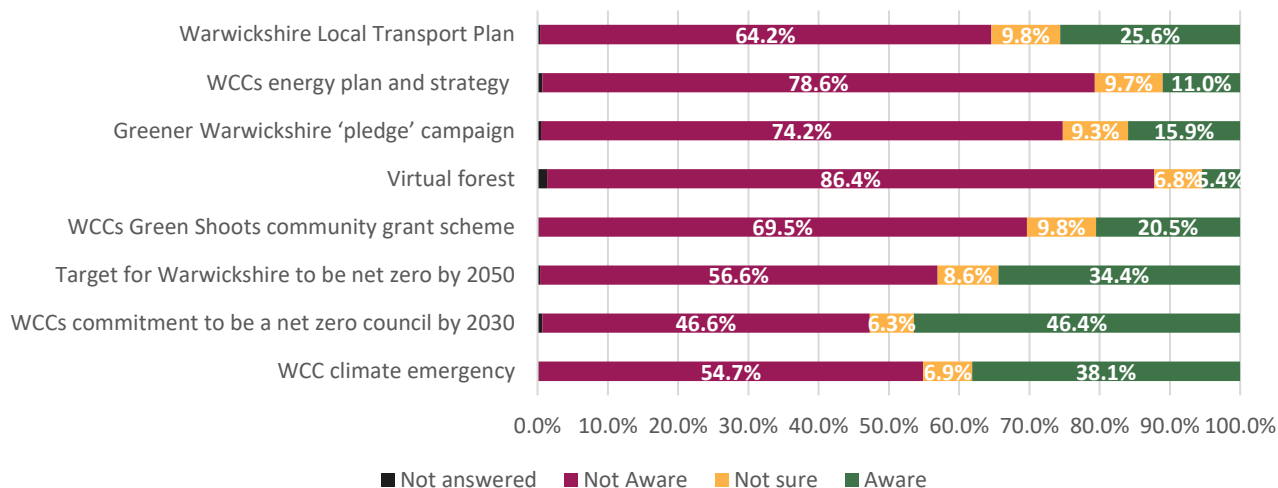
Insulate Britain	1
Just stop oil	1
Kenilworth all together greener	1
Labour Party	1
Landscape institute	1
Low Carbon Warwickshire	1
National Trust	1
Net zero go	1
Old paths christadelphians	1
Parish Council	1
Ramblers	1
Resurgence (Charity No. 1120414	1
Rubbish friends	1
Salvation army	1
Savers	1
Stratford churches climate forum	1
Centre for Alternative Technology	1
Warwick Society	1
Amnesty	1
Woodland Trust	1
WPI on Climate	1
ISO panel	1

The next question asked respondents if they were aware of any of the following schemes in Warwickshire:

- WCCs climate emergency declaration
- WCCs commitment to be a net zero council by 2030
- Target for Warwickshire to be net zero by 2050
- WCCs Green Shoots community grant scheme
- Virtual forest
- Greener Warwickshire ‘pledge’ campaign
- WCCs energy plan and strategy
- Warwickshire Local Transport Plan

A total of 46.4% (n=203) of respondents advised they were aware of WCCs commitment to be a net zero council by 2030. Overall, 86.4% (n=510) respondents advised they were not aware of the virtual forest scheme running in Warwickshire.

Figure 4: knowledge of schemes running in Warwickshire County Council by all respondents

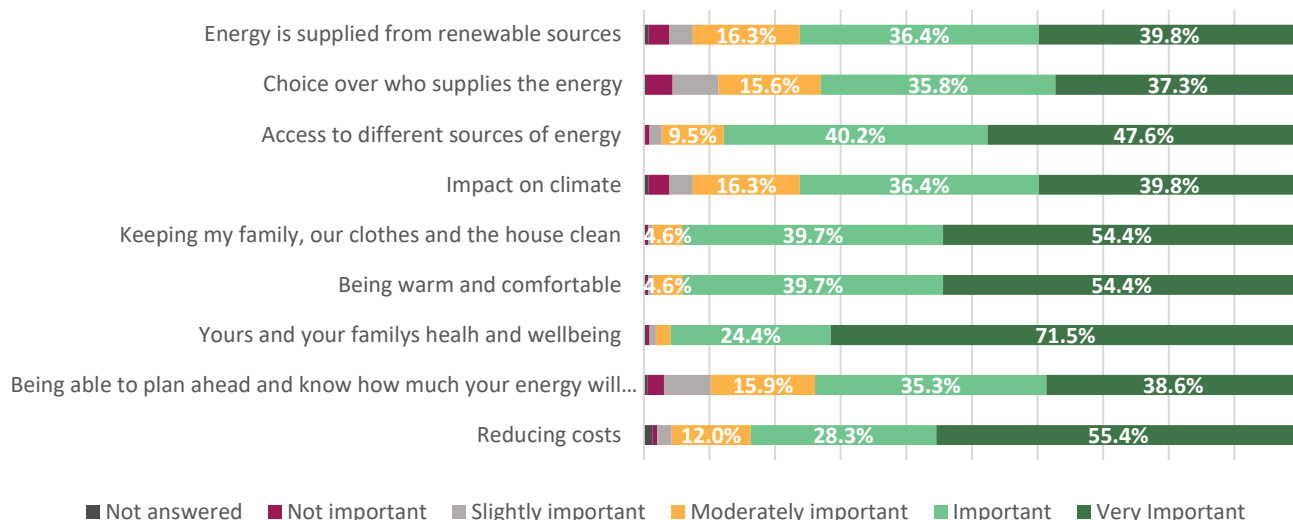


4.3 Energy Use in the Home

The next section of the survey sought to understand energy use at home. Respondents were asked for their views on energy use and generation and what measures they take to reduce their energy use in the home.

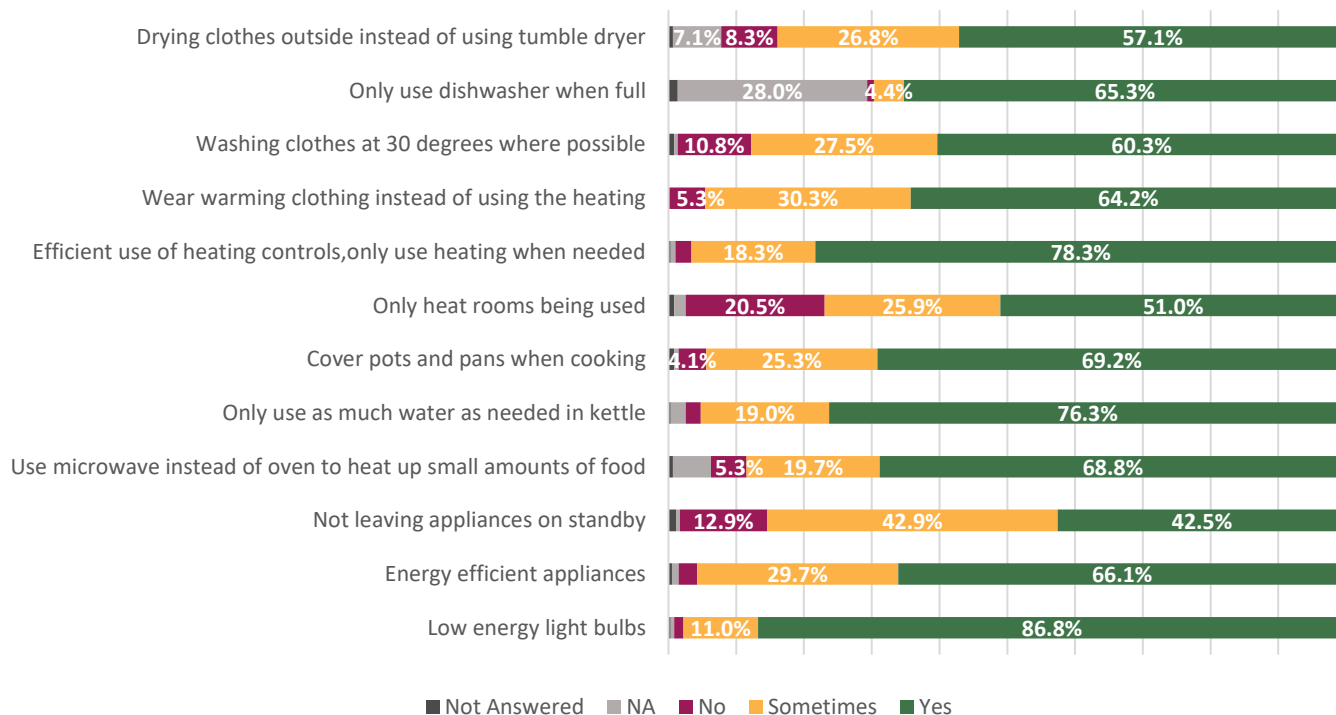
The first question in this section asked respondents how important the following statements were when thinking about energy use in their home. A total of 95.9% (n=566) advised their families health and wellbeing was very important or important when thinking about energy use in their home (Figure 5).

Figure 5: responses to “how important are the following statements when thinking about energy use in the home” (percentages)



Respondents were asked if they used any energy saving measures in their home. The most used energy saving measure was use of low energy light bulbs, a total of 86.8% (n=512) of respondents advised they use these (Figure 6). A total of 78.3% (n=462) said efficient use of heating controls and 76.3% (n=450) of respondents advised they only use as much water as needed when using the kettle. Respondents were least likely to say “not leaving appliances on standby”.

Figure 6: responses to ‘energy saving measures taken’ (percentages)



Respondents were then asked if they answered no to any of the energy saving measures what were the main reasons. A total of 298 respondents, answered this question (Figure 7). A number of options were provided but almost half of respondents selected another reason.

Figure 7: Responses to “why certain energy saving measures were not taken” (number of responses)

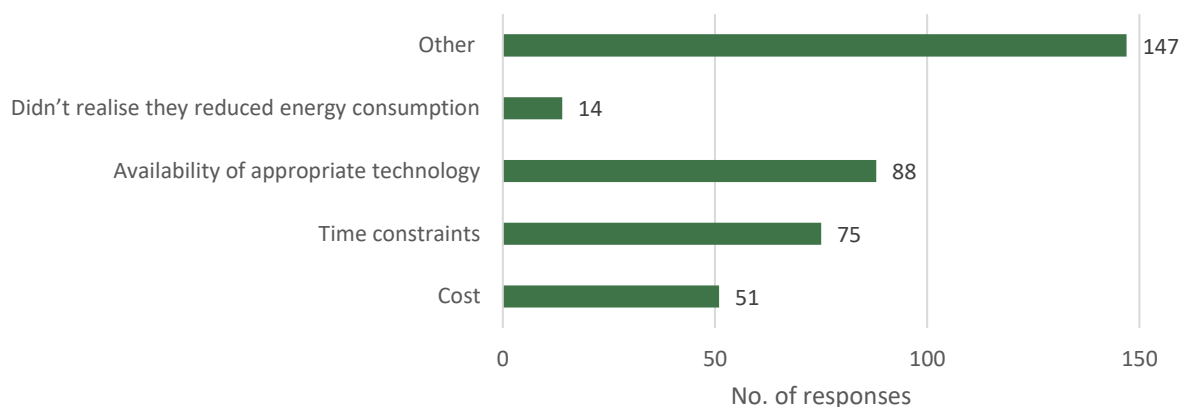


Table 6 below shows the key themes in comments made by those respondents that advised there were other reasons they did not take energy saving measures.

Table 6: Key themes showing other reasons why respondents did not take energy saving measures

Theme/ description	Number of responses	Example quotations for illustration
Clothes do not clean well on 30 degree wash	33	<i>“Clothes do not seem to get clean at 30 degrees”</i> <i>“Washing tablets do not dissolve properly”</i> <i>“Requirements for uniform washing at 60 degrees”</i>
Convenience	16	<i>“More convenient to leave things on stand by”</i>
Comfort	13	<i>“Comfort and enjoyment of living”</i> <i>“I like to feel comfortable and warm in the house”</i>
Change in habit/ behaviour	6	<i>“Have to persuade rest of family to change behaviour”</i> <i>“Too lazy to do it and it has such a small impact on cost”</i>
Health reasons	6	<i>“As a Wheelchair user I need to be warm”</i>
Damp	5	<i>“Cold rooms cause damp”</i> <i>“Heating only part of home can cause cold spots which encourages damp”</i>
Do not have individual heating controls	3	<i>“Individual rooms cannot be isolated”</i>
Not sure how to use heating system	2	<i>“Not understanding our heating system”</i>

Keep home at ambient temperature	2	<i>"It is cheaper to keep the house at a constant temperature"</i>
Unable to dry clothes outside	2	<i>"Cannot dry clothes outside"</i>

Respondents were then asked are there any other measures that they took to reduce energy use in their home. There were 158 responses to this question.

Table 7: Key themes in responses to "other measures that you take to reduce energy use in your home"

Theme/ description	Number of responses	Example of quotations for illustration
Good insulation	41	<i>"added insulation to roof and walls"</i>
Closing curtains/ blinds to keep warmth in	35	<i>"closing thick curtains to keep heat in"</i>
Turning lights off	34	<i>"lights off when not in the room"</i>
Double glazed windows	29	<i>"invested in double glazing"</i>
Reduce boiler temperature	27	<i>"have turned down the thermostat"</i>
Shutting doors and windows	26	<i>"keeping doors and windows closed to minimise heat loss"</i>
Draught excluders	24	<i>"using draught excluder"</i>
Batch cooking	21	<i>"use oven instead of switching it on and off multiple times"</i>
Careful with water usage	13	<i>"shorter showers"</i> <i>"reuse bath water"</i>
Thermostat in each room	12	<i>"using thermostat on each radiator"</i>
Wearing extra layers of clothing	12	<i>"wear warm clothes"</i>
Mindful of products purchased/ low energy	10	<i>"mindful of products purchased"</i>
Taking showers instead of baths	10	<i>"take shower instead of bath"</i>
Only use washing machine with full load	9	<i>"use washing machine with full load"</i>
Use log burner instead of heating	8	<i>"use log burner using coffee logs instead of central heating"</i>
Using warmer bedding	8	<i>"using blankets and warmer bedding"</i>

Turning off appliances	7	<i>"turning appliances off"</i>
Mindful of electricity usage	6	<i>"monitor energy usage on smart meter"</i>
New front door to reduce draughts	5	<i>"new front door with better seal"</i>
Use hot water bottles	5	<i>"hot water bottles"</i>
Allow sunshine to heat the room	4	<i>"allow sunshine to heat up a room"</i>
Open oven door when finished to heat room	4	<i>"open oven door when finished to heat the house"</i>
Maintenance of boiler	4	<i>"boiler serviced and flushed regularly"</i>

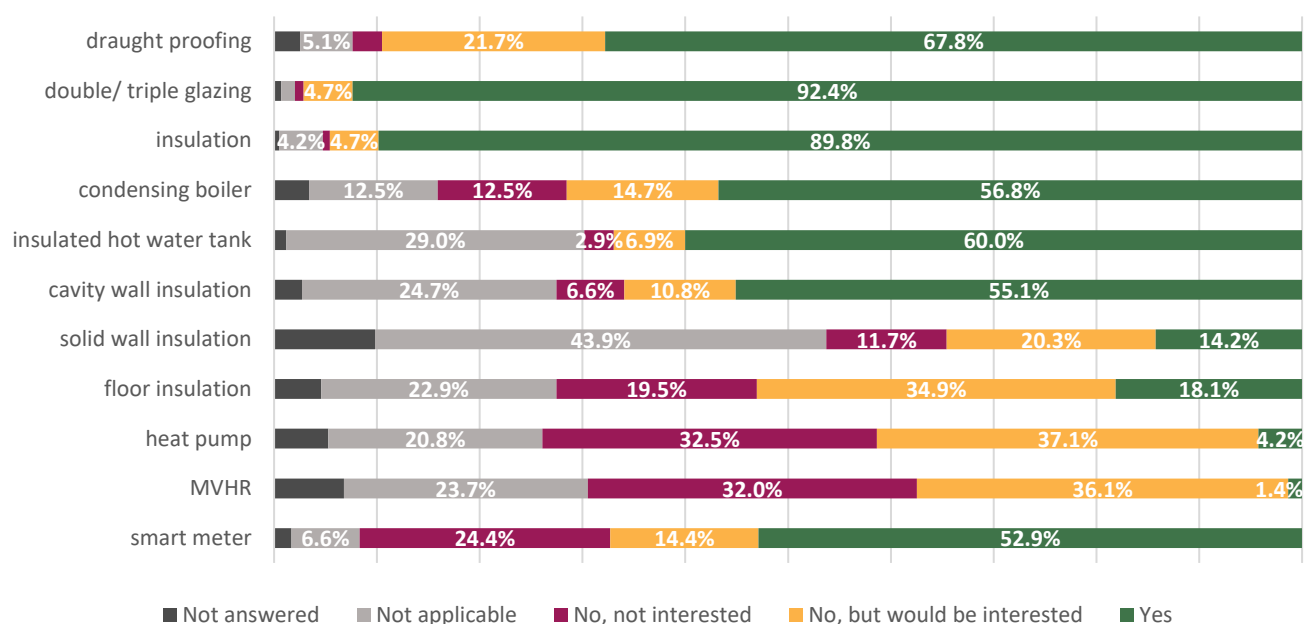
Other measures taken included drying clothing outside (n=3), foil behind radiators (n=3), only boiling water needed (n=3), composting (n=3), maintaining fridge and freezer (n=3), minimise food waste (n=2), collect rain water (n=2), make a flask for the day (n=1) and use candles (n=1).

