

# Community climate hubs: the Greener and Cleaner peer-learning model for low-carbon lifestyles

December 2024



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Greener & Cleaner

## About CAST

Led by the University of Bath, the UK Centre for Climate Change and Social Transformations (CAST) is a collaboration between Bath, Cardiff, Manchester, and East Anglia universities, and the charity Climate Outreach. The Centre aims to be a global hub for understanding the profound changes required to address climate change. We research and develop the social transformations needed to produce a low-carbon and sustainable society. Our experts include psychologists, sociologists, political scientists, engineers and organisational specialists working across multiple scales (individual, community, organisational, city-region, national and global) to identify and experiment with various routes to achieving lasting change. For further details on CAST see: <https://cast.ac.uk/>

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## Acknowledgements

Greener and Cleaner's Chief Executive Officer, Clare Searle, and the Programme and Impacts Manager, Tamasin Rhymes, both made a significant contribution to this study through the co-design of the evaluation approach, including the survey and interview protocols. Particular acknowledgement is also due to the staff and volunteers at the Greener and Cleaner Hub, who engaged with Hub users to facilitate the survey data collection, as well as providing feedback and insights on the preliminary findings.

This research was funded by the [CAST Impact Fund](#). CAST is funded by the Economic and Social Research Council (ESRC).

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<sup>1</sup> Disclaimer: Kaloyan Mitev is now at the Joint Research Centre, European Commission. The views expressed in this publication are those of the author and do not reflect the official position of the European Commission.

## Executive summary

[Greener and Cleaner](#) is working with researchers from the Centre for Climate Change and Social Transformations ([CAST](#)) to evaluate the outcomes of engaging with the Greener and Cleaner Hub. This study aims to understand how using the community climate hub influences people's understanding of climate change and their uptake of low-carbon behaviours. Hub users completed a survey (n=152) and interviews (n=20) which explored these outcomes, as well as Greener and Cleaner's peer-learning model for engaging and motivating people.

Over half (56%) of Hub users stated their awareness of environmental issues has increased 'significantly' or 'very much' since engaging with Greener and Cleaner. They demonstrated a relatively high level of climate literacy, compared to a UK representative sample, and longer-term Hub users could more accurately identify high-carbon behaviours than those who recently joined the Hub. This indicates that continued engagement with the Hub over time supports greater understanding of low-carbon lifestyles. Importantly, the Hub reaches people who may have no prior interest in environmental issues; over one in five users (21%) discovered the Hub incidentally when they passed by it in The Glades shopping centre (in Bromley).

Participating in Hub workshops or activities encourages a range of low-carbon behaviours. Almost two thirds of survey participants reported reducing how much stuff they buy (66%), repairing items where possible (64%), or buying second-hand items more frequently (62%). A large proportion have also reduced energy use at home (46%), food waste (44%), and meat consumption (37%). Some use public transport (42%) and active travel (36%) more frequently. The interviews revealed Hub engagement increases motivation for sustainable practices, and builds knowledge and confidence to initiate discussions with others about low-carbon living. Many users choose to volunteer in the Hub by running workshops or engaging with the public, thus deepening their involvement in community-level climate action.

Hub users also face challenges in living more sustainably, such as a lack of interest from family members or the wider community, or experiencing guilt if they are unable to consistently align their actions with their values. Greener and Cleaner encourages embedding sustainability into daily lives through small, manageable changes in behaviour, especially for those who are constrained by day-to-day responsibilities, or feel overwhelmed by the prospect of committing to major lifestyle changes. This emphasis on actionable solutions resonates with Hub users.

Figure 1 is an overview of the mechanisms of behaviour change employed by the Hub and the behavioural outcomes identified in this study. The left side shows three approaches Greener and Cleaner uses to cater for different learning styles and interests, as well as fostering a sense of

community and providing support for people feeling concerned about climate change. The right side shows positive outcomes for Hub users, including increased environmental understanding and a willingness to take actions in roles beyond individual consumption decisions, for instance encouraging sustainable practices in the workplace.

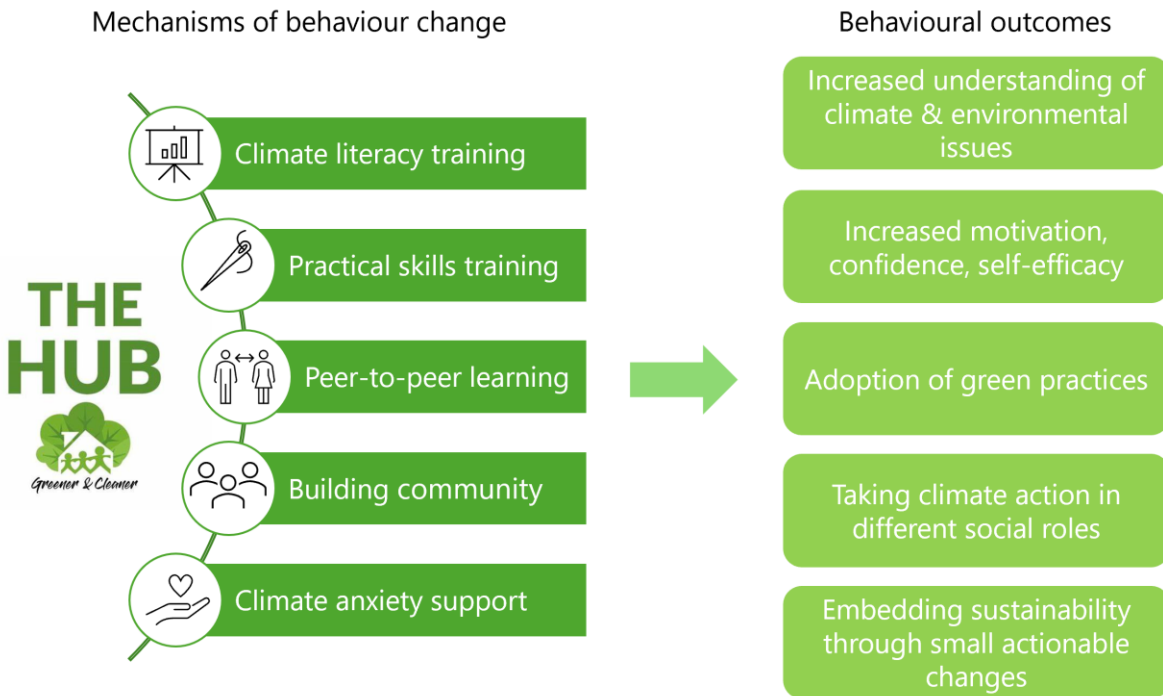


Figure 1, Greener and Cleaner Hub mechanisms of behaviour change and the behavioural outcomes

Recommendations for Greener and Cleaner include tailoring some workshops to people at different life stages, showcasing the cumulative impact of Hub users' climate actions, and fostering stronger links with local authorities to explore collaboration opportunities. In summary, the Greener and Cleaner Hub provides an innovative peer-learning model for engaging the public in low-carbon lifestyles, which could be replicated in community climate hubs in other locations.

