

Creating
Sustainable
and Inclusive
Futures for
All

Stakeholder sessions

@RIDC_UK

November 2022 www.ridc.org.uk



Welcome

Gordon McCullough: CEO (RiDC)

Rowanne Fleck: Lead User Researcher at Energy Systems Catapult (ESC)

Catherine Cashman: Senior Researcher (RiDC)

Lorraine Haskell: Electric Vehicle Consumer Code (EVCC)

Eric Harris: Head of Research (RiDC)

Rebecca Wilkes: Team Manager – Consumer Insights (ESC)

Useful websites

www.ridc.org.uk

https://es.catapult.org.uk/tools-and-labs/living-lab/

https://www.electric-vehicle.org.uk/









Why are here?

Electrification of heating and transport.

Disabled people not included in net zero agenda

Energy Redress Scheme funded two-year project to discover how disabled consumers can have greater access to sustainable energy

Innovative, accessible solutions

Partnership with the Energy Systems Catapult

Review research and develop action plans

Rowanne Fleck Energy Systems Catapult

@EnergySysCat



About the Living Lab

The Living Lab is a network of volunteers from all around the UK, who help us understand how energy is used in real-life settings. In other words, their homes.

A new idea or whizzy bit of kit may work well in the test lab, but we want to know if it really makes a difference - to real people, with real demands on their time, and real budgets.

So we want to hear from you. It doesn't matter if you live in a mid-terrace house, a block of flats, or a cottage far away from anyone. Or if you rent or own your home.

And if you need a bit of reassurance when it comes to new technology, don't worry. We'll explain everything, help you set up any new technology, and provide support if you take part in a trial.