Respondents were then asked to indicate if their home had any of the following energy saving features:

- Draught proofing
- Double or triple glazing
- Roof/ loft insulation
- A condensing boiler
- Insulated hot water tanks and pipes
- Cavity wall insulation
- Solid wall insulation
- Floor insulation
- Heat pump
- Mechanical Ventilation with Heat Recovery/ Heat Recovery Ventilation (MVHR)
- Smart meter

Figure 8 shows the total responses for all respondents that answered this question. The majority of respondents had double/triple glazing (92.4%) and insulation (89.8%). Whereas a minority of respondents had heat pumps or Mechanical Ventilation with Heat Recovery/Heat Recovery ventilation.

Figure 8: Use of energy saving features by all respondents



Respondents who used smart devices were asked to say which smart devices they use in their home to save energy. Table 8 shows the responses; in total there were 166 devices listed with the use of a smart thermostat being the most common response (n= 65).

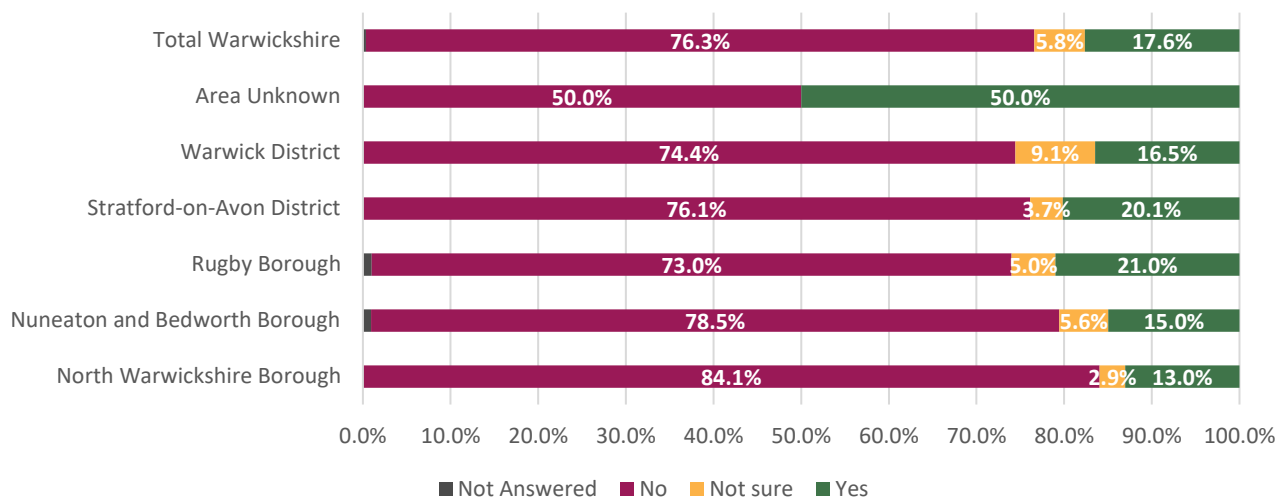
Table 8: responses to which smart devices are used in respondents' homes

Devices used	Number of responses
Smart thermostat	65
Smart meter	30
Smart Bulbs	29
Smart plug sockets	25
Voice control	6

Smart appliances	4
Apps to control appliances	2
Timers	2
Sensors	1
Immersun	1
Daily energy reports	1

The next question asked respondents if they were aware of the Energy Saving Register Trust that lists energy efficient products. Overall, 76.3% (n=450) of respondents advised they were not aware of the Energy Saving Trust Register; Figure 9 shows the responses to the question.

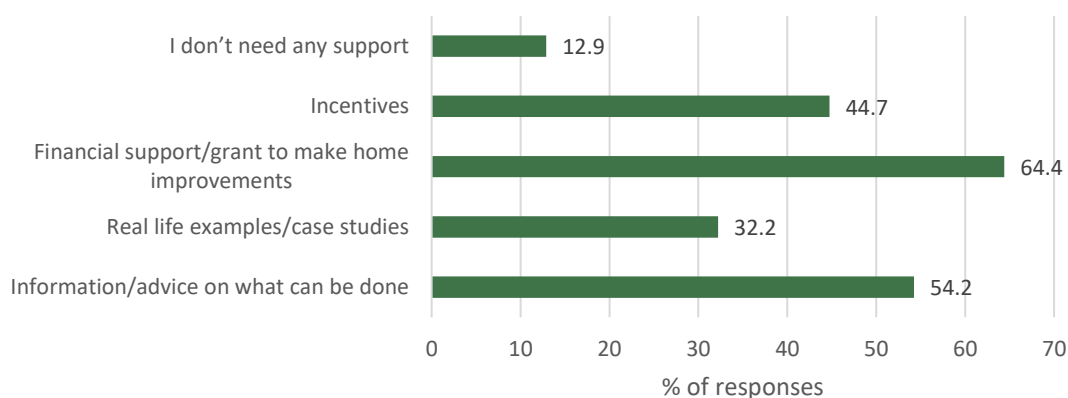
Figure 9: Responses to “Are you aware of the Energy Saving Trust Register that lists energy efficient products?” by area of residence



4.4 Reducing energy use in the home

The next question asked respondents what support would enable them to reduce the energy use in their home. Respondents were provided with a list of answers and asked to select all that applied. Overall, 64.4% (n=380) of respondents said “financial support/ grants to make the home improvements” would support them to reduce energy in the home (Figure 10). A total of 54.2% (n=320) respondents selected “advice and information of what could be done” would be helpful.

Figure 10: Responses to ‘what support would enable you to reduce energy use in your home’



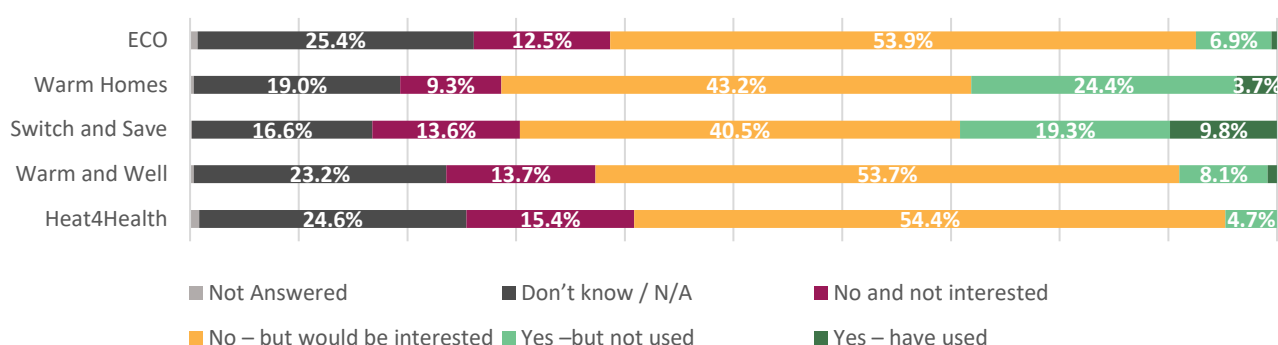
Respondents were then asked if they were aware of any of the following schemes available to Warwickshire residents:

- Energy Company Obligation (ECO)
- Warm Homes Discount Scheme
- Warwickshire Switch and Save

- Warm and Well in Warwickshire
- Heat4Health

Figure 31 shows the responses for all schemes. The Warwickshire Switch and Save scheme was the scheme that most respondents were aware of and used (9.8%, n=58). A total of 53.9% (n=318) of respondents advised they had not heard of the national Energy Company Obligation (ECO) scheme, but it would be something they were interested in (Figure 11). A small percentage 0.5% (n=3) respondents said they had heard of and used the ECO scheme.

Figure 11: responses to ‘which of the following schemes available to Warwickshire residents are you aware of?’ (percentage)



Next respondents were asked if there were any other things Warwickshire County Council could do to support them in using less energy in the home. There were 331 responses to this part of the question. Key themes are shown in Table 9.

Table 9: Key themes showing respondents answered to how WCC could support them in using less energy in the home.

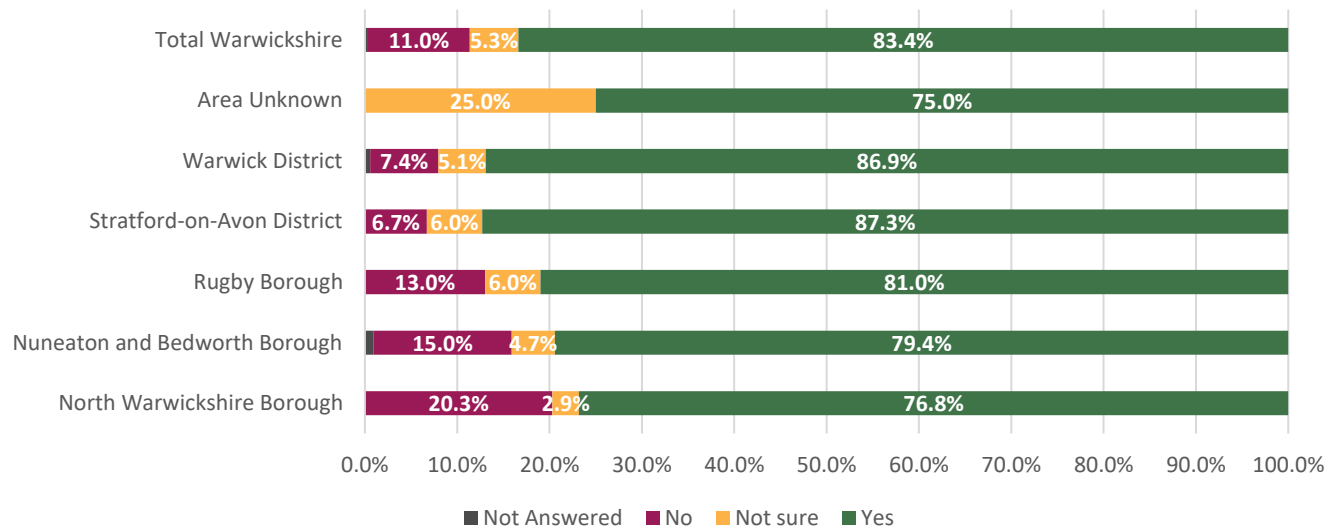
Theme/ description	Number of responses	Example quotations for illustration
Grants and assessments	126	<p>“Provide worthwhile grants”</p> <p>“Financial support for a wider range of people”</p>
No support required	71	<p>“I am able to make my own investigation”</p> <p>“Nothing that WCC can help me with”</p>
Advertise and manage schemes	47	<p>“Make the information more widely spread”</p> <p>“Publicise schemes as I had not heard of them. Posters in supermarkets, petrol stations.”</p>
List of approved contractors	16	<p>“List of local suppliers of products and services”</p> <p>“Vetted companies would give more confidence in undertaking works”</p>

Support with insulation	15	<i>"Help with insulation cost"</i>
Better knowledge on older buildings	14	<i>"Allow installation of double glazing on my listed property"</i> <i>"Rules in conservation areas prevent homes from having solar panels"</i>
Home visits	12	<i>"House to house advisory service"</i> <i>"Provide professional advice based on a quick survey of my home"</i>
Education	7	<i>"Education on how to reduce costs on energy use, tips and information"</i>
Campaign	6	<i>"Coordinate a county wide scheme providing cost effective ways for homeowners to introduce more renewable energy"</i>
Bulk buy	4	<i>"Sponsor community initiatives for energy"</i> <i>"Bulk buying lightbulbs and plus to make it cheaper"</i>
Retrofit housing	4	<i>"Retrofit all social housing requiring housing associations to do the same"</i>
Invest	4	<i>"Invest in local hydrogen storage"</i> <i>"Sponsor community incentives for local energy initiatives"</i>
New homes to be energy efficient	3	<i>"All planning requests should prioritise energy solutions"</i> <i>"Insist all new builds have solar panels"</i>
Improve council spending	2	<i>"Spend my council tax on local issues not climate change"</i>

4.5 Renewable Energy

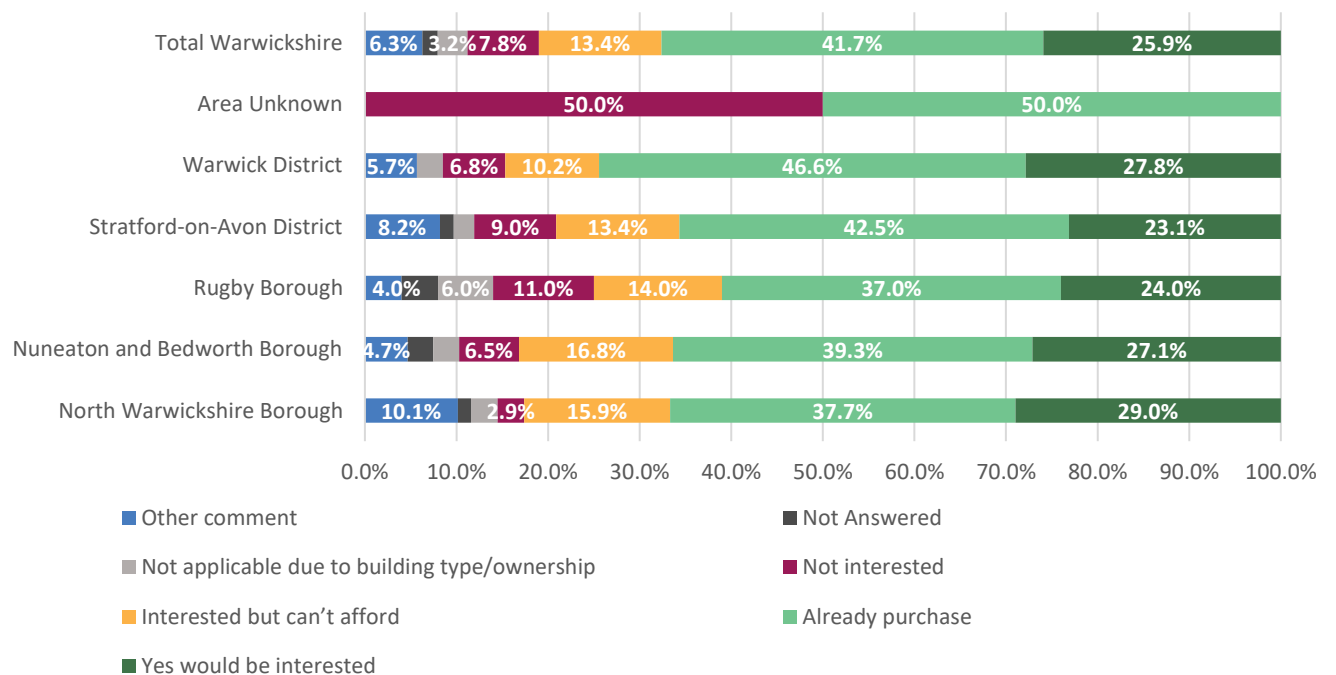
Respondents were asked if they were aware electricity can be purchased from energy providers that generate renewable or zero carbon electricity. A total of 83.9% (n=492) of respondents advised they were aware (Figure 12).