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## 1.0 Introduction

This section reviews existing research on pro-environmental behaviour change and the role of grassroots initiatives such as the Greener and Cleaner Hub<sup>2</sup>, and presents the objectives of this evaluation study.

### 1.1 Low-carbon behaviours and the role of community organisations

The scale and urgency of climate change necessitates a reduction in carbon emissions that is sufficiently broad, deep, and rapid to contribute to fulfilling the goals of the Paris Agreement<sup>3</sup>. This involves a fundamental societal shift away from patterns of development that normalise high-carbon ways of living<sup>4</sup>. This transformation requires supply-side mitigation, for instance accelerating the switch to renewable energy, as well as demand-side approaches such as encouraging more sustainable lifestyles<sup>5</sup>. People can directly reduce emissions through their own consumption decisions, but equally have the ability to shape wider structural change by influencing policy or organisational practices<sup>6</sup>. Acknowledging the important role of people as agents of change in climate mitigation, there is a body of research which investigates how behaviour change occurs.

#### Approaches for encouraging the adoption of green behaviours

Behaviour change research has found that values and beliefs (e.g., climate change concern) can predict low-impact pro-environmental actions (e.g., recycling), whereas broader social and structural factors, such as income or location, better explain higher-impact environmental behaviours (e.g., avoiding driving)<sup>7</sup>. Pro-environmental attitudes can influence behaviour but do

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<sup>2</sup> See: [The Hub from Greener and Cleaner - Greener and Cleaner](#)

<sup>3</sup> UNFCCC, 2015. *The Paris Agreement*. Bonn: United Nations. [The Paris Agreement | UNFCCC](#).

- Climate mitigation will also help address some of the environmental or societal challenges outlined in the United Nations Sustainable Development Goals [THE 17 GOALS | Sustainable Development](#)

<sup>4</sup> Moore, B. et al. (2021). Transformations for climate change mitigation: A systematic review of terminology, concepts, and characteristics. *WIREs Climate Change*, 12(6), <https://doi.org/10.1002/wcc.738>

- Creutzig, F. et al. (2018). Towards demand-side solutions for mitigating climate change. *Nature Climate Change*, 8, 260-263.

<sup>5</sup> IPCC, 2018. *Special report on global warming of 1.5 °C - Summary for policy makers*. Geneva: Intergovernmental Panel on Climate Change, United Nations. [SR15 SPM version stand alone LR.pdf \(ipcc.ch\)](#)

- Committee on Climate Change, 2019. *Net Zero - The UK's contribution to stopping global warming*. [Net Zero - The UK's contribution to stopping global warming - Climate Change Committee \(theccc.org.uk\)](#)

<sup>6</sup> Verfuert, C. et al. (2024). [Catalysts of Change: People at the Heart of Climate Transformations. Key messages from five years of social science research on climate change](#). London: Centre for Climate Change and Social Transformations

<sup>7</sup> Stern, P. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56(3), 407-424.



not always translate into behaviour change<sup>8</sup>, a dissonance often referred to as the 'value-action gap'. Social norms (i.e., what is perceived to be normal or the 'right thing to do') have a strong effect on behaviour<sup>9</sup>, and new behaviours can spread via peer influence or neighbourhood effects<sup>10</sup>. Habits are one of the strongest impediments to lifestyle change, acting to reinforce or 'lock in' existing behaviours<sup>11</sup>. Intervening during a significant life transition or 'moment of change' is one way of disrupting habits and facilitating behaviour change<sup>12</sup>.

A range of top-down approaches for encouraging low-carbon behaviours have been employed. Information campaigns aim to educate the public by highlighting environmental issues and providing actionable steps. Information campaigns may raise awareness and concern, although their effectiveness in leading to behaviour change is often limited<sup>13</sup>. Behavioural 'nudges' seek to guide choices without restricting options and are effective in some contexts, but their efficacy to influence more complex decision-making is uncertain<sup>14</sup>. Policy-driven approaches, such as 'push' measures (e.g., taxes on high-emission goods) and 'pull' strategies (e.g., subsidies for domestic renewable energy), are designed to create external motivators for behaviour change. Both can be effective, although push measures tend to face public opposition if they are viewed as being unfair<sup>15</sup>. Top-down approaches may overlook place-specific contexts or cultural acceptability<sup>16</sup>.

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<sup>8</sup> University of Essex, Institute for Social and Economic Research (2018). *Insights*. Understanding Society: Waves 1-11, 2009-2020 and Harmonised BHPS: Waves 1-18, 1991-2009. [Insights 2018 launched | Understanding Society](#)  
- Whitmarsh, L. et al. (2017). Who is reducing their material consumption and why? A cross-cultural analysis of dematerialization behaviours. *Philosophical Transactions of the Royal Society A*, 20160376.

<sup>9</sup> van der Werff, E. et al. (2013). It is a moral issue: The relationship between environmental self-identity, obligation-based intrinsic motivation and pro-environmental behaviour. *Global Environmental Change*, 23, 1258-1265.

<sup>10</sup> Wolske, K. S. et al. (2020). Peer influence on household energy behaviours. *Nature Energy*, 5, 2012-212.

<sup>11</sup> Kurz, B. et al. (2015). Habitual behaviours or patterns of practice? Explaining and changing repetitive climate-relevant actions. *WIREs Climate Change*, 6, 113-128.

- Marechal, K. & Lazaric, N. (2011). Overcoming inertia: insights from evolutionary economics into improved energy and climate policies. *Climate Policy*, 10, 103-119.

- Verplanken, B. et al. (2018). Cracks in the Wall: Habit Discontinuities as Vehicles for Behavior Change. In Verplanken, B. (Ed). *The Psychology of Habit*. Springer.

<sup>12</sup> Nash, N., Whittle, C. & Whitmarsh, L. (2020). Rapid Review of 'Moments of Change' and Food-Related Behaviours. Cardiff: Food Standards Agency. [Rapid Review of 'Moments of Change' and Food-Related Behaviours | Food Standards Agency](#)

- Swaffield, J., Whitmarsh, L., & Poortinga, W. (2023). Interrupting the flow of water: Behavioural interventions and moments of change. *Institute of Water Journal*, 8, 4-5.

<sup>13</sup> Whitmarsh, L., Poortinga, W., & Capstick, S. (2021). Behaviour change to address climate change. *Current Opinion in Psychology*, 42, 76-81. <https://doi.org/10.1016/j.copsyc.2021.04.002>.