Sign up



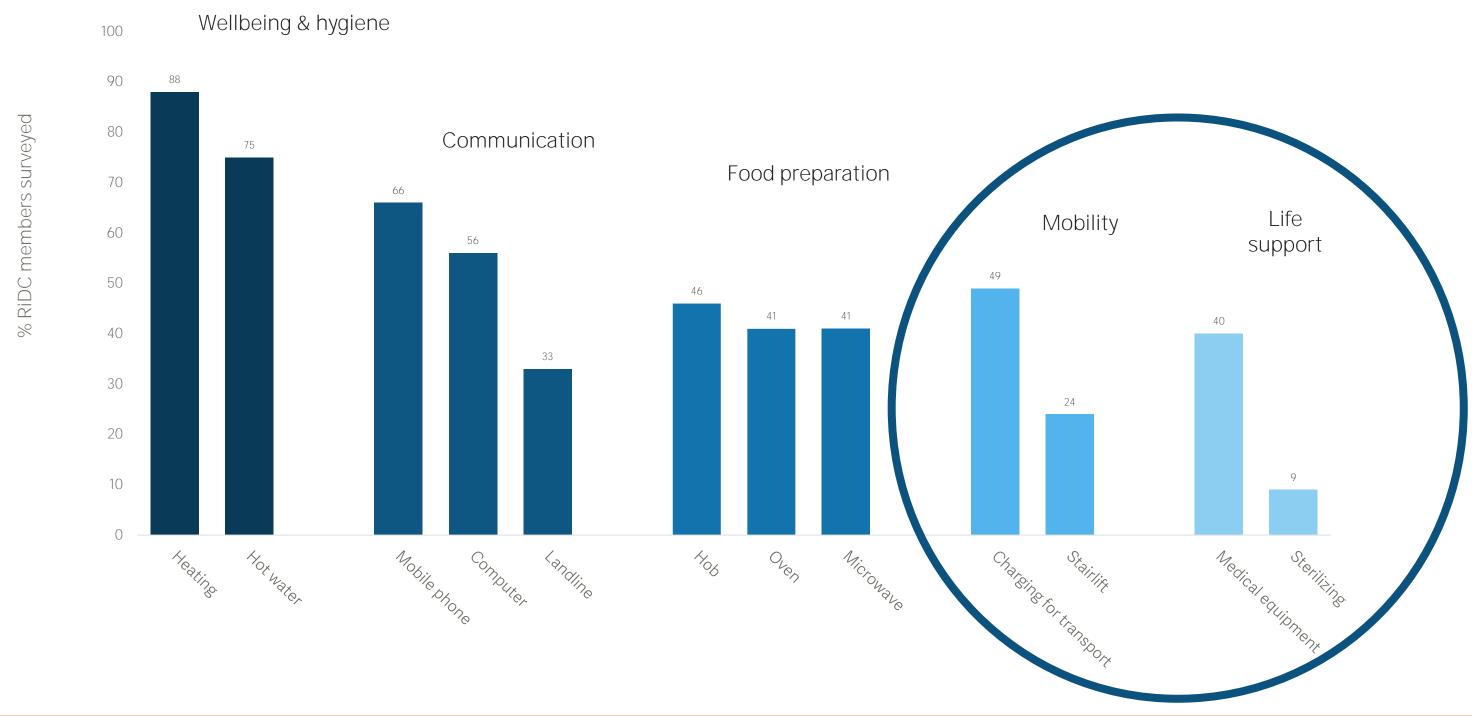




Emerging Vulnerabilities











"I am reliant on my

oxygen machine; I can't

imagine not being able to

afford to breathe."

Emerging vulnerabilities







Example Scenario

Rik has Parkinson's Disease and is reliant on devices for everything.

He uses a motorised wheelchair and an **Alexa** and **laptop** for communication and controlling entertainment devices.

Imagine the electricity is off for 2 -3 hours. What is the impact on Rik?

- Planning aids
- Protected access to energy
- Price protection
- Home efficiency improvements



The accessibility of electric vehicle home charging

Catherine Cashman RIDC

@RIDC_UK

Background

This research study was part of an ongoing broader RiDC research programme investigating whether disabled and older consumers can make sustainable choices and easily access and use low-carbon energy products and services.

With the upcoming ban on the sale of petrol and diesel vehicles by 2030, there is a nagging question at the back of many disabled motorists minds:

'Should my next car be electric?'

Back in 2019, we (RiDC) received a grant from the charity Motability, to look at how accessible electric vehicles and public charging points were for disabled motorists.

This identified serious accessibility shortcomings with both the charging equipment and supporting infrastructure:

"If I was on my own (at a public charging point), I'd be crying right now...I really wanted an electric car but that is no good for me, it was just impossible. I couldn't do it"—Mobility, cognitive impairment

■ This work was cited when the British Standards Institution (BSI) launched PAS 1899 which sets a minimum range of standards to make public electric vehicle charge points accessible.





https://www.ridc.org.uk/transport/going-electric

Following this project, we collaborated with Duku (a design company) and Urban Foresight to explore disabled motorists' charging experience to inform the design of an accessible public charging point.

• 61% of disabled people said they would consider buying an electric vehicle, but only on the condition that charging was made more accessible.



As a result, Duku has designed accessible charging points that aligns with the BSI standard for accessible chargers.

Both pieces of research alerted us to the sorts of accessibility issues that might also be relevant for electric vehicle home chargers.

What benefits could electric vehicle home chargers offer disabled electric motorists?

Electric motorists need off-street parking to install a home charger. However people with a disability are less likely to own their home and more likely to rent (social) housing which tends to have less off-street parking available. For those that do have off-street parking, having a home charger installed could offer the following benefits:

- Independence
- Convenience
- More affordable charging
- Remote rather than manual operation (via an app or voice assistant e.g. Amazon Alexa or a Google home hub)



https://www.motability.org.uk/media/nghmmyu0/electric_vehicle_charging_infrastructure_for_people_living_with_disabilities_ricardo_energy_and_environment.pdf

However, are electric home chargers accessible for disabled motorists and, most importantly, are the current and future needs of these motorists taken into account at the point of installation?

This was the question that led us (RiDC) to investigate the needs and experiences of disabled electric motorists when choosing and installing charging equipment in their home.

We conducted some desk research and two online workshops





Desk research

December 2021 - January 2022

To find out what electric vehicle home charging equipment, support and incentives were available to encourage uptake.

Online workshop 1 - preinstallation

May 2022

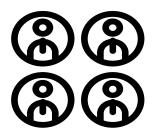
To explore what disabled motorists need to consider before purchasing and installing an EV home charger.

Online workshop 2 – post-installation

February 2022

To explore the lived experiences of disabled motorists who already have purchased and installed an EV home charger.

Who took part in our online workshops?



Online workshop 1 – preinstallation

Three RiDC panel members with a variety of mobility, dexterity, and cognitive impairments who had an electric or hybrid vehicle but no EV charging unit installed in their home.