Figure 12: responses to ‘Are you aware electricity can be purchased from energy providers that generate renewable or zero carbon energy?’ by area of residence



Next respondents were asked if they were interested in purchasing electricity from a provider that generates renewable or zero carbon energy. A total of 41.7% (n=246) of respondents advised they already purchase electricity from a provider that generate renewable or zero carbon energy (Figure 13). Just over a quarter of respondents (25.9%, n=153) said they would be interested and a further 13.4% (79) said they would be interested but can't afford this option.

Figure 13: responses to ‘are you interested in purchasing electricity from a provider that generates renewable or zero carbon energy?’ by area of residence



A total 6.3% (n=37) respondents provided a comment on purchasing electricity from a provider that generated renewable or zero carbon energy.

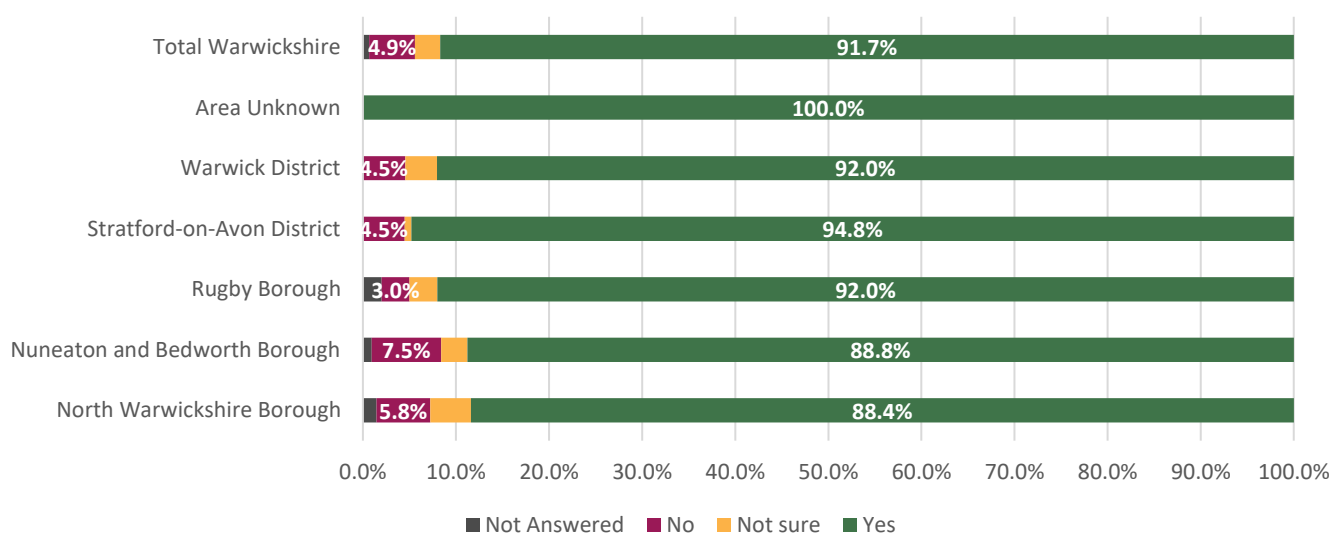
Table 10: Other responses to purchasing electricity from a provider that generates renewable or zero carbon energy

Theme/ description	Number of responses	Example quotations for illustration
Previously did	14	“We were with green but they went bust” “my supply has been taken over”
It is not always 100% renewable	11	“it is all smoke and mirrors, same energy is used” “renewable energy is not always clean”
Cost	7	“yes at competitive prices only” “cost would be the main factor”
Would need more information	3	“more information would be welcome”

Other comments made by respondents were that they didn’t know (n=1) and were currently in a contract (n=1).

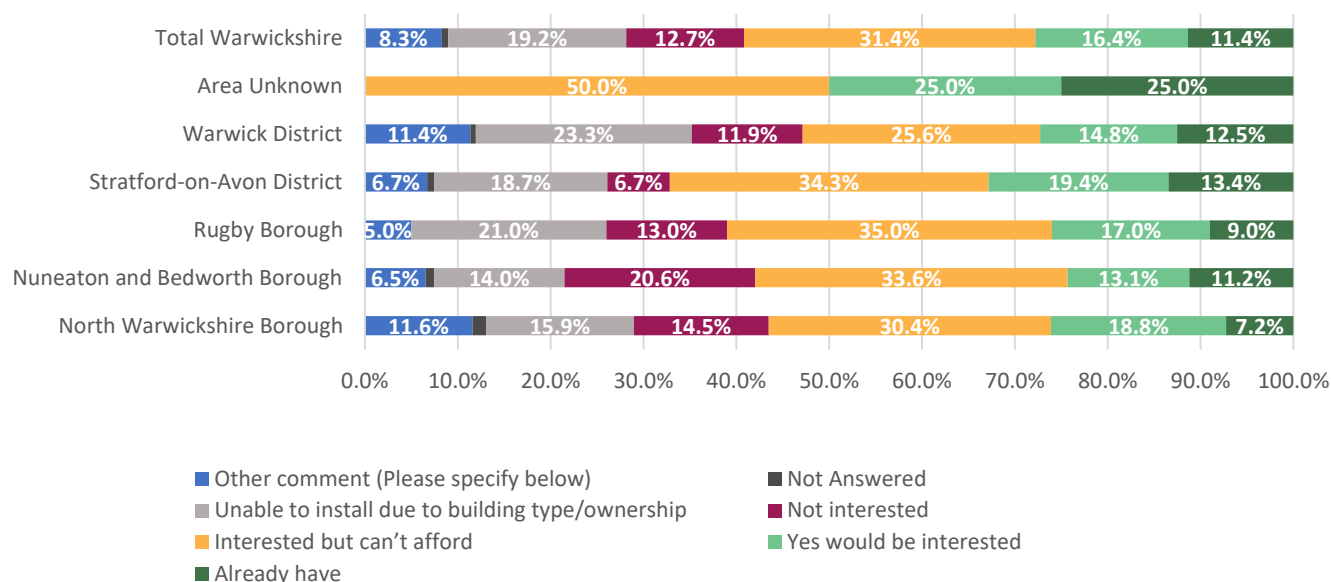
The next question respondents were asked was if they were aware that you can generate your own renewable electricity by installing photovoltaic solar panels. There were 586 responses to this question. The majority of respondents 91.7% (541) said they were aware (Figure 14).

Figure 14: responses to ‘are you aware you can generate your own renewable electricity by installing (PV) solar panels?’ by area of residence



Respondents were then asked if they would be interested in having photovoltaic solar panels installed. A total of 11.4% (n=67) of respondents said they already have photovoltaic solar panels installed (Figure 15). With a total of 16.4% (n=97) advising they would be interested in having them installed and 31.4% (n=185) advising they would be interested but cannot afford this option.

Figure 15: responses to ‘would you be interested in having (PV) solar panels installed?’ by area of residence



A total of 49 respondents provided further comments on the installation of photovoltaic solar panels (Table 11).

Table 11: Other comments on installation of photovoltaic solar panels

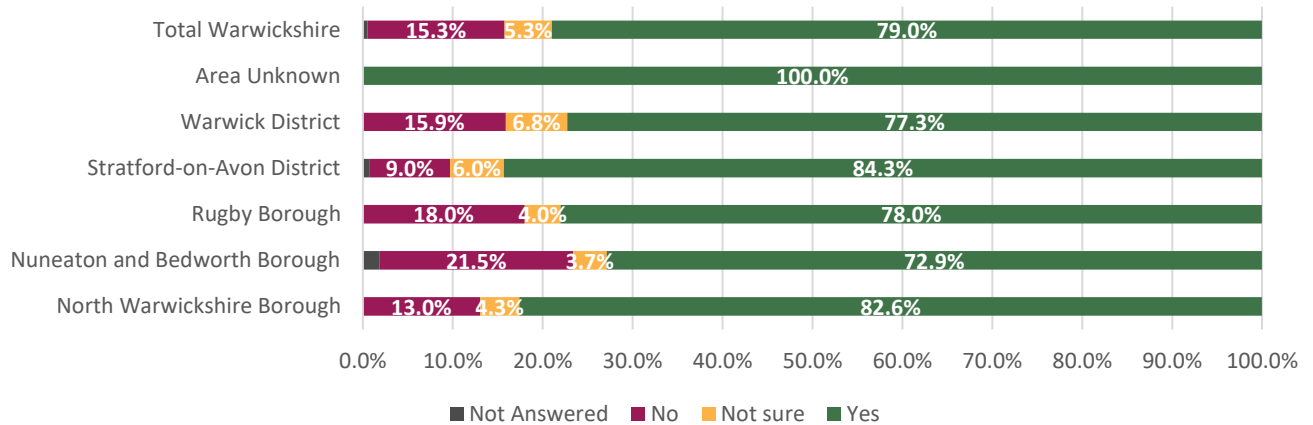
Theme/ description	Number of responses	Example quotations for illustration
Property does not face correct way/ not have access to sunlight	14	“roof doesn’t face the right way”
Cost	10	“concerned about cost”
Would need further information	6	“we would need to know more”
Due to property type unable	5	“not possible in conservation area”
Waiting for install from WCC initiative	4	“still waiting for them from solar together”

Respondents also commented that there was no incentive (n=3), they were waiting for an alternative (n=2), it would be too long to see any payback (n=2), needed planning permission

(n=1), already have installed but they are no good (n=1) and they were not nice to look at (n=1).

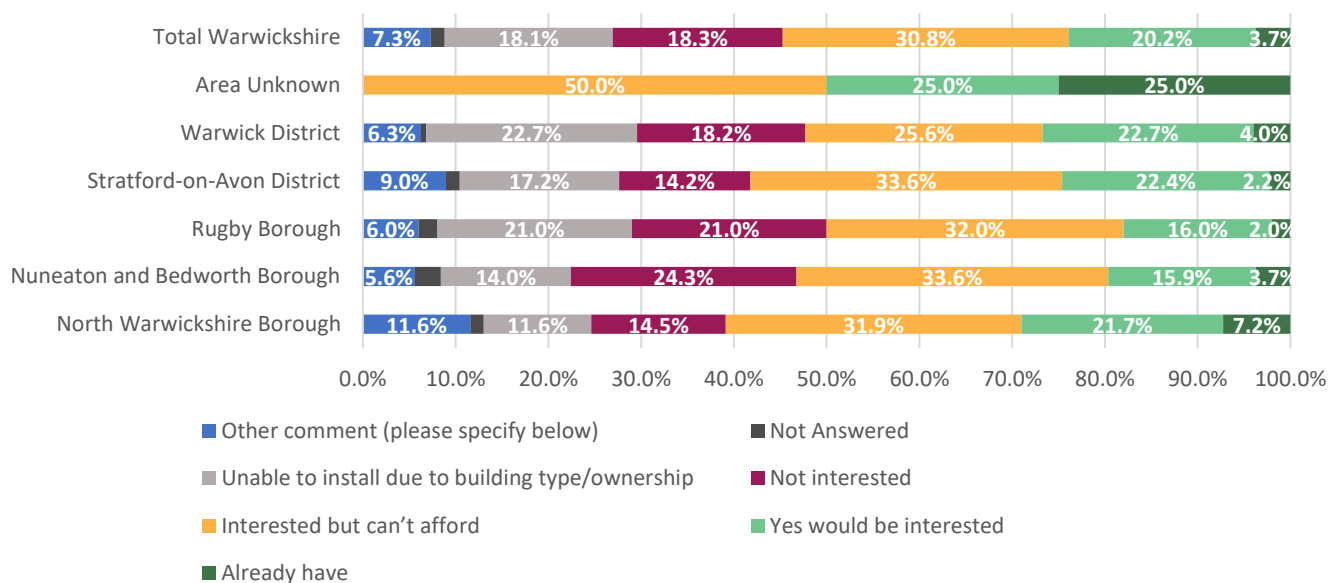
Respondents were then asked if they were aware that they could generate their own hot water by installing solar thermal panels. Overall, 79.0% (n=466) respondents advised they were aware (Figure 16). A total of 3 respondents did not answer this question.

Figure 16: responses to ‘are you aware you can generate you own hot water by installing solar thermal panels?’ by area of residence



Respondents were asked if they would be interested in having solar thermal panels installed. A total of 3.7% (n=22) of respondents advised they already have them with 60.0% (n=301) advising they would be interested (n=119) or would be interested but could not afford (n=182) (Figure 17).

Figure 17: responses to ‘would you be interested in having solar thermal panels installed?’ by area of residence



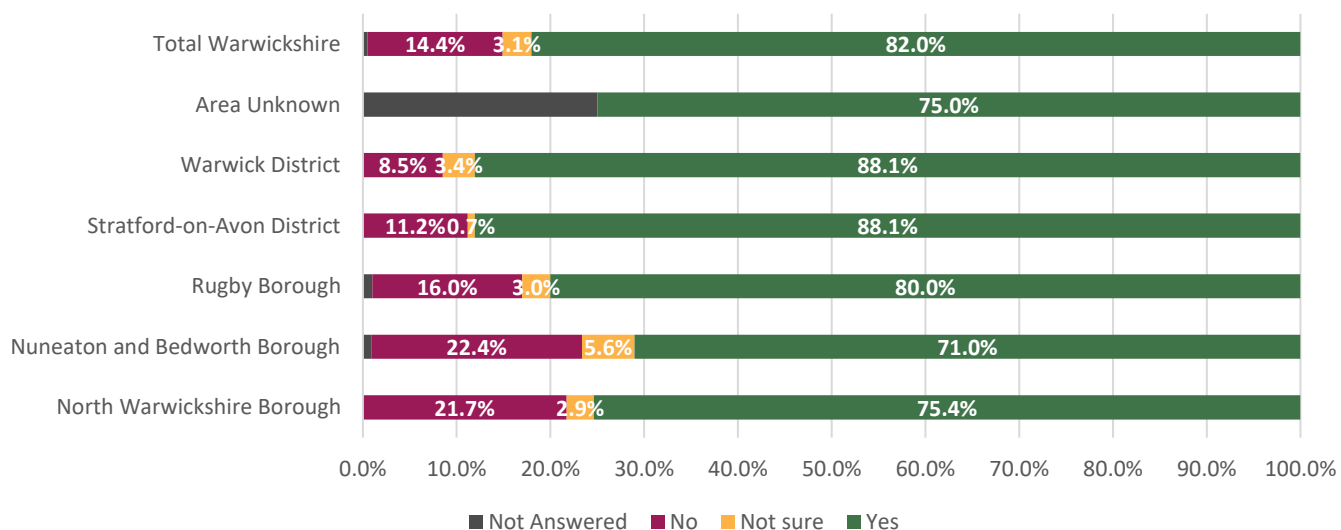
There were a further 43 other comments about installation of solar thermal panels (Table 12).