<sup>14</sup> Loewenstein, G. & Chater, N. (2017). Putting nudges in perspective. *Behavioural Public Policy*. 1(1), 26-53. <https://doi.org/10.1017/bpp.2016.7>

<sup>15</sup> Powell, D. & James, E. (2023). How public engagement can support reducing car use: A briefing for policy makers and communicators. [CAST Briefing 21](#)

<sup>16</sup> Howarth C., et al. (2023). Enabling Place-Based Climate Action in the UK: The PCAN Experience. A report by the Place-based Climate Action Network (PCAN), UK. [LSE PCAN Enabling Place-based Climate Action in the UK: The PCAN Experience](#)

Alternative approaches include deliberative processes to inform policy and gain public support<sup>17</sup>, and community-led initiatives to engage and support people to adopt low-carbon behaviours<sup>18</sup>.

### The role of grassroots organisations in affecting change

There is growing academic and policy interest in the role of grassroots initiatives in climate action. Community organisations in the UK have a rich history, from tackling poverty and social inequities during the Industrial Revolution, to advocating for civil rights and women's rights in the 20th century. More recently, grassroots organisations and charities have led initiatives that resulted in improvements in local environmental quality, social cohesion, and public health<sup>19</sup>. In the context of climate change, grassroots actors increasingly drive processes of change beyond the local (e.g., shifting societal norms, engaging in climate discourses), collaborate with government or local authorities to affect systemic change (e.g., as intermediaries in multi-stakeholder partnerships), and engage local communities in low-carbon living (e.g., supporting people to understand low-carbon innovations)<sup>20</sup>. However, grassroots organisations face multiple challenges. A lack of adequate funding and resources is one common obstacle, reducing their ability to scale up successful initiatives<sup>21</sup>. A reliance on volunteers can constrain

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<sup>17</sup> Zanin, B. et al. (2024). Five principles for good public engagement: How to get people involved in the climate conversation. [CAST Briefing 29](#)

- Mellier, C. & Capstick, S. (2024). How can citizens' assemblies help navigate the systemic transformations required by the polycrisis? Learnings and recommendations for practitioners. [CAST Guidelines: How can citizens' assemblies help navigate the systemic transformations required by the polycrisis?](#)

<sup>18</sup> Minas, A. & Mander, S. (2024). Driving change from Our Streets: Insights from a community initiative to reduce car use for short journeys. *Science Talks*, 5, 100120. [Driving change from Our Streets: Insights from a community initiative to reduce car use for short journeys - Science Talks](#)

<sup>19</sup> Powell, N. et al. (2024). Co-creating community wellbeing initiatives: What is the evidence and how do they work? *International Journal of Mental Health Systems*, 18, 28. <https://doi.org/10.1186/s13033-024-00645-7>

- Cattino, M., & Reckien, D. (2021). Does public participation lead to more ambitious and transformative local climate change planning? *Current Opinion in Environmental Sustainability*, 52, 100-110.

<https://doi.org/10.1016/j.cosust.2021.08.004>

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- Cloutier, G. et al. (2014). Planning adaptation based on local actors' knowledge and participation: a climate governance experiment. *Climate Policy*, 15(4), 458-474. <https://doi.org/10.1080/14693062.2014.937388>

<sup>20</sup> Minas, A. & Mander, S. (2024). Unpacking the transformative potential of grassroots climate action: when, why, and how do actors drive decarbonisation? *Journal of Cleaner Production* [Under review].

<sup>21</sup> Wood, J. (2023). The power to act: Dissecting distinctive elements of power and ownership in community organizing in England and Wales. *Community Development Journal*, bsad023. <https://doi.org/10.1093/cdj/bsad023>

- Finnegan, F., McCrea, N., & Chasaide, N. N. (2021). Community development and financialization: Making the connections. *Community Development Journal*, 56(1), 1-20. <https://doi.org/10.1093/cdj/bsaa057>

their ability to sustain long-term projects<sup>22</sup>. There is often limited capacity to robustly measure their impacts and evidence their contribution to achieving sustainability goals<sup>23</sup>.

## 1.2 Overview of the Greener and Cleaner Hub

Greener and Cleaner is a community climate hub located in The Glades shopping centre, Bromley, South East London. Established in 2022, the Hub aims to promote sustainable living through community engagement and education. The Hub is an extension of the Greener and Cleaner Charity, which started as a grassroots movement in 2019, primarily engaging through a Facebook group<sup>24</sup> before occupying a physical space. Positioning the Hub in a mainstream shopping centre, where everyone can see it and anyone can choose to become involved, was a strategic decision by the Greener and Cleaner leadership team, underpinned by their ethos that 'sustainability is for everyone'<sup>25</sup>. This location, together with the Hub opening five days a week, increases its potential to reach a broad audience.

The purpose of the Greener and Cleaner Hub is to make sustainable living accessible, inclusive, and integrated into the daily lives of people in Bromley and nearby boroughs. It aims to inspire and equip individuals and organisations with the tools and knowledge needed to reduce their environmental impact. A broader goal is to provide a model for engaging people in green behaviours that can be replicated in other areas and lead to a wider societal shift towards sustainability.

The Hub's core staff are supported by volunteers and they provide a wide range of activities designed to engage the community, focusing on issues that matter to local residents. These include workshops and talks on topics like energy conservation, waste reduction, and sustainable clothing. The Hub also offers peer-to-peer practical advice for anyone who might be interested in living more sustainably. It hosts a *Library of Things*<sup>26</sup>, where residents can borrow

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<sup>22</sup> Brudney, J. L., & Meijjs, L. C. P. M. (2009). It ain't natural: Toward a new (natural) resource conceptualization for volunteer management. *Nonprofit and Voluntary Sector Quarterly*, 38(4), 564-581.

<https://doi.org/10.1177/0899764009333828>

<sup>23</sup> Khan, R. et al. (2018). Community-based approaches and measuring the SDGs. *Social and Economic Studies*, 67(4), 67-93. <http://www.jstor.org/stable/45204454>

- Howard, J., & Wheeler, J. (2015). What community development and citizen participation should contribute to the new global framework for sustainable development. *Community Development Journal*, 50(4), 552-570.

<sup>24</sup> See: [Greener & Cleaner Bromley \(& Beyond\) | Facebook](#)

<sup>25</sup> Parisa Wright, founder of Greener and Cleaner, TEDxBeckenham, 29 Nov 2023. [Sustainability is for everyone | Parisa Wright | TEDxBeckenham](#)

<sup>26</sup> Established in 2014, *Library of Things* is a grassroots organisation which aims to make borrowing better than buying for people and for the planet, by affordably renting out useful things like drills, sound systems and sewing machines from a local space. It is available in 19 locations in London and has inspired similar initiatives in towns and cities across the UK. See: <https://www.libraryofthings.co.uk/>

items such as tools and household equipment, reducing the need for individual ownership. Since its inception, the Hub has become an important resource and has received recognition for its contribution to the local community<sup>27</sup>.

In summary, the Greener and Cleaner Hub is an innovative, community-led approach for encouraging pro-environmental behaviour change. The aim of this study is to understand why people choose to engage with the Hub, and how this engagement influences their understanding, attitudes and behaviours towards climate change and other environmental issues.