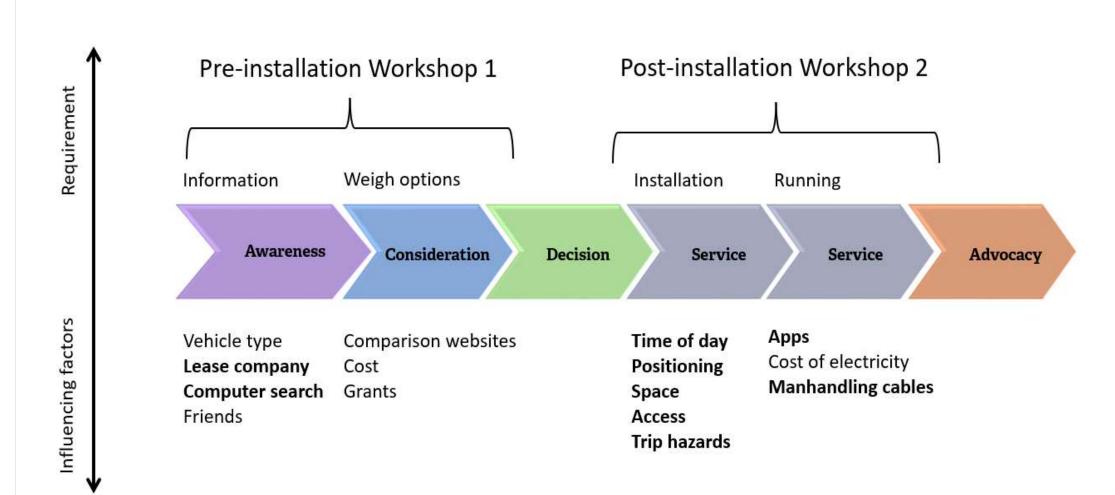
Online workshop 2 – post-installation

Six RiDC panel members with a variety of mobility, dexterity, hearing and cognitive impairments who already had an EV charging unit installed in their home.

Research outputs

We combined the outputs from both workshops and highlighted where in the customer journey critical touchpoints might exist for a disabled electric motorist.

This diagram shows a typical customer journey for choosing and running electric home charging equipment with influencing factors listed underneath each stage to identify potential areas of concern for disabled motorists.



And what were our main findings?

1. Information

Information

Awareness

Vehicle type
Lease company
Computer search
Friends

Disabled electric motorists in the pre-installation workshop had difficulty identifying suitable equipment, installers and comparing prices online due to:

 Feeling overwhelmed by the number of sources available.

"It's a minefield" – Mobility impairment

Technical terms and jargon used. "For many people – when they get bombarded with too much technical information it can be overwhelming – an idiot's guide is needed" – Mobility, cognitive impairment

 Absence of guidance on finding a certified installer and what to be mindful of during the installation

"Guidance on finding a trustworthy installer...it's trying to find who the installers are [that's difficult]"

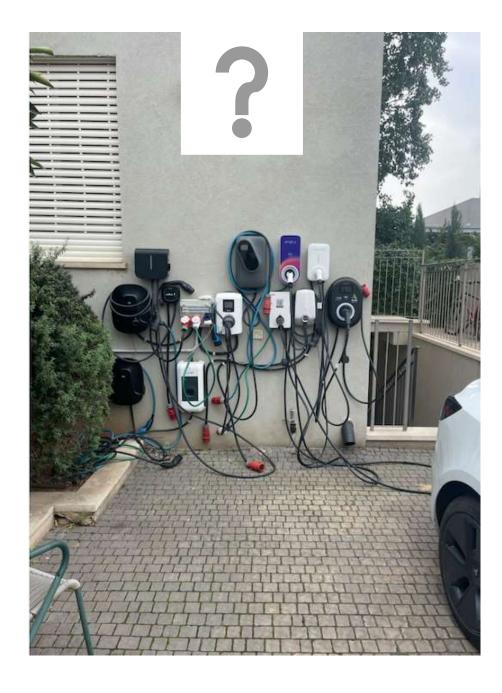
-Mobility, cognitive impairment

2. Weighing up options

Weigh options



Comparison websites Cost Grants



Disabled motorists needed very specific guidance on the types of charger that would best support their access needs before they could compare options such as:

- The type of cabling (tethered vs untethered) particularly for those with limited mobility or dexterity.
- Charging speed to best suit their vehicle's battery capacity, driving range and any specialist vehicle adaptations they may have (e.g. hoists, specialist hand controls, swivel seats etc...)
- Protective lock system (to prevent neighbours from using or vandalising it) and fuse protection. There was a lack awareness about these safety features that could benefit them.

Participants found the comparison website 'RightCharge' **useful** in terms of discovering certain charger brands and comparing prices.

3. Installation - preparation

Disabled electric motorists felt that the installation stage was when issues were most likely to arise and – when preparation and support would be most needed.