Table 12: themes from other comment to would you be interested in having solar thermal panels installed

Theme/ description	Number of responses	Example quotations for illustration
Unsuitable for property	14	“unsure our roof is suitable”
Not enough space	12	“roof already full with solar panel”
Cost	6	“cost of installation versus cost benefit”
Have combi boiler	2	“I have a combi boiler”
Further information	8	“would want info before installing”
Already have one	1	“already have and does not work”

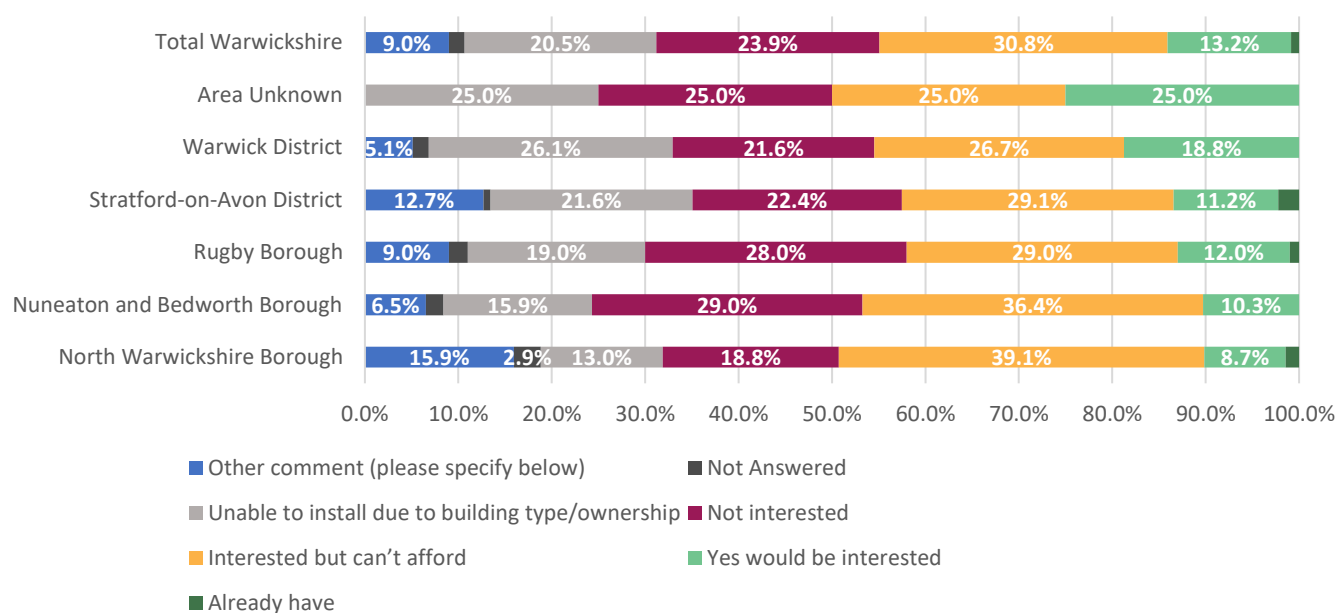
Respondents were asked if they were aware that they can generate their own hot water/heat your home by installing ground source heat pumps. A total of 82.0% (n=484) of respondents advised they were aware of ground source heat pumps (Figure 18).

Figure 18: responses to ‘Are you aware that you can generate your own hot water/heat your home by installing ground source heat pumps?’ by area of residence



Next respondents were asked if they would have ground source heat pumps installed in their home. Overall, 0.8% (n=5) respondents advised they have a ground source heat pump already installed, with 13.2% (n=78) respondents advising they would be interested and 30.9% (n=182) saying they would be interested but can't afford this option (Figure 19).

Figure 19: responses to ‘would you have a ground source heat pump installed?’ by area of residence



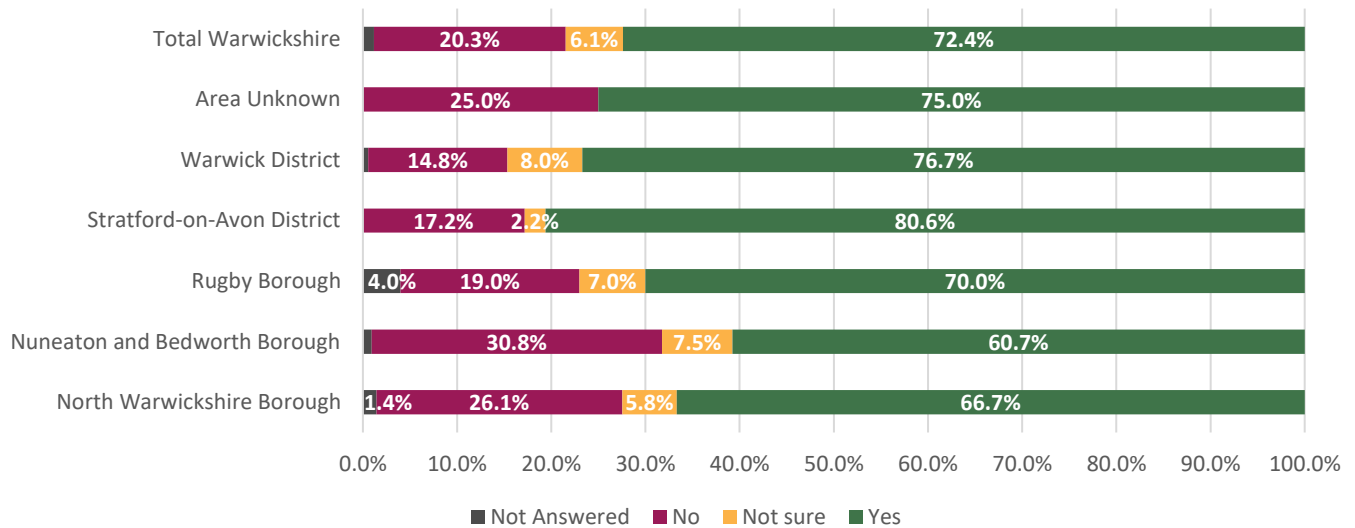
A total of 53 respondents had a further comment to make about ground source heat pumps (Table 13).

Table 13: Themes from further comments on installation of ground source heat pumps

Theme/ description	Number of responses	Example quotations for illustration
Cost	16	“maybe depending on cost”
Unproven benefits	15	“claims that are still to be proven”
Unable to install	10	“unsure have available space”
Further information	8	“would need further information”
May consider	3	“would be interested”
Already have installed	1	“I have one”

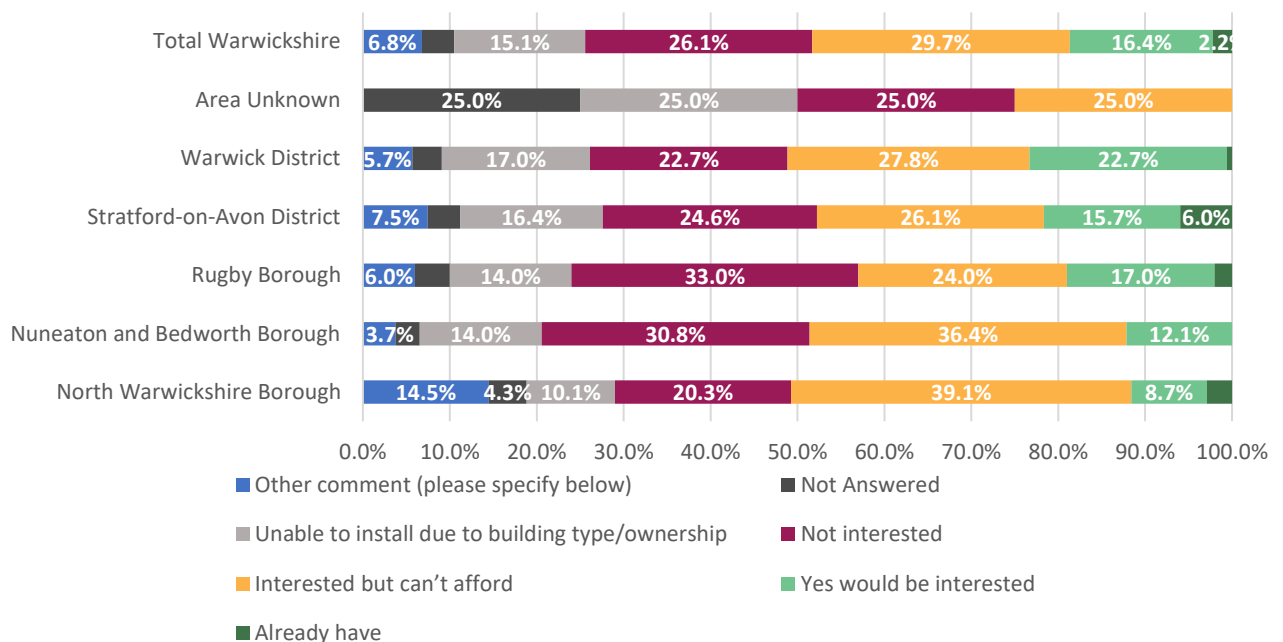
Respondents were next asked if they were aware that they can generate their own hot water/heat your home by installing air source heat pumps. A total of 72.4% (n=427) advised they were aware (Figure 20).

Figure 20: responses to ‘Are you aware that you can generate your own hot water/heat your home by installing air source heat pumps?’ by area of residence



Respondents were asked if they would be interested in having air source heat pumps installed. Just under a third of respondents (29.7%, n=175) said they would be interested but can't afford this option and 16.4% (n=97) said they would be interested (Figure 21). A small number of respondents said they already have air source heat pumps (2.2%, n=13).

Figure 21: responses to 'would you be interested in having air source heat pumps installed?' by area of residence



Themes from further comments on installation of air source heat pumps are shown in Table 14.

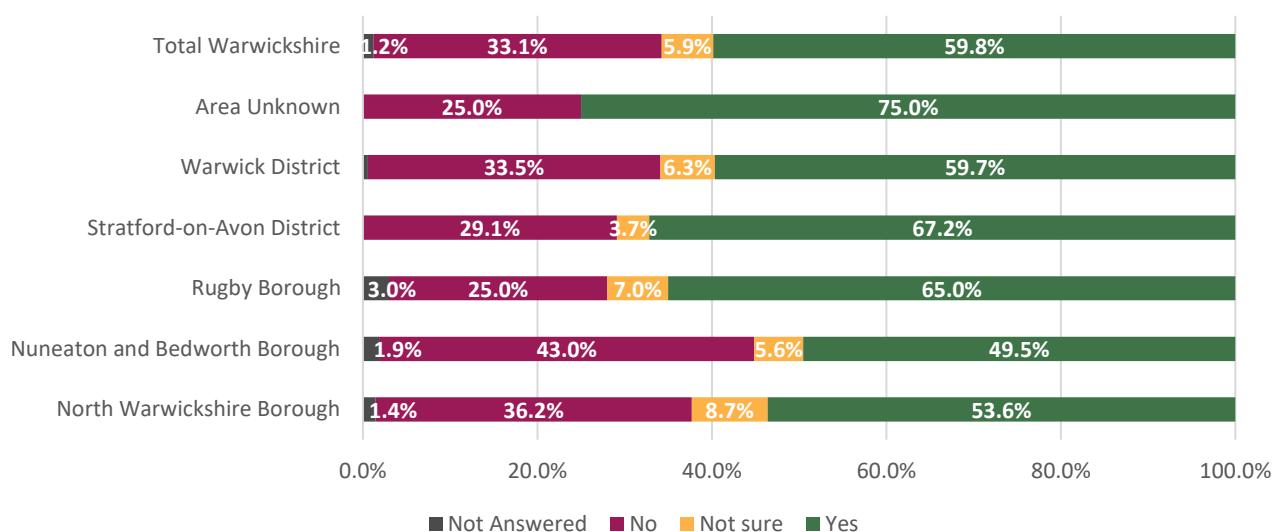
Table 14: Themes from further comments on installation of air source heat pumps

Theme/ description	Number of responses	Example quotations for illustration
Unsuitable/ not efficient	15	“not efficient for older buildings”
Cost	13	“not economically sound”
Further information	8	“information before deciding”

Further comments made were, respondent had only just had new boiler installed (n=1), concern about ongoing maintenance (n=1), don’t know (n=1) and cannot find an installer (n=1).

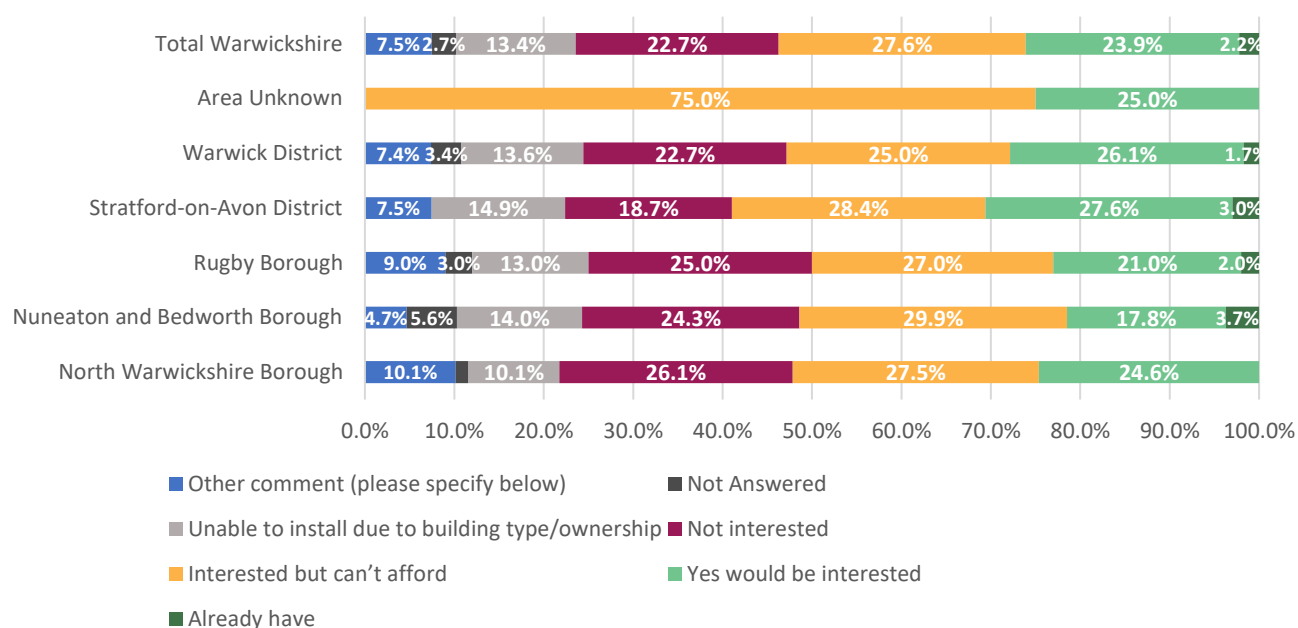
Respondents were then asked if they were aware that they can store their own renewably generated electricity by installing battery storage in their home. Overall, 59.8% (n=353) respondents advised they were aware of battery storage and 33.1% (n=195) said they weren’t aware (Figure 22).