### 1.3 Objectives of this evaluation study

This study was co-designed with two members of the Greener and Cleaner leadership team and had the following research objectives:

1. To understand who uses the Greener and Cleaner Hub (section 3.1)
2. To understand how people discover the Hub and their motivations for engaging with it (section 3.2)
3. To identify the outcomes of this engagement - how do Hub activities increase people's understanding of climate change (section 3.3) and influence their behaviours or lifestyle choices (section 3.4)
4. To explore whether the Hub encourages climate action in different social roles (section 3.5) and community contexts (section 3.6)
5. To understand the role of the Hub in supporting people to deal with climate concern (section 3.7)
6. To evaluate Hub workshops and activities, and gather feedback (section 3.8)

This report is structured as follows: chapter 2 presents the data collection methods; chapter 3 presents results that relate to the six research objectives listed above; and chapter 4 is a discussion of the key findings and the implications for community-led approaches to low-carbon living.

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<sup>27</sup> See: [We're among the best in Bromley! - Greener and Cleaner](#) and [Greener and Cleaner receives Movement for Good Award - Greener and Cleaner](#)

## 2.0 Methodology

This section describes the process of co-designing the data collection tools, gathering the data, and then analysing the data.

### 2.1 Questionnaire survey

#### Survey design

The first data collection activity was a questionnaire survey. This was co-designed with two members of the Greener and Cleaner leadership team during February – March 2024 to explore a wide range of themes which relate to how people engage with the Hub, and whether this leads to changes in environmental attitudes and behaviours. The survey was pre-tested with CAST colleagues and Greener and Cleaner staff to ensure question clarity and comprehension, and to check the survey duration and functionality.

Table 1 presents the survey structure and themes. The question blocks were separated into two surveys, with a two month interval, for two reasons: 1) to explore a broader range of topics without causing participants to experience ‘survey fatigue’ from answering too many questions, and 2) to identify whether the programme of Greener and Cleaner workshops run during May – June 2024 had a measurable impact on encouraging green behaviours. The survey protocols can be found in Appendices 5.1 and 5.2.

*Table 1, Overview of the survey structure*

Block	Theme
<i>Survey 1</i>	
1	Participant information sheet, consent form, interview and prize draw opt-in, identifying new or existing Hub users
2	Motivations for engaging with the Hub
3	Impact of Hub engagement on environmental awareness, adoption of green practices, level of social influence (existing Hub users)
4	Sociodemographic characteristics
5	Adoption of pro-environmental behaviours: travel, diet, waste, material consumption, climate advocacy
6	Climate literacy, risk perception, perceived responsibility to address climate change
7	Frequency of Hub visits, workshops attended, use of online resources
11	Open feedback and debrief

Block	Theme
<i>Survey 2</i>	
1	Participant information sheet, consent form
3	Impact of Hub engagement on environmental awareness, adoption of green practices, level of social influence (new Hub users)
5	Adoption of pro-environmental behaviours: travel, diet, waste, material consumption, climate advocacy (repeated measurement from Survey 1)
8	Climate action in different contexts or social roles
9	Evaluation of Greener and Cleaner workshops, events and activities
10	Impact of workshops on pro-environmental behaviours
11	Open feedback and debrief

### Survey data collection and data cleaning

Survey 1 was launched on 4<sup>th</sup> May 2024 and was closed on 27<sup>th</sup> June 2024. Survey 2 was launched on 4<sup>th</sup> July 2024 and was closed on 10<sup>th</sup> August 2024. Survey participants were recruited through three channels: posters and business cards with a QR code placed in the Hub, volunteers' engaging with people who visited the Hub or attended a workshop, and Greener and Cleaner digital mailing lists. The Greener and Cleaner Facebook group was not used for recruitment, to ensure the research participants were active users of the physical Hub<sup>28</sup>. Participation was incentivised through the option of entering a prize draw to win one of three £150 vouchers for [Ethical Superstore](#).

There were 156 responses for Survey 1; four were removed due to incomplete or duplicated responses. Those who completed Survey 1 were sent a link via email to complete Survey 2. There were 62 responses for Survey 2; three were removed due to incomplete or duplicated responses.

### Statistical analysis

Much of the quantitative data presented in this report is based on descriptive statistics of the entire sample of Hub users. The participants' sociodemographic characteristics and their level of engagement with the Hub (described in section 3.1) form the basis of inferential statistical analysis. This is used to explore differences between sub-groups of the Hub user sample (e.g., perceptions of younger people vs older people; see Appendix 5.8 for a description of the sub-groups) and to measure change within the sample (e.g., to identify any changes in travel or

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<sup>28</sup> The Greener and Cleaner Facebook group has over 7,000 members, but many do not visit the physical Hub. The focus of this evaluation study was how engagement with the physical Hub and the programme of workshops encourages pro-environmental attitudes, behaviours and understanding.

material consumption behaviours during the study period). The statistical tests used were: independent-samples t-test, paired samples t-test, Mann-Whitney U test, and Fisher’s exact test.

## 2.2 Semi-structured interviews

### Interview protocol design

The second data collection method was a series of semi-structured interviews to understand the participants' experiences and opinions concerning the Greener and Cleaner Hub. The interview questions were intended to elicit responses on specific topics, while maintaining flexibility to explore additional themes based on participants' answers. Table 2 presents an overview of the interview themes and the protocol can be found in Appendix 5.5.

*Table 2, Overview of the interview protocol*

Section	Theme
1	Introduction and background
2	Motivations for initial visit and continued engagement with the Hub
3	How engagement has influenced thoughts and actions on green issues
4	Impacts of the Hub on sustainability awareness, practices, and lifestyle changes
5	Concern about climate change and how the Hub has influenced or supported responses and actions
6	Sense of responsibility and efficacy (individual and community) in addressing climate change
7	Experiences of using the Hub and suggestions for future activities to encourage green practices and lifestyle changes
8	Workshop-specific questions (impact on behaviours, application of skills and knowledge, improvements, and challenges faced)
9	Final questions and wrapping up

### Interview data collection and analysis

Interview participants (n=20) were selected from those who indicated their interest in taking part in an interview (via an 'opt-in' question in Survey 1). Recruitment quotas were used to ensure a diverse range of participants, considering the following factors:

- Hub volunteer/non-volunteer status
- Age
- Gender
- Ethnicity
- Parental status

- Location/borough
- Employment status
- Formal educational attainment
- Household income
- Greener and Cleaner workshops they had attended

The interviews were conducted online via Microsoft Teams during May and June 2024. The interviews lasted up to one hour and were recorded for transcription and analysis. Prior to the interview, participants received an information sheet (Appendix 5.3) and provided their verbal consent to take part (Appendix 5.4). Participation was incentivised with a £20 [Ethical Superstore](#) voucher for each participant.