- Many were distrustful of installers, believing they would fail to consider their access needs at the point of installation the point at which the charging unit's positioning and relationship to the vehicle's input socket needs to be considered.
- Whilst the onus should be on the installer, many wanted to know what questions to ask the installer to ensure that the installation would be done with their current and future access needs in mind.

Prior to installation, customers are typically required to take and upload pictures of their electricity unit and different locations around their home.

Some participants found this challenging or impossible due to restricted mobility or dexterity impairments. They observed that they would have benefited from an in-person preinstallation visit to discuss their needs. "They told me to send photos of your electricity box, pictures of your house...I had to get people to help me do this" –Mobility impairment (wheelchairuser)

3. Installation process

Installation



Time of day Positioning Space Access Trip hazards A number of participants with home chargers felt that the installer failed to recognise or consider their access needs at the point of installation.

Dissatisfaction related to aspects such as charger height and positioning, and the surrounding environment e.g. lighting, space around the unit, slip or trip hazards.

One participant reported that the installer only consulted her carer about and failed to address whether she would be able to access it in a wheelchair. The charger was installed outside but the installer failed to discuss security measures to prevent abuse from the public. Fearful of this happening, the participant felt obliged to build a cabinet around it.

"I wasn't given a great choice about where it could go...I can't get to it in my wheelchair so I can't charge the car myself...I don't know what I would do if I didn't have a carer... I would go back to a petrol car because I could put fuel in more easily...go to a petrol station and get it put in for me "-Mobility impairment (wheelchair-user)

Many felt that the placement of the charging unit was chosen by the engineer for ease of installation and to minimise cost, rather than positioned to the needs of the user.

4. Running the charger

Running



Apps
Cost of electricity
Manhandling cables

During cold or rainy weather, those with chargers said they had sometimes encountered slip or trip hazards when accessing their charger due to surfaces being slippery and lighting and visibility being poor.

"The other problem is at night when it's dark, I need some sort of flashing unit at the end of the charger itself or otherwise have one on the car, it's quite difficult to find it at night and where to insert it...just something to guide you to the unit so you don't have to fiddle about when it's raining and I could trip and injure myself"—Mobility impairment, older

Whilst being able to remotely operate the charger using an app would be particularly beneficial for those who might struggle to access a charger (due to its positioning or height), some were concerned about how user-friendly and compatible they would be with their assistive technologies.

Based on these research findings, we wrote a research report as well as consumer guidance to help disabled motorists make informed choices about choosing and installing EV charging equipment in their home.

These were both published on our website (www.ridc.org.uk) in June, 2022.

What could be done in light of this research?

Below we summarise our broad recommendations for action based on our research findings which can be discussed and refined later in our session.



More detailed and consistent consumer information, guidance or checklists (e.g. on what EV home charger features to consider) should be made available to assist disabled electric motorists when choosing and installing EV home charging equipment that suits their particular needs.



All providers of consumer information and suppliers' should ensure their websites and accompanying apps at least meet basic accessibility standards (Web Content Accessibility Guidelines (WCAG) 2.1. AA). Information should also follow Plain English guidelines to make it as clear and concise as possible.



Installers should offer disabled or vulnerable customers pre-installation customer visits where needed, rather than relying on remote assessments (i.e. photos, online or phone questions).

What could be done in light of this research?



Installers and equipment supplier's code of practice and staff training should recognise and consider the different needs of disabled and older users as well as the possible declining nature of their disabilities and future needs when installing the equipment. Disabled and older customers should also be present and personally consulted by the installer at the point of installation.

• Installers should provide disabled users with documentation showing they are an authorised installer, consider the space around the charging unit (including if it can be accessed safely with or without mobility aid(s)), consider and address potential trip and safety hazards, ensure the charger is placed somewhere where it is visible with sufficient lighting, and ensure the charger is positioned at the right height and within easy reach for the user.



The BSI should build requirements around best practice in installation of accessible home charging units into the new BSI standard that has been developed for public EV charging.



Encourage further research on the (UX) user experience of disabled electric motorists as the EV home charging market fast develops. The number of disabled EV users is currently relatively small, with early adopters. Similarly, the home EV charging market is relatively new.