Figure 22: responses to ‘Are you aware that you can store your own renewably generated electricity by installing battery storage in your home?’ by area of residence



Respondents were asked if they would be interested in having battery storage installed. Over half of respondents said they would be interested (23.9%, n=141) or interested but can’t afford (27.6%, n=163) (Figure 23). A total of 2.2% (n=13) respondents advised they already have battery storage installed.

Figure 23: responses to ‘would you be interested in having battery storage installed’ by area of residence



Themes from comments provided about battery storage are listed in Table 15.

Table 15: responses showing themes from other comments to ‘would you be interested in having battery storage installed’

Theme/ description	Number of responses	Example quotations for illustration
Further information	23	“would like to know how this works”
Cost	11	“waiting for price to change”
Unable to install	4	“property is listed”
Awaiting EEC agreement	2	“awaiting the EEC to initiate the agreement I have made with them through WCC programme”
Concerned about technology/ maintenance	2	“is the technology mature enough”

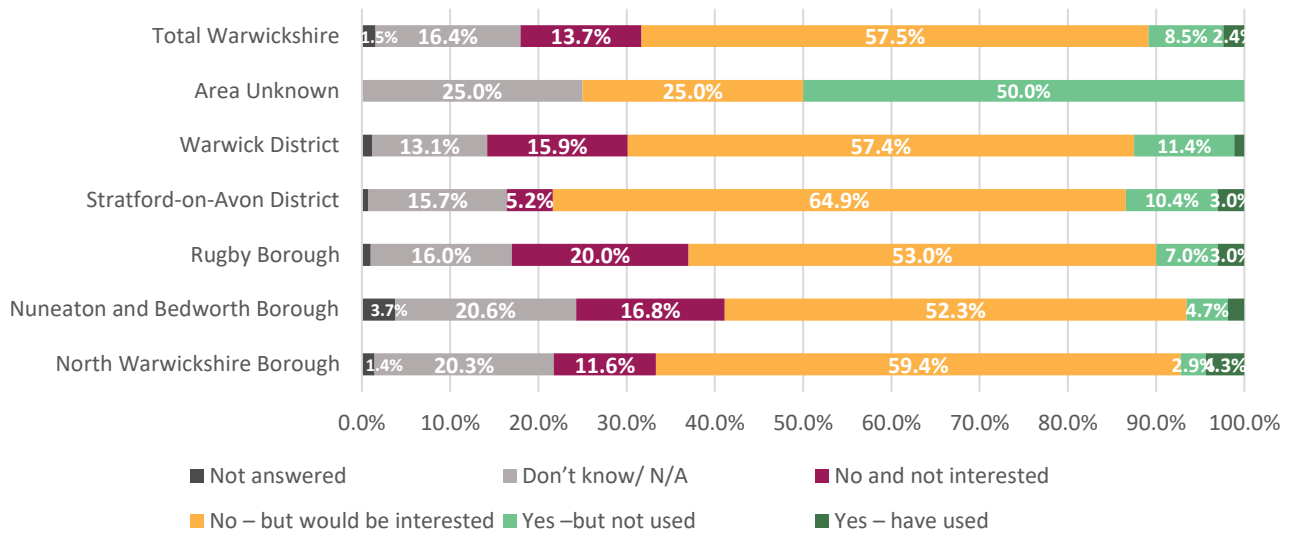
Other responses were that they felt they were a fire risk (n=1) and don’t know (n=1)

The next set of questions asked what schemes respondents were aware of that are available to Warwickshire residents to encourage the use of or generation of renewable energy from the following list:

- Domestic Renewable Heat Incentive
- Smart Export Guarantee
- Switch and Save scheme
- Solar Together Warwickshire

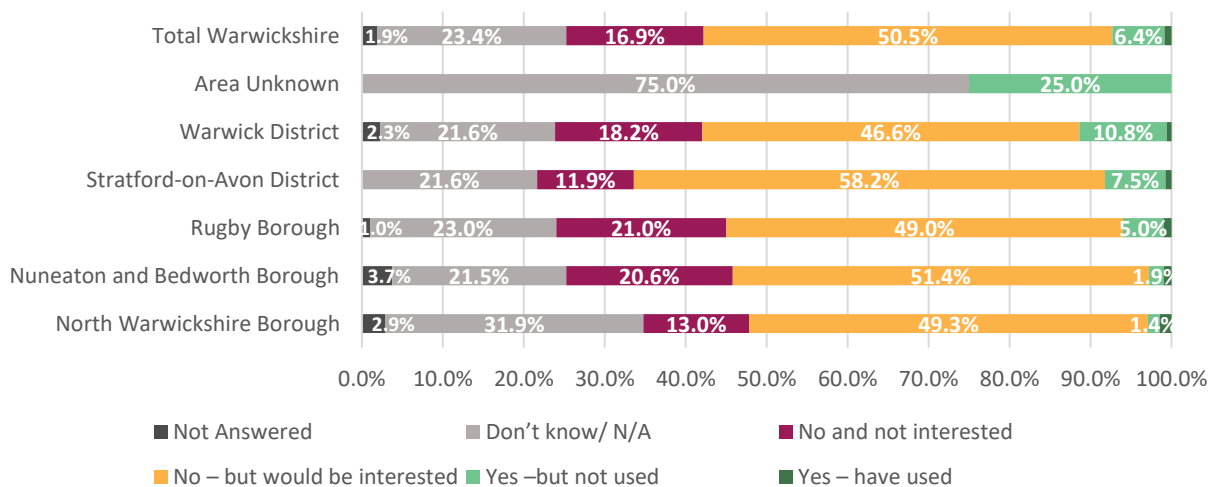
A total of 2.4% (n=14) respondents advised they had used the Domestic Renewable Heat Incentive scheme (Figure 24). Over half 57.5% (n=339) of respondents said they had not heard of the scheme but would be interested.

Figure 24: responses to 'are you aware of the domestic renewable heat incentive' by area of residence



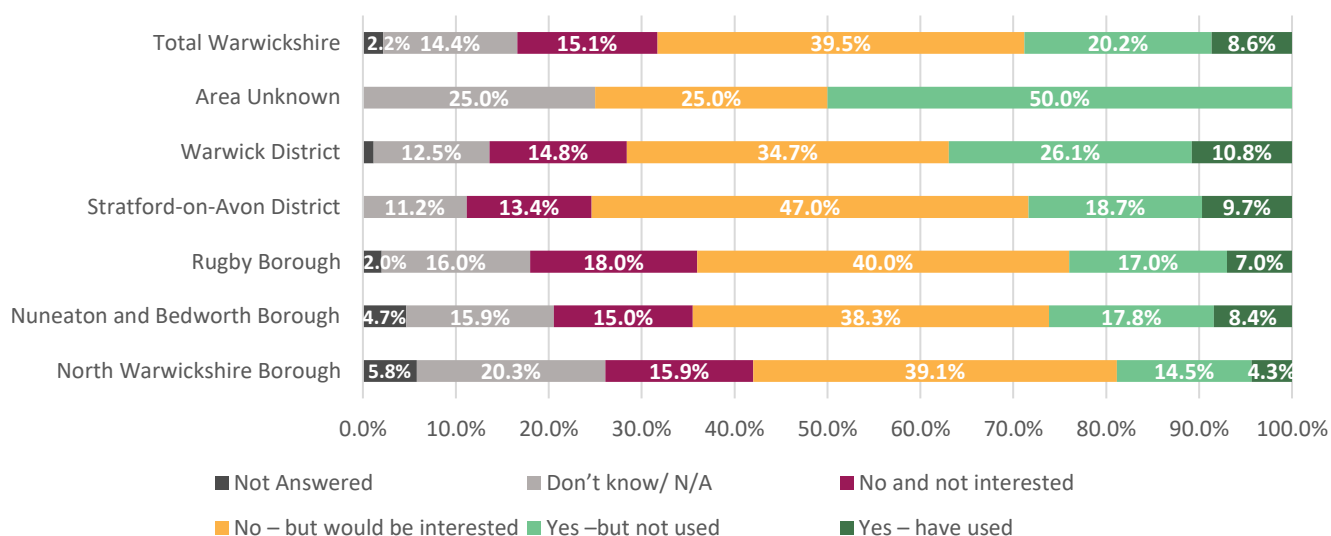
A total of 6.4% (n=) respondents advised they had used the Smart Export Guarantee scheme (Figure 25). Around half 50.5% (n=298) of respondents said they had not heard of the scheme but would be interested.

Figure 25: responses to 'are you aware of Smart export guarantee' by area of residence



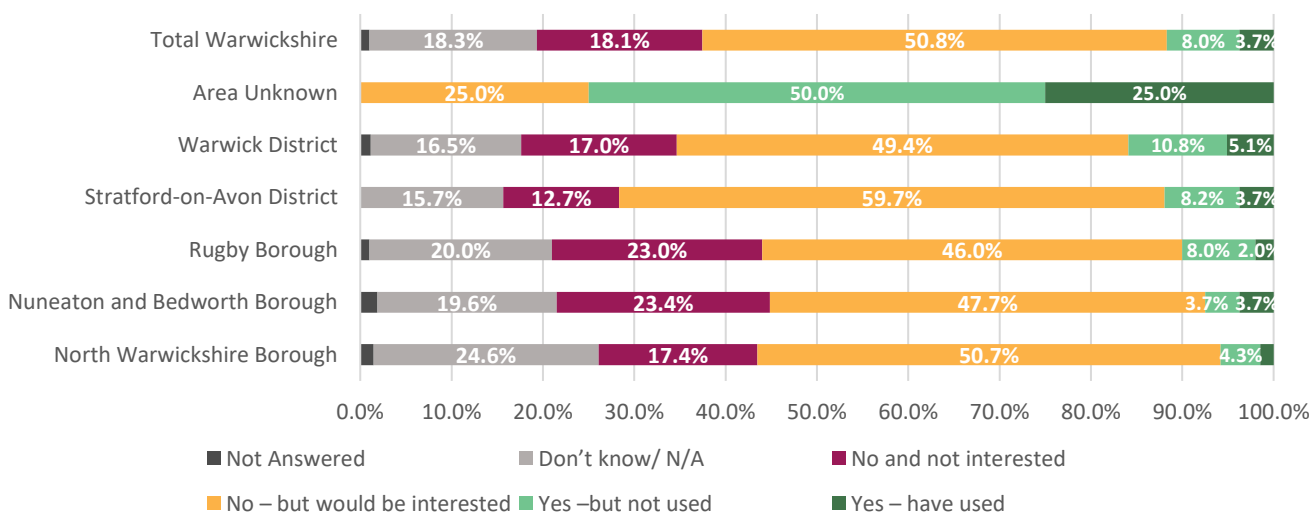
A total of 8.6% (n=51) respondents advised they had used the Switch and Save scheme (Figure 26). A further 20.2% (n=119) had heard of and not used and 39.5% (n=233) of respondents said they had not heard of the scheme but would be interested.

Figure 26: responses to 'are you aware of Switch and Save' by area of residence



A total of 3.7% (n=22) respondents advised they had used the Solar Together Warwickshire scheme (Figure 27). A further 8.0% (n=47) had heard of and not used and 50.8% (n=300) of respondents said they had not heard of the scheme but would be interested

Figure 27: responses to 'are you aware of Solar Together Warwickshire' by area of residence



Respondents were then asked how supportive they were of various methods of generating renewable energy locally (Figure 28 and Table 16). Respondents were most supportive of the generation of energy from waste locally (86.4% either very supportive or supportive) and least supportive of nuclear energy to generate energy locally (28.3% either opposed or strongly opposed).

Figure 28: responses to ‘how supportive are you of these methods of generating renewable energy locally’ (percentage)

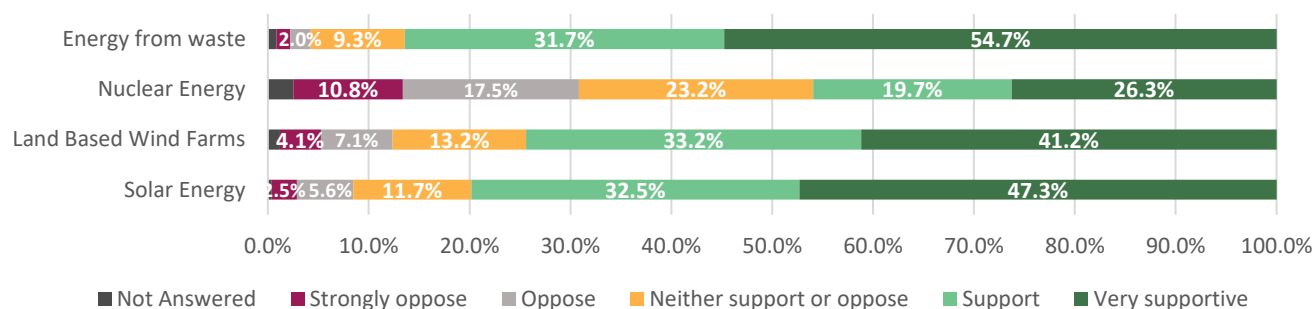


Table 16: number of responses to ‘how supportive are you of these methods of generating renewable energy locally’

	Solar Energy	Land Based Wind Farms	Nuclear Energy	Energy from waste
Not Answered	2	7	15	5
Strongly oppose	15	24	64	8
Oppose	33	42	103	12
Neither support or oppose	69	78	137	55
Support	192	196	116	187
Very supportive	279	243	155	323
Grand Total	590	590	590	590

Respondents were given a free text box to add any further comments they had on renewable energy, including support that may be needed to access renewables. Table 17 summarises the main themes from responses.

Table 17: Themes of further comments on renewable energy and support needed to access renewables

Theme/ description	Number of responses	Example quotations for illustration
Waste to create energy	42	"energy from waste only where recycling rates can be proven"
Develop tidal	20	"tidal energy schemes given a priority" "offshore tidal power should be developed"
Develop Solar	10	"strongly supportive of solar panels" "all new homes and structures should have solar"
Expensive	8	"renewable energy is an expense we can not afford"
Improve our knowledge	7	"look at what other countries are doing in this field" "let science and industry find the solution"
No nuclear	6	"surely it is more dangerous to the planet by the waste it causes" "more dangerous to the planet by the waste it causes"
Careful positioning	5	"solar energy is too intensive on otherwise food or leisure productive land"
Community schemes	4	"community energy schemes"
Improve appearance	3	"land based solar and wind farms are appalling blots on the landscape"
More information	2	"I do not know enough to have an opinion"
Hydro electric	2	"hydro electric"
Support nuclear	2	"a mini nuclear reactor iin Warwickshire would be good"
Trusted suppliers	1	"would not know which suppliers to trust"
Renewable energy needs to be managed better	1	"not effectively managed"
Safety concerns	1	"concerned about human error or terrorist attack" "disposal of waste products"
Ensure impact on wildlife is assessed	1	"full consideration given to impact on these solutions on wildlife"

4.6 Electric Vehicles

The next section of the survey focused on electric vehicles. Respondents were provided with the following information:

In November 2020, the Government announced the end of the sale of new petrol and diesel cars in the UK by 2030.

Following consultation with stakeholders, industry and the wider public, a 2-phased approach to the process was announced:

- Step 1 will see the phase-out date for the sale of new petrol and diesel cars and vans brought forward to 2030.
- Step 2 will see all new cars and vans be fully zero emission at the tailpipe from 2035.

Between 2030 and 2035, new cars and vans can be sold if they have the capability to drive a significant distance with zero emissions (for example, plug-in hybrids or full hybrids) - to be defined through consultation.