Qualitative data was systematically analysed using thematic analysis, a widely used method in social science research for identifying, analysing, and reporting patterns (themes) within qualitative data<sup>29</sup>. The data was coded using deductive and inductive approaches (i.e., a priori and emergent codes) to identify key themes in the participants' responses. A more detailed explanation of the interview methodology can be found in Appendix 5.7.

### 2.3 Workshops with Greener and Cleaner staff and volunteers

Two in-person workshops were held with Greener and Cleaner staff and volunteers at the Hub, on 18<sup>th</sup> March 2024 and 30<sup>th</sup> June 2024. An online workshop was also held on 25<sup>th</sup> March 2024. These workshops were not formal data collection activities; they provided an opportunity for Hub staff and volunteers to provide feedback on the research design, ask questions, and discuss preliminary findings from Survey 1 and the interviews. This supported the researchers and the Hub leadership team by highlighting practical issues relating to the recruitment of survey participants, identifying potential workshops the Hub could run in the future, and exploring ways to reach and encourage underrepresented groups to engage with the Hub.

### 2.4 Research ethics review

The proposal for the Greener and Cleaner evaluation study was reviewed by the University of Bath Biomedical Sciences Research Ethics Committee; approval was received on 15<sup>th</sup> April 2024 and remains valid until 30<sup>th</sup> March 2025. The REC reference number is 0832-3936.

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<sup>29</sup> The thematic analysis of the interviews was based on the framework developed by Braun and Clarke. See: Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.



### 3.0 Findings

This chapter presents the results of the evaluation study. The survey and the interview findings are presented together under eight themes which relate to how people engage with the Hub, and how this engagement influences their understanding, attitudes and behaviours towards climate change. The chapter concludes with some feedback on the Hub workshops.

#### 3.1 Who uses the Greener and Cleaner Hub

One objective of the survey was to understand who uses the Hub. The Greener and Cleaner team can use this information to tailor workshops and activities to the current users' needs and preferences, as well as to identify whether any social groups in their local community that are underrepresented.

The survey sample (n=152) is predominantly female (77.0%), 21.7% are male and 1.3% prefer not to say. Over half (54.6%) of the respondents have children under the age of 18 living at home<sup>30</sup>. Around one in ten (11.2%) stated they have a long-standing illness, injury or disability that limits their normal day-to-day activities<sup>31</sup>. Figure 2 shows the participants' age category; the most common response was '35 to 44' (30.9%), although the responses are distributed across all of the age categories<sup>32</sup>. This would suggest the Hub appeals to a wide range of age groups.

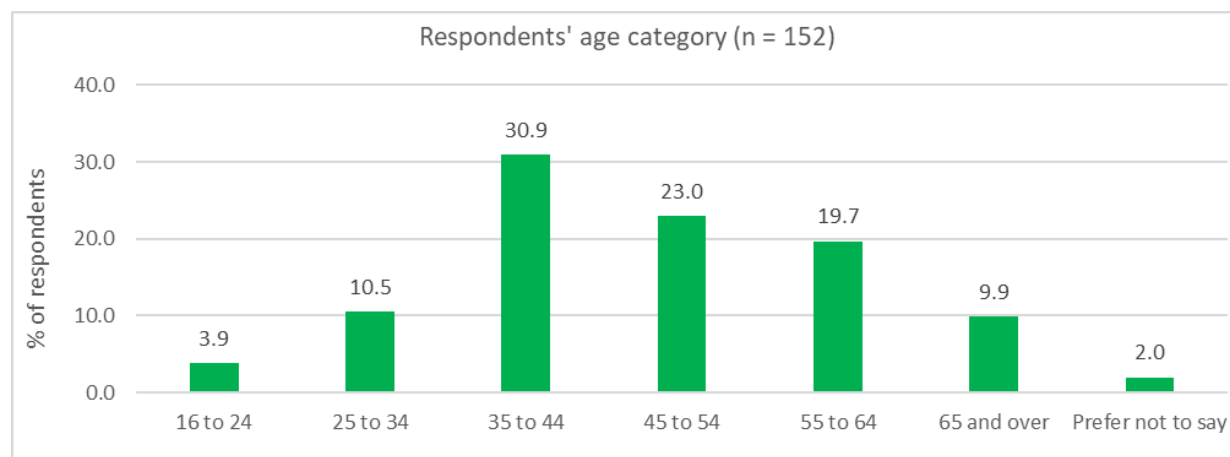


Figure 2, Survey participants' age category

<sup>30</sup> This is somewhat higher than in Bromley as a whole, where 33.8% of households have dependent children. See: [How life has changed in Bromley: Census 2021](#)

<sup>31</sup> The proportion of this survey sample that have a long-term health condition is comparable with the population of Bromley. In 2021, 5.7% of Bromley residents were identified as being 'disabled and limited a lot' and a further 8.6% were identified as being 'disabled and limited a little'. See: [How life has changed in Bromley: Census 2021](#)

<sup>32</sup> In this survey sample, the median age category is '45-54', whereas the median age in Bromley is 41 years old. However, the Greener and Cleaner sample does not include children and this invalidates a direct comparison. Considering all age categories, the Greener and Cleaner sample is broadly similar to Bromley as a whole. See: [How life has changed in Bromley: Census 2021](#)

Table 3 shows a range of ethnicities were reported in the survey sample and three quarters of the participants (75.0%) stated their ethnicity as 'white'<sup>33</sup>.

*Table 3, Survey participants' ethnicity*

Ethnicity	Frequency (n=152)	%
White	114	75.0
Asian/Asian British	14	9.2
Mixed/Multiple ethnic groups	11	7.2
Black/African/Caribbean/Black British	4	2.6
Middle Eastern	1	0.7
Other ethnic group	4	2.6
Prefer not to say	4	2.6

The participants' level of education is presented in Table 4. Most (76.9%) respondents have an undergraduate or postgraduate degree, which suggests this sample has a particularly high level of education<sup>34</sup>.

*Table 4, Highest level of education achieve so far (survey)*

Level of education	Frequency (n=152)	%
No formal qualifications	1	0.7
GCSE or O-level	6	3.9
A-level	14	9.2
Undergraduate degree (e.g., Bachelor's)	61	40.1
Postgraduate degree (e.g., Master's, Level 7 degree, PhD)	56	36.8
Vocational qualification	9	5.9
Other	2	1.3
Prefer not to say	3	2.0

<sup>33</sup> Ethnicity in this survey sample is comparable with Bromley's population. See: [How life has changed in Bromley: Census 2021](#)

<sup>34</sup> Census 2021 data reveals 46.7% of London residents have attained Level 4 or above (Higher National Certificate, Higher National Diploma, Bachelor's degree, or post-graduate qualification). See: [Education, England and Wales - Office for National Statistics](#). For education levels in Bromley, see: <https://www.ons.gov.uk/visualisations/censusareachanges/E09000006/>

Table 5 shows the participants' employment status. Most are employed or self-employed<sup>35</sup>, but Hub users also include people who are retired (12.5%), looking after the home/family (8.6%), and unemployed (4.6%). Respondents could select multiple options and so these employment status categories are not mutually exclusive.