Lorraine Haskell EVCC

@evconsumercode





- EVCC administered by Renewable Energy Assurance Ltd (REAL).
- Electric Vehicle Consumer Code for Home Chargepoints sets high standards for members installers of domestic EV chargepoints – to protect consumers
- Covers the entire consumer journey from the installer's first contact with a consumer to dealing with complaints and protection should a company go out of business, including dealing with vulnerable consumers and site surveys
- Code requires compliance with legal provisions and further
- Dovetails with IET's Code of Practice on installing domestic chargepoints and recommended by OZEV and EST Scotland for their Domestic Chargepoint Funding
- EVCC carries out due diligence on applicants and monitors members for compliance

- EVCC is also CTSI approved Alternative Dispute Resolution body under the Alternative Dispute Resolution for Consumer Disputes (Competent Authorities and Information) Regulations 2015
- A team of experienced caseworkers will work with Consumers and Code Members to mediate on issues using their best endeavours to achieve a resolution that is fair and acceptable to both parties
- Process should be faster and more effective than court action, and is free
- Also can offer arbitration cheaper alternative to court, still legally binding

'Clear standards and codes of practice are required to ensure that both product and installation are accessible and meet the needs of all motorists, including those with disabilities and older people.'

RiDC's report is incredibly relevant to EVCC – EVCC already well-placed to deliver on what is being asked for.

- 'Participants felt they would have benefited from a pre-installation visit to discuss their particular needs, rather than the installer relying on photos, online or phone questions.'
- 'Participants in workshop one expected to be understood and listened to by the installer throughout the installation process to ensure that the charger would be positioned at the right height for them and within easy reach. They felt it was particularly important for installers to be aware of their current access constraints. Further to this, consideration should be made as to the possible future decline of their capabilities due to the nature of some disabilities.'

Section 3.1 of the Code reads: 'In the case of vulnerable consumers or consumers in vulnerable circumstances, Code Members should provide extra care and support to ensure that Consumers understand the key documents, including the quotation, the Contract and the guarantee arrangements. This may, for example, mean involving a trusted friend or relative in any contacts they have with the Consumer, and arranging for such a person to be present during a visit to the Consumer's home.

Code Members will seek to maximise accessibility of Chargepoint equipment to the Consumer wherever possible and safe to do so.'

- More detailed consumer information and guidance should be made available to assist disabled motorists when choosing and installing home EV charging equipment to ensure it suits their particular needs.'
- 'Many stressed the importance of preparation, i.e. knowing exactly what questions to ask the installer and what to be mindful of to ensure that the installation is done to best support the user's access needs.'

Section 1: 'Code Members provide Consumers with the information they need to choose the most suitable Chargepoint for them and explain how to get the best from it. We have provided <u>guidance for Consumers</u> including a list of questions they should ask before going ahead.'

Section 4.6: Prior to signing a contract, Code Members must ensure consumers have received: a written detailed quotation to include information on where the Chargepoint will be installed, any alterations to the property or services that will be needed, the operation of the Chargepoint, indications as to how long it could take to charge the consumer's EV, monitoring and programming options, any requirement for regular servicing, inspection and/or testing, information about reliable sources where the Consumer can check any claims

for financial benefits.'

• 'Those in workshop one expressed a lot of distrust in installers, believing that they could fail to consider their access needs and be faced with unexpected additional charges.'

Section 4.3: 'Anyone who is visiting a Consumer's home on a Code Member's behalf MUST: present price information clearly. Any discounts offered (e.g. where the installation of the Chargepoint is offered at a discount if taken at the same time as other installs/work) must be explained and must be from a realistic genuine price e.g. one at which the Code Member can show that they have made a significant number of installs of Chargepoints.'

Section 4.6.3: "When a Consumer receives the final invoice, there should be no unexpected items compared with the quotation, unless they have been agreed beforehand in a written variation of contract signed by the Consumer to include any impact on the cost and the completion date."

Going forward, EVCC would like to work with RiDC to adapt wording of Code, to make sure it covers off all points.

For more information Visit: www.electric-vehicle.org.uk Email: info@electric-vehicle.org.uk

Questions and comments

use the Q&A function



Renewable home energy solutions

How accessible is consumer information on renewable home energy and heating solutions?

Eric Harris RIDC

@RIDC_UK

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Background

This research study is part of a broader RiDC research programme investigating whether disabled and older consumers can easily access and use low carbon energy products and services. The research programme - Enabling Inclusive Innovation and Sustainable Choice is funded by the Energy Savings Trust under the Energy Redress Scheme Round 11 (Innovation). The programme is being led by RiDC and delivered in partnership with Energy Systems Catapult (Living Lab).

Research

This research investigates the needs and experiences of disabled people when choosing and installing alternative renewable home heating and home energy solutions, e.g., solar panels, air, and ground heat pumps.