Respondents were then asked how supportive they are of moves to speed up the switch to electric vehicles and other less polluting forms of transport. Figure 29 shows the responses for Warwickshire and by district and borough. Almost two thirds of respondents (63.2%, n=374) were either supportive or very supportive. Reasons for answers to this question are summarised in Table 18.

Figure 29: responses to 'how supportive are you of moves to speed up the switch to electric vehicles and other less polluting forms of transport' by area of residence

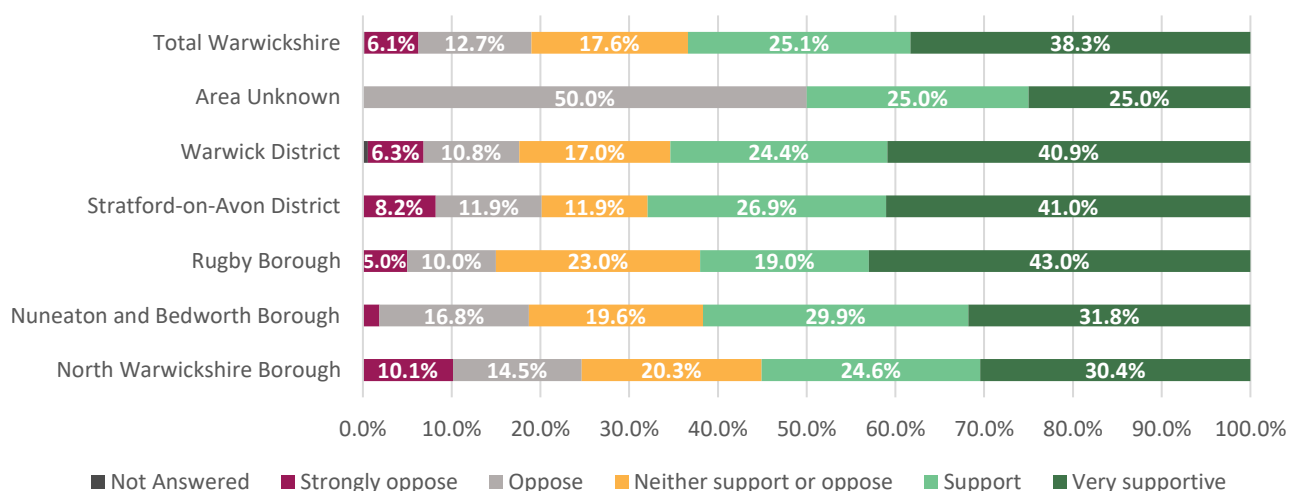


Table 18: Main themes from reasons provided on support/opposition for moves to speed up the switch to electric vehicles and other less polluting forms of transport

Theme/ description	Number of responses	Example quotations for illustration
Components used to make cars are damaging	62	<p>“they are not zero emission vehicles, the mining associated with battery production is harmful”</p> <p>“impact on making and disposing of batteries”</p> <p>“manufacture of vehicle takes up more of earths resources than an engine”</p>
Not enough data	20	<p>“too much dependency on something that may not be as efficient as an combustible engine”</p> <p>“insufficient data available on electric vehicles”</p>
Essential to reduce pollution	12	<p>“very supportive due to the increasing number of cars on the road causing pollution”</p> <p>“the county and the world need to reduce pollution”</p>
If construction is carbon neutral	9	<p>“only supportive where their construction is carbon neutral”</p> <p>“if the significant carbon footprint in the manufacture of these vehicles can be reduced”</p>
Too quiet	6	<p>“the fact that such vehicles are silent makes life difficult for people with sight problems”</p>
Cost of electric too high	3	<p>“they need to bring down the cost of electric before we consider it”</p>
Unsure of lifespan of battery	3	<p>“concerns regarding the end of the life of the battery”</p>
Concerned mechanics will lose jobs	1	<p>“risk of currently trained mechanics being put out of work”</p>

Respondents were asked what they thought the barriers are to increasing ownership of electric vehicles. A summary of themes from responses are provided in Table 19. Cost of vehicles and availability of charging points were mentioned most frequently as barriers.

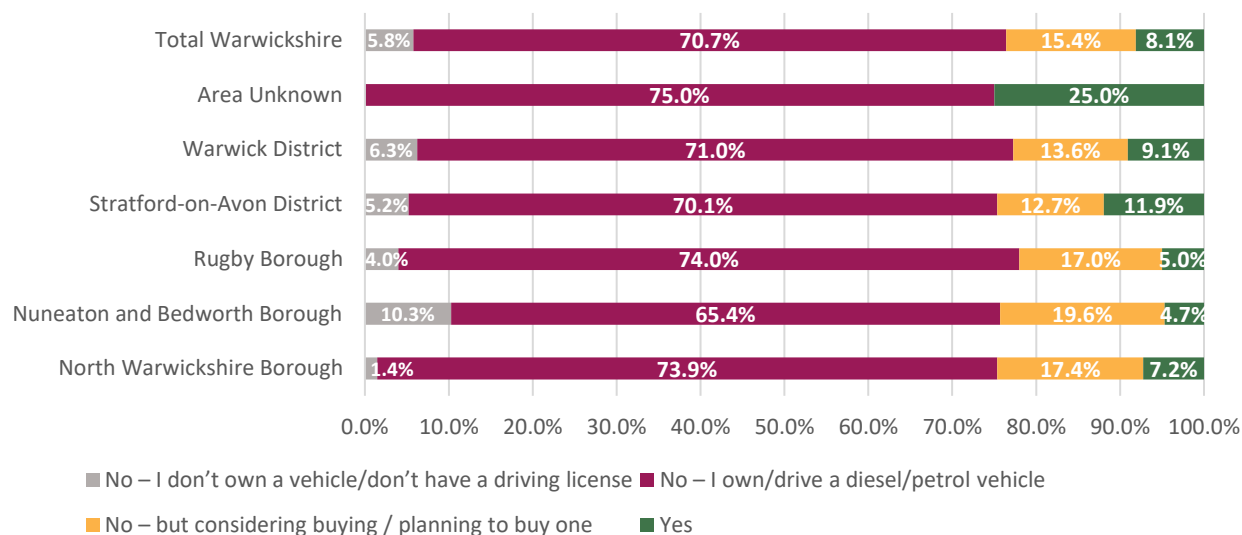
Table 19: Themes from question ‘What barriers do you think there are to increasing ownership of electric vehicles?’

Theme/ description	Number of responses	Example quotations for illustration
Cost of vehicles	386	“cost” “wouldn’t be able to afford” “high cost and limited second hand market”
Availability of charge points	305	“needing to find charging points when out and about” “a lack of charging points”
Mileage range	137	“too short a range” “inability to travel long distances with ease”
Unable to have charge point at home	87	“difficulty in charging due to town centre living, no off street parking”
Capacity of electricity	41	“lack of capacity to supply the electricity needed”
Environmental and unproven benefits	40	“components used to make cars are damaging” “battery production and disposal is not environmentally sustainable”
Time it takes to charge	33	“need faster charge times”
Battery safety	32	“battery safety”
Cost of electric	27	“cost of electricity”
Lack of vehicle range/design available	23	“the types of cars available”
Cost of replacement battery	12	“cost of replacement battery”
Other cars requiring to be scrapped	11	“existing cars have already paid their carbon debt”
Ability to tow	5	“unable to tow a caravan”
Reliability	5	“I have been stranded with an electric vehicle unable to push or move it – petrol car feels safer”

Other responses were safety of vehicles (n=3), support needed (n=3), poor driving experience (n=3), government mindset (n=2), people stealing charging cables (n=2), simple method for paying for charge (n=2) and would this work as an emergency vehicle (n=1).

Respondents were asked if they own or drive an electric vehicle. In total 8.1% (n=34) respondents advised they owned an electric vehicle whilst 15.4% (n=91) said they were considering or planning to buy one (Figure 30).

Figure 30: responses to ‘Do you own or drive an electric vehicle?’ by area of residence



Respondents who owned or drive an electric vehicle, or were considering buying/planning to buy one were asked if they had sold or exchanged a petrol/diesel vehicle during the last year. Of the 138 respondents to this question, 35 (25.4%) had sold or exchanged a petrol or diesel car in the last year.

These respondents were also asked “Do you currently or would you plan to charge an electric vehicle at home?”. The majority of respondents said that they would (89.1%, n=138).

The same respondents were then asked if they currently use or would use any of the following public charge points asking to select all that apply. The most popular public charging points were ‘specific charging stations (79.0%, n=109) and ‘in towns/shopping centres’ (76.8%, n=106) (Figure 31). Other charging points used are listed in Table 20.

Figure 31: responses to ‘do you use or would you use any of the follow public charge points’ (percentage)

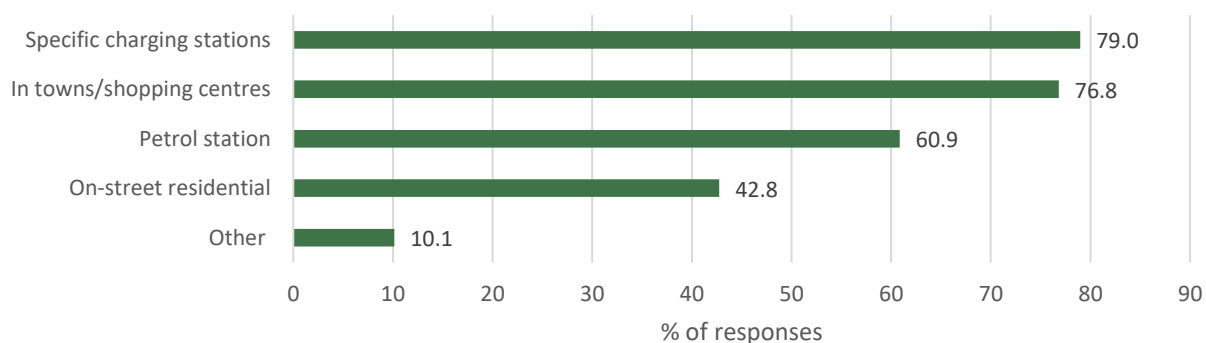


Table 20: Responses for ‘other electric charging points they would use’

Theme/ description	Number of responses
Office/ work	3
In town car parks	2
Motorway services	2
Event venues	2
Hotels	1
Gym	1
Home	1

4.7 Communicating about energy and other climate change initiatives

Respondents were asked what they felt were the most effective ways to communicate to residents about climate change initiatives from a list of options provided. Overall, 62.5% (n=369) respondents advised letters and leaflets through the post were the most effective (Figure 57) with 61.5% (n=363) respondents saying emails would be the most effective method of communication. Other suggestions are summarised in Table 32 and the text below.

Figure 32: responses to ‘in your opinion what are the most effective ways to communicate with residents about climate change initiatives?’

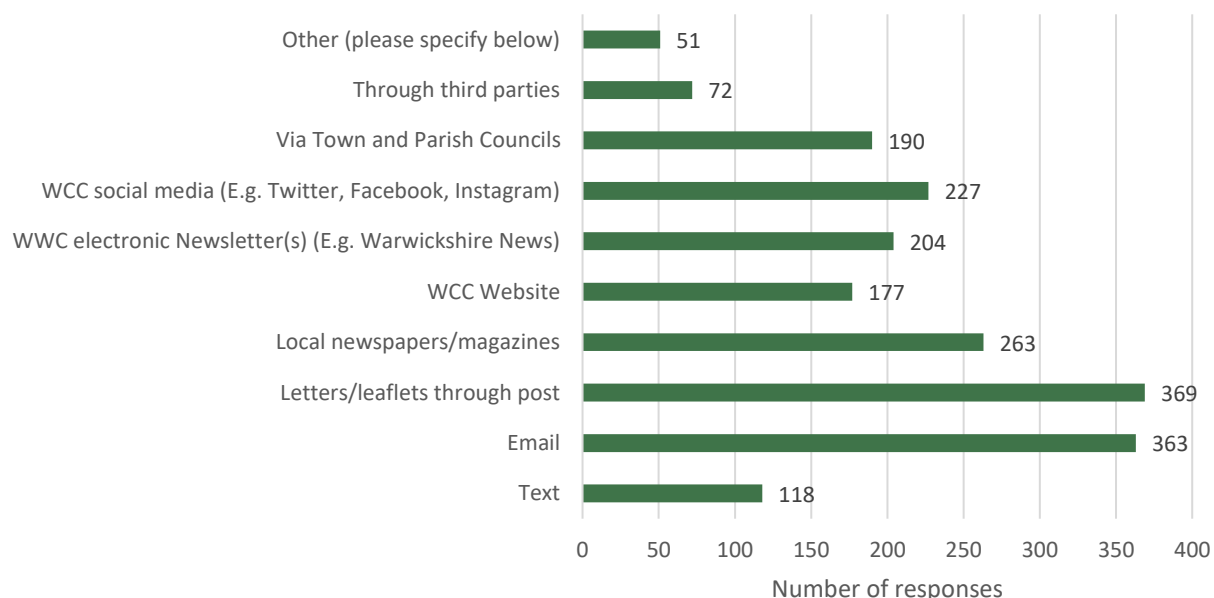


Table 21: Other responses to ‘most effective ways to communicate with residents about climate change initiatives’

Theme/ description	Number of responses
TV	15
Community magazines	14
Talks in village halls/ roadshows	14
During community events	13
Via local groups	11
Schools	10
Resident associations	8
Radio	5
Information shown on boards	3
Via a specialised team	3

Other responses were: in council tax bill (n=2), local noticeboards (n=2), via local businesses (n=2), workshops (n=2), via local councillors (n=20), local stakeholders (n=2), leaflet every 6 months (n=1), communications should link (n=1), national magazines (n=1), online adverts (n=1), word of mouth (n=1), action21 (n=1), bus shelters (n=1), energy companies (n=1), not for profit organisations (n=1), peoples payslips (n=1), side of buses (n=1), YouTube (n=1), local group social media accounts (n=1), petrol forecourts (n=1), demonstration houses (n=1), age UK (n=1)

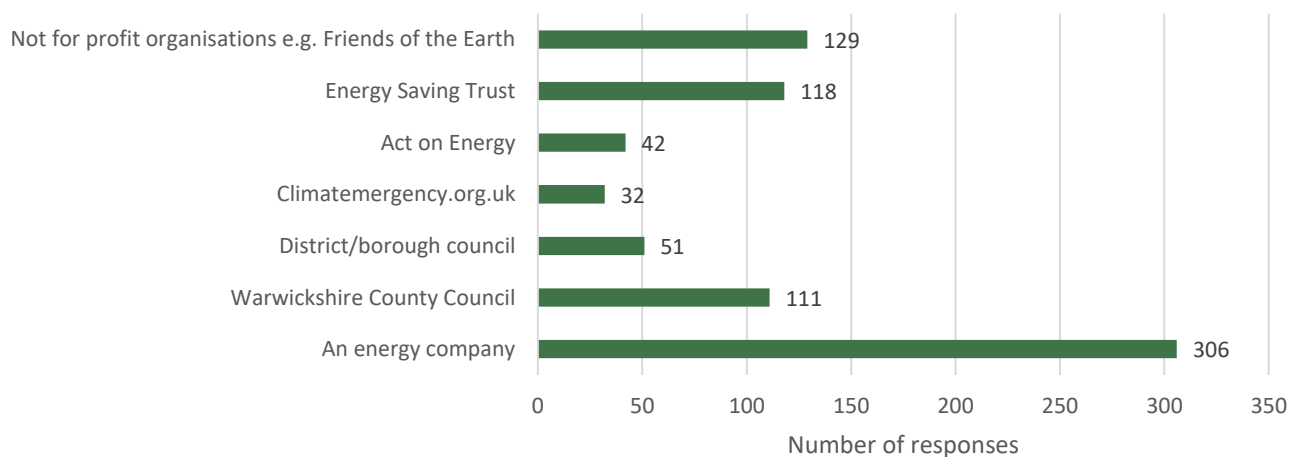
Respondents were asked how useful various pieces of information would be to them help to find out more about saving energy and other climate initiatives. Respondents were asked to select all options that applied; 583 respondents answered this question (Table 22). Overall, 90.0% (n=531) respondents advised they would find a list of grants available useful or very useful. A directory of suppliers, case studies and ‘How to’ videos were also seen as very useful or useful by over 60% of respondents.