*Table 5, Survey participants' employment status*

Employment status	Frequency (n=152)	%
Employed full time (30+ hrs/wk)	53	34.9
Self-employed	36	23.7
Employed part time (less than 30 hrs/wk)	29	19.1
Retired	19	12.5
Looking after home/family	13	8.6
Unemployed	7	4.6
Studying	5	3.3
Other	3	2
Prefer not to say	1	0.7

Figure 3 shows the participants' household combined income. A high proportion (26.0%) reported the highest income category, '£96,000 or more'<sup>36</sup>. However, the Hub also caters for people on lower incomes; 12.0% of users have a combined household income of less than £26,000. One in five (19.3%) prefer not to say.

<sup>35</sup> Employment levels in the survey sample are comparable with Bromley. In 2022, 78.3% of Bromley residents between 16 and 64 years old were in paid work and 5.0% were unemployed. See Office for National Statistics: [Local indicators for Bromley \(E09000006\) - ONS](#)

<sup>36</sup> For context, the median income (before tax deductions, per individual) for Bromley residents in 2022 was £35,800. See HM Revenue & Customs: [Average Income of Tax Payers, Borough - London Datastore](#). There is, however, significant variation in income levels; in 2019, 9.1% of the Bromley population was 'income-deprived' (i.e., people in an area who are out of work or on low earnings). See Office for National Statistics (2021): [Exploring local income deprivation](#)

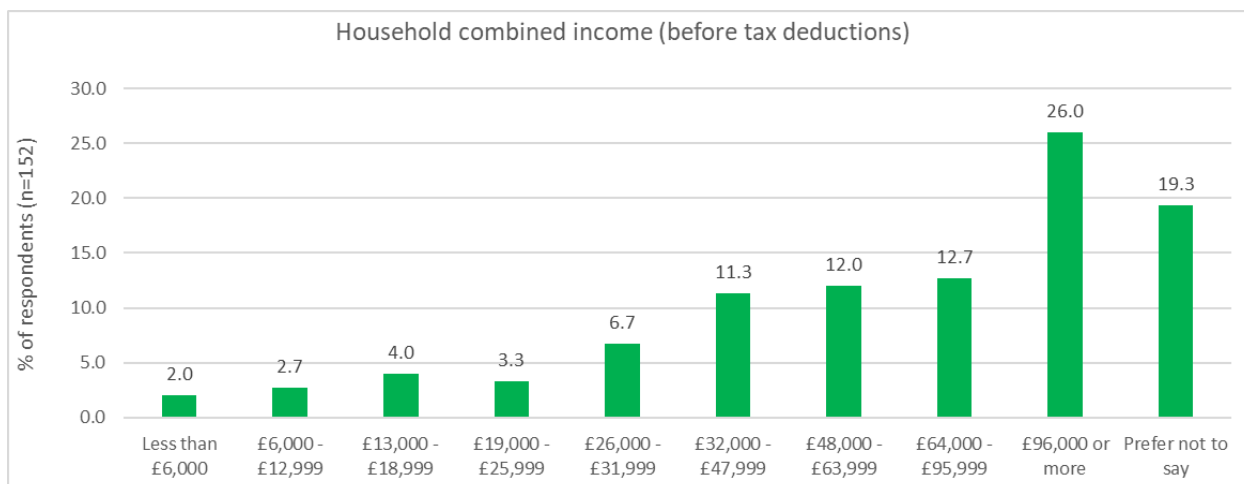


Figure 3, Survey participants' household combined income (per year, before tax deductions)

The Greener and Cleaner team is interested in whether people who use the Hub come from boroughs other than Bromley (Table 6). As expected, most live in Bromley (77.6%), but some participants live in Lewisham (8.6%), Croydon (3.3%), or another London borough (5.9%).

Table 6, Borough where participants' live (survey)

Participants' borough or location	Frequency (n=152)	%
Bromley Borough	118	77.6
Greenwich Borough	0	0.0
Lewisham Borough	13	8.6
Croydon Borough	5	3.3
Another London borough	9	5.9
Elsewhere in the UK	7	4.6
Another country	0	0.0
Prefer not to say	0	0.0

### Representativeness of the survey sample

In summary, this survey sample is broadly representative of Bromley's population for age, ethnicity, employment, and the proportion that have a long-term health condition. However, this sample has a higher level of education, a higher level of income, and a higher proportion of households with dependent children, compared to the population of Bromley. In terms of gender, females are overrepresented in this sample, although this is often the case for survey samples.

### Profiling the sample by level of engagement with the Hub

Two survey questions explored the participants' level of engagement with the Hub. A high proportion are Hub staff or volunteers (30.9%), which highlights that many people who use the Hub subsequently choose to become more involved by taking on a volunteer role (accepting that volunteers will have a higher propensity to complete a survey evaluating the Hub's impacts). Table 7 presents a grouping of Hub users in terms of when they started using the Hub; most are 'longer term users' (75.7%) who had been using the Hub for more than three months when this study was launched (May 2024).

*Table 7, Categorisation of the survey sample based on when participants started using the Hub*

Longer term or new Hub user	Frequency (n=152)	%
Longer term user – started using the Hub prior to March 2024, or is a Hub staff/volunteer	115	75.7
New user – started using the Hub in March, April, or May 2024. These individuals would have 1 to 3 months' experience of using the Hub	22	14.5
New user – has never visited Hub <sup>37</sup>	15	9.9

These two questions were included to investigate: 1) whether Hub staff/volunteers have different perceptions of the Hub compared to non-volunteers, and 2) whether longer term users have different perceptions compared to new users<sup>38</sup>.

### Interview participants' sociodemographic characteristics

As described previously, the interview participants were recruited from the survey sample (using an opt-in question in Survey 1). Table 8 provides an overview of the interview participants' sociodemographic characteristics.

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<sup>37</sup> Although recruitment for this study was targeted at 'active users' of the physical Hub, rather than those who only use the Greener and Cleaner Facebook group, it was not possible to exclude people who had not yet visited the Hub from one of the recruitment channels - the Greener and Cleaner digital mailing lists.

<sup>38</sup> This question was also included to avoid incoherency of questions presented to new users, who would not yet have sufficient experience of using the Hub to discuss its effect on their environmental awareness or green practices; these questions were instead presented to new users in Survey 2, after they had had an opportunity to use the Hub for at least two months.