This research comprised three main elements:

- Survey of RiDC panel
- Two online user workshops
- Mystery shopping

RiDC | Renewable Home Energy Solutions Background

Our research overview

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Why What What What What are we doing this research? do we know? do we want to find out? did we find out? can we do in light of this research? 80% of panel have gas boilers **Emerging market** Information Do these low carbon alternative solutions work for **Fast changing** Gov encouraging more disabled people? Installation sustainable alternative heating Complex solutions What does the customer Support journey look like? Fossil fuels getting more expensive

RiDC | Renewable Home Energy Solutions Background

Method

What we did

- Survey
- Workshops
- Mystery shopping

Survey

A short survey was sent out on 8th April 2022 to 2,413 RiDC panel members to help gain a better understanding of disabled people's view of alternative heating sources and collect any experiences they might have in finding and installing these.

http://www.rica.org.uk/our-panel

In the survey we asked panel members about points of interest, including but not limited to, whether they used any renewable energy sources in their homes, their biggest worries about using these sources and any barriers to when using sustainable energy.

Survey

- 683 responses
- Outputs helped inform two user workshops

Workshops

These workshops were designed to gain a deeper understanding of disabled people's experiences of alternative heating sources. They investigated the entire customer journey from looking to install a renewable energy source in the home through to the installation and running of renewable energy solutions, and focused on:

- 1. The extent to which the information available on renewable energy sources is accessible
- 2. The accessibility of funding a renewable source
- 3. The installation of these sources
- 4. The running of these sources

Workshop 1 - People who had experience with renewable home energy and heating sources.

Areas explored

Pre-installation experience

- Any barriers when looking for information on installing a renewable energy source in their home
- Funding a renewable energy source
- Any workarounds used, based on their needs
- What they would advise a close friend with similar needs to them, to look out for when applying for funding

Installation and running experience

- What made them chose their solution
- Hidden costs
- Installation work
- The impact of disability if long investment times were experienced

Workshop 2 - People without a renewable home energy and heating source but an interest in finding out more about this topic

Areas explored

Accessibility of information available

- Whether they had experienced or envisaged any barriers when looking for information on installing a renewable energy sources
- Their experience of looking into funding a renewable energy source
- For those who had researched this previously, whether the website they used was accessible to them.

What the challenges might be with installation and running

- Any barriers envisaged during installation
- Their number one reason why they might not install a renewable energy source / biggest concerns

Mystery shopping

Aim & Participants (20 recruited – 18 participated)

To investigate the accessibility and usability of websites that provide information about obtaining a quote for a renewable energy source and looking to fund a renewable energy source



Cognition

Neurodiverse, mental health, Autism



Mobility

Multiple degenerative conditions including: spinal injuries, polio, fibromyalgia, osteoarthritis.



Hearing

Hard of hearing, Deaf

See Report Appendix 1 for full list of participant disabilities



Dexterity

Fibromyalgia, fatigue, systemic vasculitis



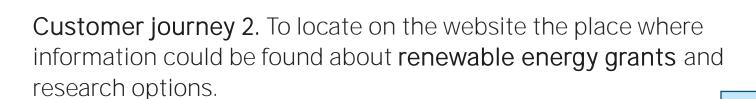
Visual

Blind with residual vision, blind with no light perception, partially sighted

Mystery shopping

The mystery shoppers were asked to visit seven websites, chosen for their prominence as providers of alternative heating sources information, and asked to follow one of two typical customer journeys dependant on the type of site visited.

Customer journey 1. To locate on the website the place for **renewable energy quotes**, research options without obtaining a quote.



After each website visit, the participants were asked to complete a short questionnaire detailing their experience by recording their satisfaction scores and answers to a series of nine accessibility heuristics questions.

Websites visited

Customer journey 1.

- https://www.britishgas.co.uk/
- https://www.eonenergy.com/
- https://www.scottishpower.co.uk/
- https://www.edfenergy.com/

Customer journey 2.

- https://www.gov.uk/
- https://www.ofgem.gov.uk/
- https://energysavingtrust.org.uk/

RiDC | Renewable Home Energy Solutions4 Method

Results

What we found

Short survey to help inform two workshops exploring our panel member's understanding and experiences of renewable energy sources in the home.

When asked about their use of renewable energy sources in the home, 83% said they do not use renewable energy sources in the home.