Table 22: responses to ‘how useful would the following be to you to find out about saving energy and other climate initiatives’

	Very useful	Useful	A little useful	Not useful	I don't know	Not answered
Case Studies	156	228	124	56	15	11
Directory of suppliers	156	236	112	61	10	15
List of grants available	358	173	37	14	3	5
How to videos	137	218	139	62	15	19
Blogs	42	97	153	212	46	40
Direct contact	89	160	124	136	56	25

Respondents were asked which organisations or websites they had used to gain knowledge about saving energy and climate change and were able to tick multiple responses. A total of 306 (51.9%) respondents advised they had gained knowledge from an energy company, which was the most common response (Figure 33). Act on Energy was selected by the lowest proportion of respondents (7.1%).

Figure 33: responses to 'which organisations have you used to gain knowledge' (number of responses)



4.8 Climate change impact and adaption

In this section of the survey respondents were asked what potential future impacts of climate change concerned them. A total of 479 responses were given to this question - key themes are summarised in Table 23. Just over a third of respondents (37.4%, n=179) said that changes in weather was what they were most concerned about. A total of 104 (26.7%) respondents stated the impact on the environment was a future impact of climate change that concerned them.

Table 23: key themes to responses ‘what potential future impacts of climate change concern you’

Theme/ description	Number of responses	Example quotations for illustration
Changes in weather	179	“more storms” “increasing extremes of weather”
Impact on environment	104	“the impact on our environment”
Impact on wildlife	75	“the impact on wildlife”
Flooding	70	“river levels increasing and local flooding”
Impact on humans	69	“I wonder what life will be like for my grandchildren”
Food decline	47	“impacts on food and water supplies”
Global warming	57	“the hot summers and rising of temperature”
Increasing costs	46	“financial costs of everything”
Food supply	27	“changes in food production”
Air quality	20	“air pollution”
Everything	18	“everything – the knock on effect on our survival”
Drought	13	“drought due to extreme weather changes”
Mass immigration	13	“mass immigration from effected countries”
Melting ice caps	12	“rising sea levels with ice caps melting”
War	12	“increasing conflicts and war”
Water shortages	10	“a shortage of water”
Changes in lifestyle	9	“the required change will need to be made to lifestyles”
Pollution	8	“pollution”
Poverty divide	7	“poverty divide and the collapse of society”
Lose ability to generate power	6	“losing our ability to generate power due to conventional power stations being closed and our so called renewable systems not being able to cope”
Reduction of tree planting/ de forestation	5	“the demolition of forests across the world”

Other countries not doing their bit	5	“as long as other countries do not join in and do their part a little island like the UK will take all this hits and costs and still not save the planet”
Use of plastic	5	“the amount of plastic we use”
Mass extinction	7	“mass extinctions”
Forced changes	4	“increased regulation forcing change rather than encouraging opportunities for change through peoples own choice”
Increasing population without infrastructure	3	“increasing pollution and traffic in our area with insufficient planning and support infrastructure being put in place”
Scaremongering	3	“the scaremongering who are trying to justify their existence”
Damage to infrastructure	4	“increased damage to infrastructure”
Overuse of vehicles	2	“too many parents using cars for school run leading to greater traffic and generating more exhaust gases”
Pollution	2	“atmospheric pollution and the effect on health”
Reliance on gas	2	“the continued use of coal and other carbon based fuels to produce energy”
Time scales	2	“my biggest concern is we will all sleepwalk into an irreversible tipping point and it will be too late to do anything about it!

Other comments included waste from fast fashion (n=1), pesticide use (n=1), management of waste (n=1), impacts on housing (n=1), fly tipping (n=1), wind farms erected on green spaces (n=1), industrial pollution (n=1), management of roadworks(n=1) and government to act in good faith (n=1).

Respondents were next asked for their opinion on what types of local support could be provided to reduce the effect of these climate change impacts; 402 respondents provided an opinion. The main themes are summarised in Table 24. Advice was the most common response followed by grants.

Table 24: key themes in responses to ‘what types of local support could be provided to reduce the effect of climate change impacts’

Theme/ description	Number of responses
Advice	96
Grants	57
Improved public transport	51
Plant more trees	28
More renewable energy	25
Support for local food production	25
Cease building	24
Improved cycle lanes	22
Flood protection	13
Wind and solar power	12
Reduce inequality	12
Financial decisions	11
Electric charging facilities	11
Improved roads	11
Economical alternatives	10
Reduce use of cars	11
Invest in renewable energy	9

Support for local industry	9
Public transport incentive	8
Assessment of properties	7
Community heating on new builds	7
National effort	7
Porous driveways	6
Lead by example	6
Environmentally friendly products	6
Remove cars from town centre	6
Electric buses	5
Local events	5
Long term	5
Specialist team	9
Clean energy	4
Urban farming	4
Everyone involved	4
New housing energy efficient	4

Further comments made by respondents were: council building to lead by example (n=3), Council to listen to peoples' ideas (n=3), green initiatives for older building (n=3), insulated homes (n=3), reduce plastic use (n=3), stop wasteful packaging (n=3), too late to make any valid changes (n=3), better planning regulations (n=3), more bike parking facilities (n=2), carpooling (n=2), clear emergency planning (n=3), encourage domestic tourism (n=2), encourage working from home (n=2), free solar panels (n=2), greater ease of recycling (n=2), influencers (n=2), invest in decarbonising (n=2), measure air quality (n=2), more green spaces (n=2), park and ride schemes (n=2), practical ways to change (n=2), retrofit homes (n=2), Stop HS2 (n=2), use available power sources (n=2), allow more self-build (n=1), assistance for elderly (n=1), ban bonfires (n=1), ban plastic grass (n=1), build more housing (n=1), cease building more housing (n=1), cease using chemicals on soil (n=1), collective purchasing (n=1), competitions between parish (n=1), control carbon dioxide (n=1), decrease street lighting (n=1), encourage local industry to reduce lighting (n=1), GPs communication (n=1), ground source heat pumps (n=1), invest in nature reserves (n=1), large carbon extraction units (n=1), leaflets (n=1), local drop in

office (n=1), manage fast fashion (n=1), mindful of where products come from (n=1), cease building more roads (n=1), involvement in planning decisions (n=1), plan for climate migration (n=1), policies in line with climate change (n=1), provision of shelters for extreme weather (n=1), public bins allow for recycling (n=1), reuse initiatives (n=1), reduce car park lighting (n=1), reduce carbon impact (n=1), support climate refuges (n=1), support from energy companies (n=1), support from known charities (n=1), pruning managed better by WCC (n=1), and EU and Government involvement (n=1).

Respondents were also asked if they had experienced any direct impacts of climate change. A total of 51.7% (n=305) respondents answered this question with the main themes summarised in Table 25. Of these 35.7% (n=109) advised they had seen a change in weather.

Table 25: responses to ‘have you experienced any direct impacts of climate change yourself?’

Theme/ description	Number of responses
Change in weather	109
No impacts experienced	88
Flooding	37
Change in gardening	20
Rise in costs	27
Pollution	8
Less wildlife	7
More illness	4
Drought	2
Heat	2
Reduction of tree planting/ de forestation	5
Other countries not doing their bit	5
Use of plastic	5
Mass extinction	7
Forced changes	4
Increasing population without infrastructure	3
Scaremongering from leaders	3
Damage to infrastructure	4
Overuse of vehicles	2
Pollution	2
Reliance on gas	2
Time scales	2

Other comments included, making different choices (n=1), loss of life, fly tipping (n=1), erosion of coast (n=1) and change in rivers (n=1).

Respondents were then asked what support would help to reduce the impact of climate change. There were 196 responses to this part of the question. Main themes are summarised in Table 26.

Table 26: key themes to responses asking ‘what support could reduce the impact of climate change’

Theme/ description	Number of responses	Example quotations for illustration
A worldwide effort	23	"a world wide effort is needed, an international agreement"
Cost	21	"Cost effective alternatives"
Improved maintenance of drainage and rivers	17	"allow an adequate budget for maintenance of drainage and rivers"
Trees and green spaces	16	"plant more trees and hedgerows"
Schemes	14	"Funded and managed schemes"
Grants	14	"financial assistance"
Education	12	"education to allow for a better understanding"
Information and advice	12	" I would be guided by those who know more than I do"
Less car use	8	"Reduce vehicles on the road"
Homes more efficient	6	"help to make home more self sufficient and less reliant on important fuel"
Fuel alternatives	6	"Reduce dependence on gas and fuel"
Leaders making long term plans	5	"informed MPs and Councillor making measured long term decisions not focused on the next election but beyond"
Build community networks	3	"building community networks that build local resiliency"
Improved air quality	3	"reduction in air pollution and measure air quality"
Improved communication	3	"do more to 'get the word out' and provide hints and tips"
Insulation	3	"insulation in properties"
Promote virtual ways of working	3	"promoting (or making legal) other virtual ways of working"
Specialised team	3	"specialist team of advisors"
Speed restrictions	3	"speed reduction in residential areas"
Nature reserves	3	"Support for local nature reserves"
Take action	3	"more action and less words"

Other comments made were locally based services (n=2), manage fly tipping (n=2), nationwide approach (n=2), share positive stories (n=2), help to cool homes (n=2), vehicle weight restrictions (n=1), support local food production(n=1), stop use of plastics (n=1), scrap scheme for old cars

(n=1), develop nuclear (n=1), affordable local transport (n=1) and allowing more to be disposed of at the tip without a charge (n=1).

Respondents were asked who should provide support to help reduce the effect of climate change; main themes are shown in Table 27. There were 345 responses to this question.

Table 27: responses to ‘who should provide support to help reduce the effect of climate change’

Theme/ description	Number of responses
Government	131
Local government	118
Everyone	41
Energy companies	17
Environmental agency	7

Approved contractors	5
Home builders	5
Water companies	5
Community groups	3
Not WCC	3
Police	3

Other comments made by one person were research bodies, product manufacturers, landlords, individuals, influencers, health services and independent bodies.

The final question of the survey asked respondents if they had any other views to share on climate change. There were 421 responses to this part of the question. The main themes are summarised in Table 28.

Table 28: themes of responses to ‘do you have any other views to share on climate change’

Theme/ description	Number of responses	Example quotations for illustration
Green Initiative that help everyone	37	“helpful if the costs of making changes were affordable” “true incentives that can be claimed and used that everyone can qualify for”
Develop better technology to provide alternative power sources	30	“reduce our reliance on coal and gas” “develop better technology to provide alternative power sources”
Adapt the way we live	26	“we need to look at how best to adapt to what is coming”

Must work together as a community	25	"climate change action will be ineffective if left to individuals"
Must work together as a world	24	"this is an enormous problem for the whole world and it needs careful consideration"
Better education	27	"support and education for lower income households is crucial"
Take action	19	"raise awareness, interest desire to act and action itself" "invest a far greater share of resources in terms of staff and budgets"
Achieving net zero is important	15	"realistically achievable net zero targets"
All new homes with solar panels	13	"all new homes should be built with solar panels and renewable energy"
Companies to do their bit	13	"companies made to reduce packaging and have a cap on transport" "companies must change their ways of operation"
Insulate homes	13	"all homes with best possible insulation"
Financial support	11	"financial incentive to live a greener lifestyle" "funding needs to be allocated to home owners and landlords"
Green public transport	10	"green public transport needed"
Needs to be treated as an immediate threat/ emergency	10	"everyone needs to up the gain now, or the planet is destined for a radical change"
Managed simple schemes	10	"Ensure programmes are affordable and properly managed and delivered in a timely manner"
Concerned for future generations	9	"Deeply concerned about the damage my own and previous generation have done for the future generations"
Education for young adults and children	7	"education from an early age is the way forward"
Plant more trees	6	"continue incentives to farmers to plant hedgerows and trees"
Approved contractor list	6	"i don't trust some suppliers who try to sell systems to households, accreditation for suppliers is needed"
Cease building more houses	6	"stop allowing so much land to be swallowed up for building"
Research	6	"more research is needed"

WCC should not spend money on this	5	"what has this got to do with the county council spend my council tax on local issues"
Improvement to cycle network	5	"create safe cycle routes especially in parks and route for school"
All new home building companies to make a contribution	4	"all new homes to make a contribution to the area"
Allow listed buildings to have insulation	4	"planning encouragement would have the biggest effect"
Vegan/ vegetarian diet	4	"promotion of a vegan/ vegetarian diet"
Cost of living is too high/ energy cost rise	4	"people are struggling to pay bills and put food on the table, cost of living is making the vulnerable more vulnerable"
More allotments	3	"allotments available for residents"
Pleased to see action	3	"glad to see action"
Promote how WCC are going to make changes	3	"an annual committed report that shows how well WCC as a whole are doing"
Not everything should be blamed on climate change	3	"not sure I am convinced that some of the issues that are blamed on climate change truly are"
WCC to lead by example	3	"hopefully council are looking at ways to reduce their own carbon footprint by holding meetings on zoom"
Better communication from WCC	3	"as a Warwickshire resident I've just not noticed any information and I am a retired literate professional, so I am not sure how people less able are going to get the information needed"
Carbon units displayed on items	2	"encourage the government to require embodied carbon units to be displayed on products"
Cease taking rubbish abroad	2	" I do not think we should be shipping rubbish abroad"
Climate change is a naturally occurring event	2	"climate change is just a naturally occurring phenomenon"
County and Districts to work together	2	"work collaboratively to deliver a better outcome for all residents"
Don't allow private energy companies	4	"energy should renationalise, all the energy market has done is make money for some and recently misery for others"
Encourage industrial units to have solar panels	2	"all industrial units to install solar panels"
Local resources	2	"encourage use of local resources"

Improved rail network	2	“reinstate missing links in the rail network it could encourage people onto public transport”
Improved recycling	2	“you should be encouraging people to recycle as much as possible”
People first not money	2	“I despair of any government doing anything that doesn’t put money in their pockets”
Transport sharing	2	“promote transport sharing”
Regular conferences between local and central government	2	“regular conferences with district and county councils to share ideas on how to counter climate change at a local and national level”
Safeguards needed to manage solar and wind power	2	“what happens after their span, who removes and restores the site”
Single national response	2	“ a single response by all local governments rather than every council spending money on its own schemes”
Stop continual/ daily deliveries	2	“stop same and next day deliveries, find a way to consolidate deliveries”
Use less plastic	2	“use less plastic in items, especially food packaging”

Other comments made were: Utilise heat waste (n=1), unsure recycling is making a difference (n=1), too many pets (n=1), read 39 ways to save the planet (n=1), free public transport (n=1), pleased joined UK100 (n=1), cease letting car engines run (n=1), love the WCC climate change page (n=1), live with it rather than reverse it (n=1), lack of action from schemes (n=1), install grease traps (n=1), improve infrastructure (n=1), HS2 has resulted in tree loss (n=1), energy company profits capped (n=1), fed up of meat free alternatives (n=1), encourage showers (n=1), climate justice(n=1), educate WCC on permaculture principles (n=1), better sewage management (n=1) and alternates to cars are no good when needing to carry shopping (n=1).