*Table 8, Overview of interview participants' sociodemographic characteristics*

Sociodemographic characteristic		Frequency (n=20)
Status	Greener and Cleaner volunteer	11
	Non-volunteer	9
Age range:	25-34	1
	35-44	10
	45-54	5
	55-64	2
	65+	2
Gender	Female	17
	Male	3
Ethnicity	Asian/Asian British	1
	Black/African/Caribbean/Black British	2
	Mixed/Multiple ethnic groups	2
	White	14
	Prefer not to say	1
Children (aged under 18) living at home	Yes	11
	No	9
Employment status	Employed full-time	8
	Employed part-time	3
	Self-employed	6
	Retired	2
	Looking after home/family	1
	Unemployed	2
Location	Bromley	12
	Lewisham	4
	Croydon	1
	Elsewhere in the UK	1
	Not specified	2
Education	GCSE/'O' Level3	3
	A-Level/Vocational qualification	2
	Undergraduate degree	8

Sociodemographic characteristic		Frequency (n=20)
	Postgraduate degree	7
Combined household income before tax deductions	£6,000 - £12,999	1
	£13,000 - £18,999	2
	£26,000 - £31,999	2
	£32,000 - £47,999	3
	£48,000 - £63,999	3
	£64,000 - £95,999	3
	£96,000+	3
	Prefer not to say	3

### 3.2 How people engage with the Greener and Cleaner Hub

This section discusses how people first become aware of the Hub, which activities they take part in, their motivations for participating, and whether their engagement has changed over time.

#### 3.2.1 Participants' initial awareness of the Hub

Survey participants were asked how they first heard about the Hub and the results are presented in Table 9.

*Table 9, Information sources for initial awareness of the Greener and Cleaner Hub (survey)*

Information sources	Frequency (n=152)	Valid %
A recommendation from a friend, family member or colleague	44	28.9
Facebook	39	25.7
I passed by the Hub, in The Glades shopping centre	32	21.1
From a local community group or social club	13	8.6
From a Greener and Cleaner event or workshop	10	6.6
From our local school	3	2.0
From my place of work	2	1.3
From advertising for Library of Things	2	1.3
Instagram	1	0.7
Twitter/X	0	0.0
LinkedIn	0	0.0
YouTube	0	0.0
Pinterest	0	0.0

Table 9 shows the most common way of first hearing about the Hub was through word of mouth (28.9%). The interviews provided further insights; participants reported that peer recommendations were typically based on a shared interest in sustainability, or the crafts and skills taught at the workshops:

*"One of my NCT friends had posted up about an initiative to make fruit and vegetable bags. The post was also saying that obviously it's kind of learning some skills on a sewing machine and, yeah, so that's how I first got involved with it." (GC3)*



This emphasises the important role of personal networks in spreading information and suggests that individuals are more likely to engage with the Hub when someone they know has recommended it.

Greener and Cleaner's online presence is also important, with one in four users (25.7%) discovering the Hub via the charity's Facebook group<sup>39</sup>:

*"I first came across them on Facebook as a group...I don't like shopping and I certainly don't like shopping centres so I went out of my way to visit the Hub, so I wouldn't have come across the Hub physically." (GC11)*

Online visibility is therefore relevant for raising awareness of the Hub, especially for those who avoid shopping centres. Two interview participants highlighted referrals from other local organisations as a way of finding out about the Hub.

It is notable that one in five users (21.1%) discovered the Hub when they passed by it in The Glades shopping centre:

*"I was walking past and I thought. What's this? Because 99.9% of the shops there are just featureless shops, whereas the Hub has an open shop front. It's very inviting." (GC4)*

Positioning the Hub in a mainstream shopping centre, where everyone can see it and anyone can choose to become part of it, was a strategic decision by the Greener and Cleaner team, underpinned by their ethos that 'sustainability is for everyone'<sup>40</sup>. Many people who pass by the Hub may have no prior interest in environmental issues and so this approach, 'to go to where people live', is one important way of reaching members of their local community. The findings of this study suggest the Hub's physical location is effective at engaging people.

### 3.2.2 Motivation for first visit to the Hub

Survey participants were asked about their main motivation for first visiting the Hub (Figure 4)<sup>41</sup>. One in three respondents (32.1%) were already using the Greener and Cleaner Facebook group and wanted to see the Hub. One in six (16.1%) first visited the Hub to attend a specific workshop

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<sup>39</sup> See: [Greener & Cleaner Bromley \(& Beyond\) | Facebook](#)

<sup>40</sup> Parisa Wright, founder of Greener and Cleaner, TEDxBeckenham, 29 Nov 2023. [Sustainability is for everyone | Parisa Wright | TEDxBeckenham](#)

<sup>41</sup> 15 survey respondents reported having not yet visited the Hub in Survey 1, hence the lower number of participants (n=137) in Figure 4.

or event. Other motivations include peer recommendations (9.5%) and a desire to learn about sustainability and reducing carbon footprint (7.3%).

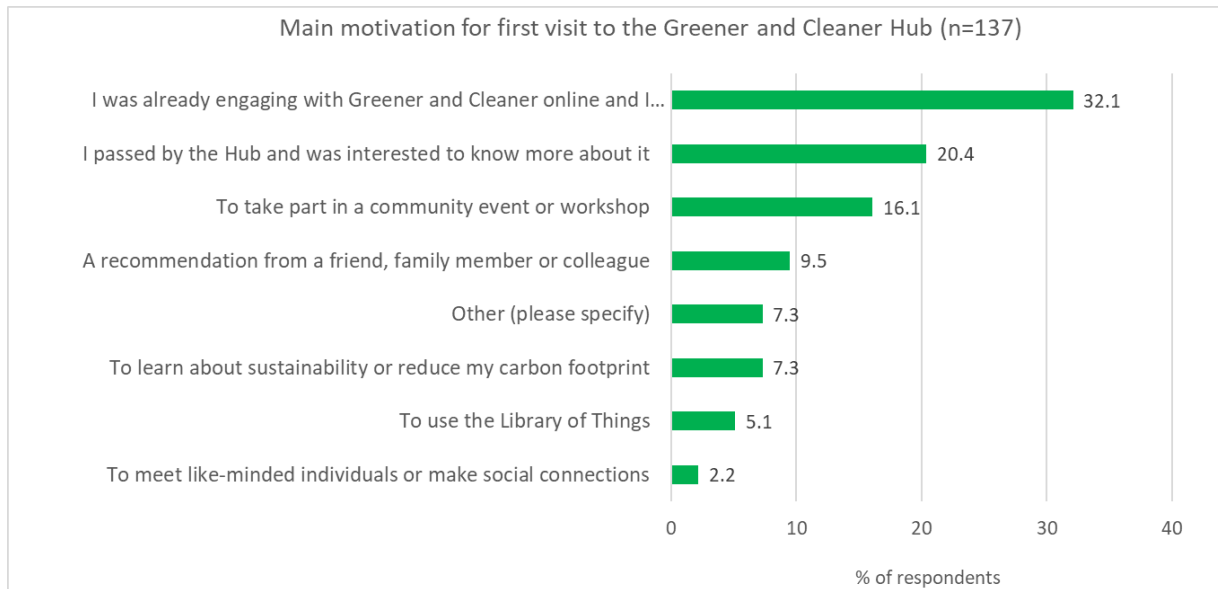


Figure 4, Main motivation for first visit to the Greener and Cleaner Hub (survey)

Interview participants were also asked about their main motivation for their first visit (Table 10).