- 13% said they use solar power/electricity panels
- Take up of air (2%) or ground source(1%) heating totalled to 3%

When asked what their biggest worry was

- Three quarters (76%) of the respondents said **cost**
- Maintenance (47%) and Installation (45%) came next
- Regular supply and charging of assistance aids also featured

Barriers

43% of the respondents said they know of (or perceived) barriers to using sustainable energy source in the home

Thee main barriers uncovered

- Cost
- Living situation (social or rented housing)
- Space for equipment

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insulation expensive information access benefit disabled affordinstallation don't home energy work housingpanel, rent airliveCOStsource pumpSolar heat roof install property money costs groundpeople sustain council power initial high association company equipment maintenance
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Funding

When asked if they know of some government funding schemes

- The majority (80%) were unaware of these schemes
- People were more aware of the Domestic Renewable Heat Initiative (closed 31 March 2022) than the Smart Export Guarantee

What we found - Workshops

Themes

Information

Participants who already had experience of researching installation and applying for funding of a renewable energy source highlighted the difficulty of navigating the 'system' and its complexities.

Quotes from participants when applying for funding ...

"It's a minefield ... even if you have your acuity and you are able to navigate the system and look at what is available, it is still extremely complex. Its almost as if they are trying to trip you up"

Denise, Mobility

"It was a quite involved process then of actually applying through the different providers ... it was quite work intensive, you have to really know what you are doing"

Information

In part these difficulties were due to the language used. Participants emphasised that the **use of jargon** was a barrier for them, highlighting the need for information to be in Plain English

Installation

The practicalities of the installation were discussed which highlighted many concerns of the participants.

- When in the day the work would be carried out.
- How long the work would take and the disruption to people's 'normal' lives.
- Continuity of supply especially for assistive technology such electric wheelchairs
- Trip hazards during and post installation

Running and maintaining

What would happen if the system fails, who takes responsibility?

- Is there any PSR consideration given to renewable energy solutions?
- What would the contingency plan be?

Costs

The cost of many alternative 'green energy' solutions is often framed in terms of return on investments (ROI) which can span many years.

ROIs of over 15 years are not uncommon. The dynamic of some disabilities can mean these long-term benefits will not be seen by some people because of a need to move home or having a shorter life expectancy. This can make the motivation for uptake more difficult to justify.

Maria, Mobility

What we found - Mystery shopping websites

Finding renewable energy information

Accessibility toolbar or feature

Where available the accessibility toolbar or feature on websites were well received.

"I found it very easy to navigate around this website,
I was very pleased to see British Gas have an
Accessibility Tool bar and also Access for All and
BSL"

Amy, Mobility

This feature was not always available or easily found.

One shopper stated the importance of having accessibility settings and could only find an accessibility statement in a pdf format.

Accessibility toolbar or feature

"The Gov website did not have accessibility settings just an 'Accessibility Statement' which basically told me nothing, well nothing I could understand easily anyway ... In my experience document downloading involves big wordy convoluted and inaccessible information. I backed away"

Jess, Mobility & V.I.

Minimising the need to provide personal information

Access of certain information was restricted by having to first provide personal information much of which was seen to be not necessary at the exploration stage.

"We did try clicking on the air source heat pumps icon to see if we could find more information, but the link took us to a request for personal information"

Jess, Mobility & V.I.

Navigation

All our participants found their way to the renewable energy information for the source they were interested in, which was reflected in their scores

 60% reporting this task to be extremely easy or somewhat easy however, 33% experienced some level of difficulty

Having direct links to minimise searching using the toolbar

Mystery shoppers found they had to spend time trying to search for the information they needed, as it wasn't readily available or easy to access.

Need to have a concise list of the renewable energy sources available and for the headings to be clear for each subsection.

"I would have thought they would be there on a link on the home page, not hidden ... something as new and improvising as this should take centre-stage on the home page."

Judith, Mobility, Visual and Hearing.

What we found - Mystery shopping websites

Finding a quote for a renewable energy source

Terms and conditions

These should be big and clear enough for visually impaired people to read. This is especially important when considering devices to zoom in to see the information

"I found some tiny terms and conditions text at the bottom of the page but my pinch and expand options would not expand so far, sadly not enough for me to be able to read it"

Jess, Mobility, V.I,

Online quotes

Mystery shoppers commented on the lack of options for obtaining quotes. They wanted a way to obtain online quotes without having to arrange for someone to call as this isn't always accessible for some people.

"I couldn't get an online quote, I had to fill in all my details and arrange for someone to call to discuss this heating option. I wouldn't want to do this"

Holly, Mobility, V.I. & Hearing.

Alternative ways of obtaining quotes

Options suggested by our participants

- Adding a live chat box that incudes multiple ways of obtaining quotes
- A video call back rather than simply a phone call
- Subtitled videos alongside transcripts
- Availability of British Sigh Language interpretation for example SignLive.