Appendix 1

Copy of survey (the space available and to comment and font was much larger on the survey but for the purpose of this report has been reduced):

Voice of Warwickshire Panel Survey 2 – Climate and Energy

Overview

In 2019, Warwickshire County Council declared a Climate Emergency. A refreshed Council Plan 2022 was approved on 8th February 2022 and includes a strategic priority on climate and sustainability:

We want to be a County with a sustainable future which means adapting to and mitigating climate change and meeting net zero commitments, so that our generation ensures future generations can live well and reap the benefits of a sustainable and thriving Warwickshire

Warwickshire County Council has committed to reduce the Council's carbon footprint to net zero by 2030 and wants to work with all our partners and residents in Warwickshire to support the County to do the same no later than 2050.

We know that there is strong support and commitment across the County to address climate change and when we asked our residents what we could do to help improve life in Warwickshire for future generations, the most popular responses were improvement in sustainable or green travel and general environmental concerns. Our commitment to climate and sustainability in the new Council Plan means:

- You will see more local community-based activity playing a part in mitigating the effects of climate change.
- you will have more opportunities to make travel choices that support the environment
- You will be supported by infrastructure and new technologies, such as electric vehicles and renewables.
- You will have access to information to help you to understand what you can do to play your part in tackling climate change and ensure you have more opportunities to make choices to decarbonise your daily life.
- You will be provided with green spaces and trees across the County through our focus on biodiversity and environmental stewardship, which will also contribute to achieving and offsetting our net zero targets.

- You will have open and transparent information about progress towards our net zero targets and will see the Council continue to reduce its own carbon footprint and impact on the environment.

The council has engaged with residents and other stakeholders previously on climate and related areas such as our Local Transport Plan and waste management. We have been told a lot about the areas that people feel are important such as improvements in public transport, better provision for active transport, and making recycling easier. We have also been told that residents need more and better information to help them improve their contribution to reducing carbon emissions.

Why your views matter

In the following survey we would like to understand more on another area that residents have said is important - minimising energy consumption and alternative/renewable energy. Together with the other information we have, this will inform our Sustainable Futures Strategy and our Energy Strategy and will help us to develop initiatives that will move the County closer to net zero.

We also have a number of questions on electric vehicles, communicating about climate change initiatives and general views on climate change.

We are keen to capture the views of all residents who have registered with Voice of Warwickshire to ensure we have a representative overview.

All those completing the survey will be entered into a prize draw to win a £50 Love to Shop voucher.

Some of the questions within the survey have webpages for further information if you are unable to access these please feel free to move onto the next question. If we can be of any assistance when completing the survey please contact Kate Price - Tel: 01926 742031 / Email: voiceofwarwickshire@warwickshire.gov.uk

Background

These questions ask about your interest in and knowledge of climate change, and awareness of a number of Warwickshire County Council (WCC) policies and initiatives.

1 How would you describe your interest in climate change?

Please select only one item

- Very interested
- Interested
- Not that interested
- Not at all interested

If you are part of a group with an interest in climate change please specify below:

2 How would you describe your knowledge level with regards to reducing your carbon footprint and achieving net zero?

What is net zero

'Net zero' means getting a balance between the carbon (greenhouse gas emissions) we put into the atmosphere and the carbon we can take out of the atmosphere through trees, soil and oceans. Although some emissions can be offset (balanced) by processes that reduce carbon in the atmosphere the overall objective is for carbon emissions to be zero.

- Very knowledgeable
- Knowledgeable
- I know a little
- I don't know much at all

3 Are you aware of any of the following?

	Aware	Not Aware	Not sure
WCC's Climate Emergency declaration			
WCC's commitment to be a net zero council by 2030			
Target for Warwickshire to be net zero by 2050			
WCC's Green Shoots community grant scheme			
Virtual forest			
Greener Warwickshire 'Pledge' campaign			
WCC'S Energy Plan and Strategy			
Warwickshire's Local Transport Plan			

Energy use

Nearly all of us use electricity in our home to power our lighting and appliances. Some of us also use electricity to heat our home. Other traditional heating systems use gas, oil or solid fuel whilst more modern technologies include solar thermal and heat pumps. In the following questions, by energy, we mean the electricity and any other fuel you use to power your home.

In the following pages, we will ask your views on energy use and generation with a view to understanding how Warwickshire County Council can support residents to reduce their carbon footprint.

Energy use in the home

These questions will help us understand more about how Warwickshire residents use energy.

In the UK, around 22% of the country's carbon emissions come from our homes – including heating, lighting and appliances (<https://energysavingtrust.org.uk/>).

4 How important are the following to you when thinking about your energy use in the home:

	Very important	Important	Moderately important	Slightly important	Not Important
Reducing costs					
Being able to plan ahead and know how much your energy will cost					
Yours and your family's health and wellbeing					
Being warm and comfortable					
Keeping my family, our clothes and the house clean					
Impact on climate					
Access to different sources of energy					
Choice over who supplies the energy					
Energy is supplied from renewable sources					

5 Do you take any of the following measures to reduce energy use in the home?

	Yes	Sometimes	No	Not applicable
Low energy lighting/light bulbs				
Use energy efficient appliances				
Not leaving appliances on standby				

Use a microwave to heat up small amounts of food instead of the oven				
Only use as much water as you need in the kettle				
Cover pots and pans when heating/cooking food				
Only heat the rooms in the house that are used/used regularly				
Efficient use of heating controls so you are only using heating when needed				
Washing clothes at 30 degrees whenever possible				
Only using the dishwasher when full				
Drying clothes outside rather than using a tumble drier				
Wearing warmer clothing when it is colder rather than using the heating				

6a If you answered no to any of the above what are the main reasons?

Please tick all that apply

- Cost
- Time constraints
- Availability of appropriate technology
- Didn't realise they reduced energy consumption

Other reason (please specify below):

6b. Are there any measures that you don't currently take that you would consider implementing? *Please specify below:*

7 Are there any other measures that you take to reduce energy use in your home?
Please specify below:

8 Does your home have any of the following energy saving features?

	Yes	No, but would be interested	No, not interested	Not applicable
--	-----	-----------------------------	--------------------	----------------

Draught proofing				
Double or triple glazing				
Roof/loft insulation				
A condensing boiler				
Insulated hot water tanks and pipes				
Cavity wall insulation				
Solid wall insulation				
Floor insulation				
Heat pump				
Mechanical Ventilation with Heat Recovery/Heat Recovery Ventilation (MVHR)				
Smart meter				

9 Do you use smart devices to save energy?

Smart devices

Smart devices are devices that you can control remotely, often from your phone, e.g. heating controls, lighting, windows, curtains / blinds, plug sockets, appliances.

Please select only one item

- Yes
- No
- Not sure

If yes which devices do you use?

10 Are you aware of the Energy Saving Trust Register that lists energy efficient products?

<https://energysavingtrust.org.uk/listing/est-register/>

Please select only one item

- Yes
- No
- Not sure

Thinking about how to help people to reduce home energy use ...

11 What support would enable you to reduce the energy you use in your home? (Please select any that apply)

Please select all that apply

- Information/advice on what can be done
- Real life examples/case studies
- Financial support/grant to make home improvements
- Incentives
- I don't need any support

12 Are you aware of any of the following schemes available to Warwickshire residents?

National and regional schemes

	Yes – have used	Yes – but not used	No – but would be interested	No and not interested	Don't know/ N/A
Energy Company Obligation (ECO)					
Warm Homes Discount Scheme					

Warwickshire Schemes

	Yes – have used	Yes – but not used	No – but would be interested	No and not interested	Don't know/ N/A
Warwickshire Switch and Save					
Warm and Well in Warwickshire					
Heat4Health					

More information on these National and regional schemes

Green Homes Grant (GHG) - <https://www.gov.uk/guidance/apply-for-the-green-homes-grant-scheme>

Energy Company Obligation (ECO) - <https://www.gov.uk/energy-company-obligation> (including Affordable Warmth Obligation/ Home Heating Cost Reduction Obligation)

More information on these Warwickshire schemes

Warwickshire Switch and Save - <https://actonenergy.org.uk/project/warwickshire-switch-save/>

Warm and Well in Warwickshire - <https://actonenergy.org.uk/project/warm-well-in-warwickshire/>

Heat4Health - <https://actonenergy.org.uk/project/heat4health-warwickshire-worcestershire-coventry-solihull/>

13 Thinking specifically about using less energy in the home are there any other things Warwickshire County Council can do to support you?

Please advise below:

Your views on renewable energy

Renewable energy is energy that is collected from renewable resources that are naturally replenished on a human timescale or described as sustainable - something that can't run out, or is endless, like the sun. The term 'alternative energy' is also used. It means sources of energy that are alternative to the most commonly used non-sustainable sources - like coal. Other terms used include green energy and clean energy.

The most popular renewable energy sources currently are:

- Solar energy
- Wind energy
- Hydro energy
- Tidal energy
- Geothermal energy
- Biomass energy

14 Are you aware that you can purchase your electricity from energy providers that generate renewable or zero carbon electricity?

- Yes
- No
- Not sure

14b. Are you interested in purchasing your electricity from energy providers that generate renewable or zero carbon electricity?

- Already purchase
- Yes would be interested

- Interested but can't afford
- Not interested
- Not applicable due to building type/ ownership

15a Are you aware that you can generate your own renewable electricity by installing photovoltaic (PV) solar panels?

- Yes
- No
- Not sure

15b. Would you be interested in having photovoltaic solar panels installed?

- Already have
- Yes would be interested
- Interested but can't afford
- Not interested
- Unable to install due to building type/ownership
- Other comment (Please specify below)

Other comment:

16a Are you aware that you can generate your own hot water by installing Solar thermal panels?

- Yes
- No
- Not sure

16b. Would you be interested in having solar thermal panels installed?

- Already have
- Yes would be interested
- Interested but can't afford
- Not interested
- Unable to install due to building type/ownership
- Other comment (please specify below)

17a Are you aware that you can generate your own hot water/heat your home by installing ground source heat pumps?

- Yes
- No
- Not sure

17b. Would you be interested in having ground source heat pumps installed?

- Already have
 - Yes would be interested
 - Interested but can't afford
 - Not interested
 - Unable to install due to building type/ownership
 - Other comment (please specify below)
-
-

18a Are you aware that you can generate your own hot water/heat your home by installing air source heat pumps?

- Yes
- No
- Not sure

18b. Would you be interested in having air source heat pumps installed?

- Already have
 - Yes would be interested
 - Interested but can't afford
 - Not interested
 - Unable to install due to building type/ownership
 - Other comment (please specify below)
-
-

19a Are you aware that you can store your own renewably generated electricity by installing battery storage in your home?

- Yes
- No
- Not sure

19b. Would you be interested in having batteries installed?

- Already have
- Yes would be interested
- Interested but can't afford
- Not interested

- Unable to install due to building type/ownership
- Other comment (please specify below)

20 Are you aware of any of the following schemes available to Warwickshire residents to encourage the use of or generation of renewable energy?

	Yes – have used	Yes –but not used	No – but would be interested	No and not interested	Don't know/ N/A
Domestic Renewable Heat Incentive					
Smart Export Guarantee					
Switch and Save scheme					
Solar Together Warwickshire					

More information about these schemes

National Schemes

Domestic renewable heat -<https://www.gov.uk/domestic-renewable-heat-incentive>

Smart export guarantee - <https://www.ofgem.gov.uk/environmental-and-social-schemes/smart-export-guarantee-seg>

Warwickshire schemes

Switch and Save scheme - <https://www.warwickshire.gov.uk/switchandsave>

Solar Together Warwickshire - <https://solartogether.co.uk/warwickshire/home>

21 The generation of larger quantities of renewable energy will be required in the future. How supportive are you of the following methods of generating renewable energy locally:

More information on methods of generating renewable energy

Solar farms are large scale applications of solar photovoltaic (PV) systems. They provide green, renewable and locally sourced energy to high numbers of people and businesses for many years after their initial construction.

Land-based wind turbines range in size from 100 kilowatts to as large as several megawatts.

Larger wind turbines are more cost effective and are grouped together into wind plants, which provide bulk power to the electrical grid.

Nuclear power plants use low-enriched uranium fuel to produce electricity through a process called fission—the splitting of uranium atoms in a nuclear reactor.

Waste-to-energy (WtE) or energy-from-waste (EfW) is the process of generating energy in the form of electricity and/or heat from the primary treatment of waste, or the processing of waste into a fuel source.

	Very supportive	Support	Neither support or oppose	Oppose	Strongly Oppose
Solar energy farms					
Land based wind farms					
Nuclear energy					
Energy from waste					

Please to add any further comments on renewable energy including support you may need to access renewables

Electric vehicles

In November 2020, the Government announced the end of the sale of new petrol and diesel cars in the UK by 2030.

Following consultation with stakeholders, industry and the wider public, a 2-phased approach to the process was announced:

- Step 1 will see the phase-out date for the sale of new petrol and diesel cars and vans brought forward to 2030.
- Step 2 will see all new cars and vans be fully zero emission at the tailpipe from 2035.

Between 2030 and 2035, new cars and vans can be sold if they have the capability to drive a significant distance with zero emissions (for example, plug-in hybrids or full hybrids) - to be defined through consultation.

22 How supportive are you of moves to speed up the switch to electric vehicles and other less polluting forms of transport?

- Very supportive
- Support

- Neither support or oppose
- Oppose
- Strongly oppose

Please use this space to provide reasons for your answer:

23 What barriers do you think there are to increasing ownership of electric vehicles?
Please advise:

24 Do you own or drive an electric vehicle?

- Yes
- No – I own/drive a diesel/petrol vehicle
- No – but considering buying / planning to buy one
- No – I don't own a vehicle/don't have a driving license

24a Have you sold or exchanged a petrol/diesel vehicle during the last year?

- Yes
- No

24b Do you currently or would you plan to charge an electric vehicle at home?

- Yes
- No
- Not sure/don't know

24c Do you currently or would you use any of the following public charge points? (Tick any that apply)

- On-street residential
- In towns/shopping centres
- Specific charging stations
- Petrol station
- Other (please specify below)

Communicating about energy and other climate change initiatives

25 In your opinion what are the most effective ways to communicate with residents about climate change initiatives? (Please select all that apply)

- Text
- Email
- Letters/leaflets through post
- Local newspapers/magazines
- Warwickshire County Council Website
- Warwickshire County Council electronic Newsletter(s) (E.g. Warwickshire News)
- Warwickshire County Council social media (E.g. Twitter, Facebook, Instagram)
- Via Town and Parish Councils
- Through third parties
- Other (please specify below)

26 How useful would the following be to you to find out more about saving energy and other climate initiatives?

	Very useful	Useful	A little useful	Not useful	I don't know
Case studies					
Directory of suppliers					
List of grants available					
How to videos					
Blogs					
Direct contact					

Other (please state):

27 Which organisations or websites have you used to find out about saving energy and other climate initiatives (please select all those used)?

- An energy company
- Warwickshire County Council
- District/borough council
- Climatemergency.org.uk
- Act on Energy
- Energy Saving Trust
- Not for profit organisations e.g. Friends of the Earth

Other (please state):

Climate change impact and adaption

We would like to ask you your views on the impacts of climate change on you and your local area.

28 What potential future impacts of climate change concern you? (Please specify below)

29 In your opinion, what types of local support do you think could be provided to reduce the effect of these impacts? (please specify below)

30 Have you experienced any direct impacts of climate change yourself? (please specify below)

31 What support do you think could reduce the effect of this impact on you? (please specify below)

32 Who should provide this support? (please specify below)

Further thoughts

Do you have any other views on climate and energy which you would like to share with us?

Many thanks for your participation in the survey.