"I didn't get a complete quote. I had the option to leave my details for an outside contractor to ring me back. I have problems using my phone because my hearing is poor even with hearing aids. I always prefer to use an email or text so I can make sure I've understood the conversation and have a record"

Violet, Mobility & Hearing

Minimising Jargon

Too much use of jargon which our shoppers found confusing and specialised terminology.

One solution suggested was to add a key to explain technical language so people do not have to take time to find this out on their own which can be difficult and time consuming. This could also be made easier by reducing lengthy text and using short sentences to summarise key information.

Complicated language, jumbled information
[across] businesses suppliers and domestic
[markets]. It seemed like an awful lot of words for
very little actual information

Jess, Mobility, V.I,

Outdated language

"Their priority services register page uses out of date terminology. It refers to 'the deaf' and 'the ill or disabled'. These are unacceptable to the groups of people they refer to"

Jess, Mobility, V.I,

What we found - Mystery shopping websites

Finding how to apply for government grants

Clear information

A need for clear information with step-by-step guidance on how to apply for grants.

"No simple list of what was available and what it applied to, or simple steps to show how to apply for it"

Beth, Mobility, Gov.uk

Availability of grants

Grants not considering the situation of disabled people not being a homeowner and on benefits.

"I could find nothing anywhere that a disabled, social housing tenant living on disability benefits could apply for"

Jess, Mobility & V.I., Gov.uk



Results

Common theme across all three stands

Information

Channels

Most of the information on renewable energy and heating can be found online.

Burdon is on the providers to make this information accessible for all assistive technologies, such as:

- Screen readers
- Magnification / colour software
- Tracking pads
- Speech input

Websites built towards WCAG2.1 AA standard

The use and visibility of website accessibility toolbars across all platforms.

Additionally alternative channels must be offered such as print, phone and SignLive

Content

The diversity and complexity of renewable energy and heating sources can make choosing the *right* solution for people's particular needs difficult. Information on the following would be helpful

- What grants are available and if there are any disability specific help
- The use of short sentences in Plain English to give clarity about technical terminology
- Consumer focus guidance on the questions that disabled people could benefit from asking suppliers

The perspective of disabled people is not being considered when providing information, which in-turn leads to a sense of being excluded from contributing to the green agenda.

Installation

Lack of a conversation with installers.

Consideration must be given to people's particular needs, i.e.,

- Understanding the scope and practicalities of installation
- People's short, medium and long-term plans
- Any limitations of use/interaction with controllers
- Installation time taken
- Installation working hours
- Contingency what to do when system fails

Recommendations

What can be done to support disabled people to engage with alternative heating and energy sources?

Recommendations



More detailed, consistent and easy to read **consumer information**From: government, energy suppliers, housing organisations, equipment suppliers and installers



Greater compliance to basic website accessibility standards across all stakeholders - Web Content Accessibility Guidelines (WCAG 2.1. AA).



Flexibility in **choice of channels** for quotes: over the phone, chat boxes, Sign Live, email, home visits



Policy reflecting disabled people's actual circumstances.

ROI, Grants, Tariffs

"Being physically unable to cope with the upheaval of changing to more efficient and environmentally friendly heating/ventilation

system when you have no family support makes change

impossible and the pay back loan scheme would add a layer of

difficulty if we had to sell in order to move to sheltered housing"

Recommendations



Code of practices and staff training for home installation to specifically address the needs of disabled and older users



Move towards requirements around **best practice in installation and equipment design**, to be folded into national and international standards
and national building regulations



Encourage further user experience UX research into alternative home heating solutions in partnership with disabled people

"It's harder for people with any kind of cognitive difficulties to understand

the options and carry them out. As someone with complex medical needs I need to use a lot more energy than others and don't have the option to reduce my energy use in many areas ... for example, I have lots of medical equipment (ventilator, suction machine, electric wheelchair, hoists, inflatable beds....), heating is important to me as I have temperature regulation difficulties and am prone to chest infections, long hot showers and hot baths are an important part of my physical therapy and help me to

keep my muscles and joints healthy."

When change happens fast ...

disability comes last

- Last to inform
- Last to consider
- Last to design for

RiDC | Renewable home energy solutions Making change happen

Rebecca Wilkes Energy Systems Catapult

@EnergySysCat

Questions and comments

use the Q&A function

Creating future actions

- Has the research made you think differently?
- What is a good starting point to bring about change?
- What more needs to be done?

Thank you

We will send a short questionnaire in the next few days to find out what you thought of today and what you and your organisation might do in the future.

Email gordonmccullough@ridc.org.uk if you want to discuss this research or RiDC's work.