Table 10, Main motivation for initial visit to the Hub (interviews)

Motivation for first visit	Frequency (n=20) <sup>42</sup>
Curiosity/to find out more about the Hub	8
To attend an event or workshop	4
Seeking volunteering opportunities (following a life change)	3
Interest in sustainability or pro-environmental behaviour	3
Already volunteering with Green and Cleaner before the Hub	2
Seeking paid work	1

The primary motivation for interview participants was a desire to find out more about the Hub. However, some participants were reluctant at first because they were not sure what the Hub is:

<sup>42</sup> One participant gave two motivations for their initial visit; hence the total frequency of responses is slightly greater than the sample size.

*"I'd certainly walked past it a few times, not knowing what it was and been a bit sort of, oh, I don't know, and bit anxious to go in. And then once I'd seen the Facebook post and realised what it was, then yeah, I felt a bit more comfortable to actually put my head around the door and have a look in and say, oh, 'this is nice!'" (GC7)*

The interviews revealed that some people were already interested in sustainability and wanted to learn more, whereas others were less familiar with environmental issues. A few participants were motivated by volunteering opportunities, reflecting the Hub's role as a supportive space for people seeking meaningful experiences or new social connections (e.g., following a significant life transition).

### 3.2.3 Frequency of visits to the Hub, workshops attended, and use of online resources

Several aspects of how people currently use the Hub were explored. Survey participants were asked how often they had visited the Hub in the past year. Figure 5 shows one in four (27.4%) visit the Hub at least once a fortnight, whereas one in three (37.7%) visit it occasionally (i.e., 'a few times over the year'). Hub volunteers and women visit the Hub more frequently<sup>43</sup>.

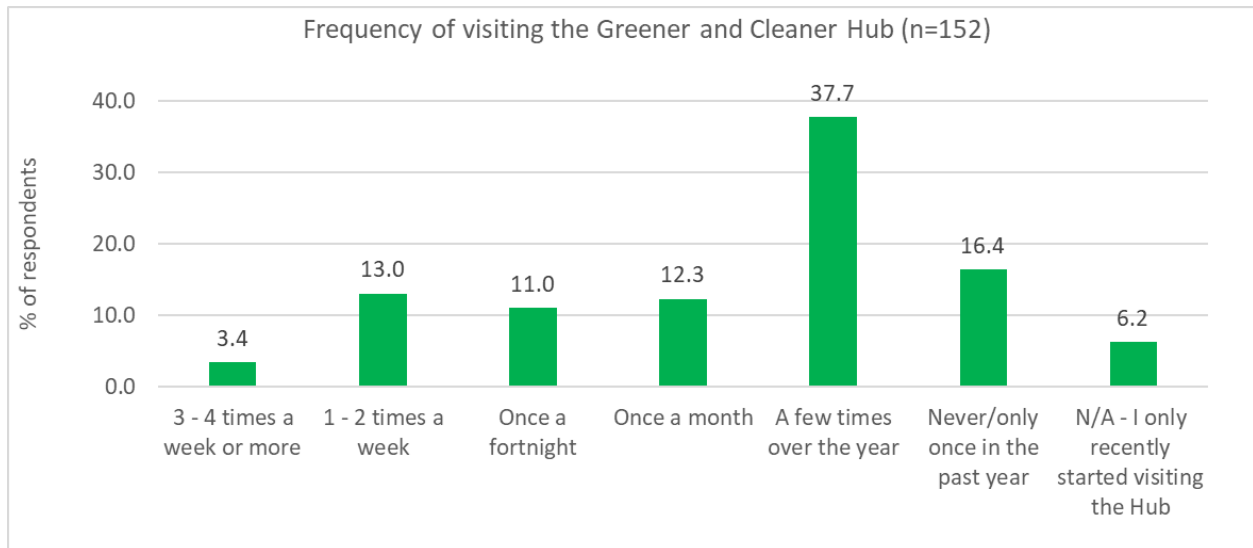


Figure 5, Frequency of visits to the Greener and Cleaner Hub (survey)

<sup>43</sup> Mann-Whitney U tests revealed:

- Hub volunteers (mean rank = 50.71) have visited the Hub statistically significantly more frequently in the past year than non-volunteers (mean rank = 84.32),  $U = 3397.500$ ,  $z = 4.636$   $p = .001$ . The median response for Hub volunteers = once a month, whereas the median response for non-volunteers = a few times over the year.
- Women (mean rank = 67.32) have visited the Hub statistically significantly more frequently in the past year than men (mean rank = 91.37),  $U = 2336.500$ ,  $z = 2.941$   $p = .003$ . The median response for both groups = a few times over the year.

## Workshops attended

Survey participants were presented with a list of Greener and Cleaner workshops and events, and asked which ones they had attended. Figure 6 shows practical workshops (e.g., mending, knitting, crafting) are the most popular. Swapping workshops are also well attended (e.g., Clothes swap, Swapping and discussion of green options). A smaller proportion have attended workshops which focus on building participants' understanding of climate change (e.g., Carbon literacy, Climate Fresk) or discussing emotions associated with climate change (Climate café). Participants could specify 'other events' they had attended and the most common were: energy saving workshop (n=3), repair café (n=3), a school visit (n=3), solar power workshop (n=2) and sustainable weddings/events (n=2). In terms of variation in the survey sample, a higher proportion of infrequent Hub users, non-volunteers, new Hub users, and men have not attended any workshops yet<sup>44</sup>.

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<sup>44</sup> Fisher's exact tests revealed:

- A higher proportion of non-volunteers (26.7%) than Hub volunteers (4.3%) have not attended any Greener and Cleaner workshops yet. This difference in proportions is statistically significant,  $p = .001$
- A higher proportion of infrequent Hub users (i.e., visit the Hub less than once a fortnight; 2.5%) than frequent Hub users (i.e., visit the Hub at least once a fortnight; 25.8%) have not attended any Greener and Cleaner workshops yet. This difference in proportions is statistically significant,  $p = .001$
- A higher proportion of new Hub users (i.e., joined in March, April, or May 2024; 43.2%) than longer term Hub users (i.e., joined the Hub prior to March 2024; 12.2%) have not attended any Greener and Cleaner workshops yet. This difference in proportions is statistically significant,  $p = .001$
- A higher proportion of men (33.3%) than women (16.2%) have not attended any Greener and Cleaner workshops yet. This difference in proportions is statistically significant,  $p = .031$
- See Appendix 5.9 for statistically significant differences in the survey sample sub-groups' attendance at specific workshops (based on sociodemographic characteristics or their level of Hub engagement).

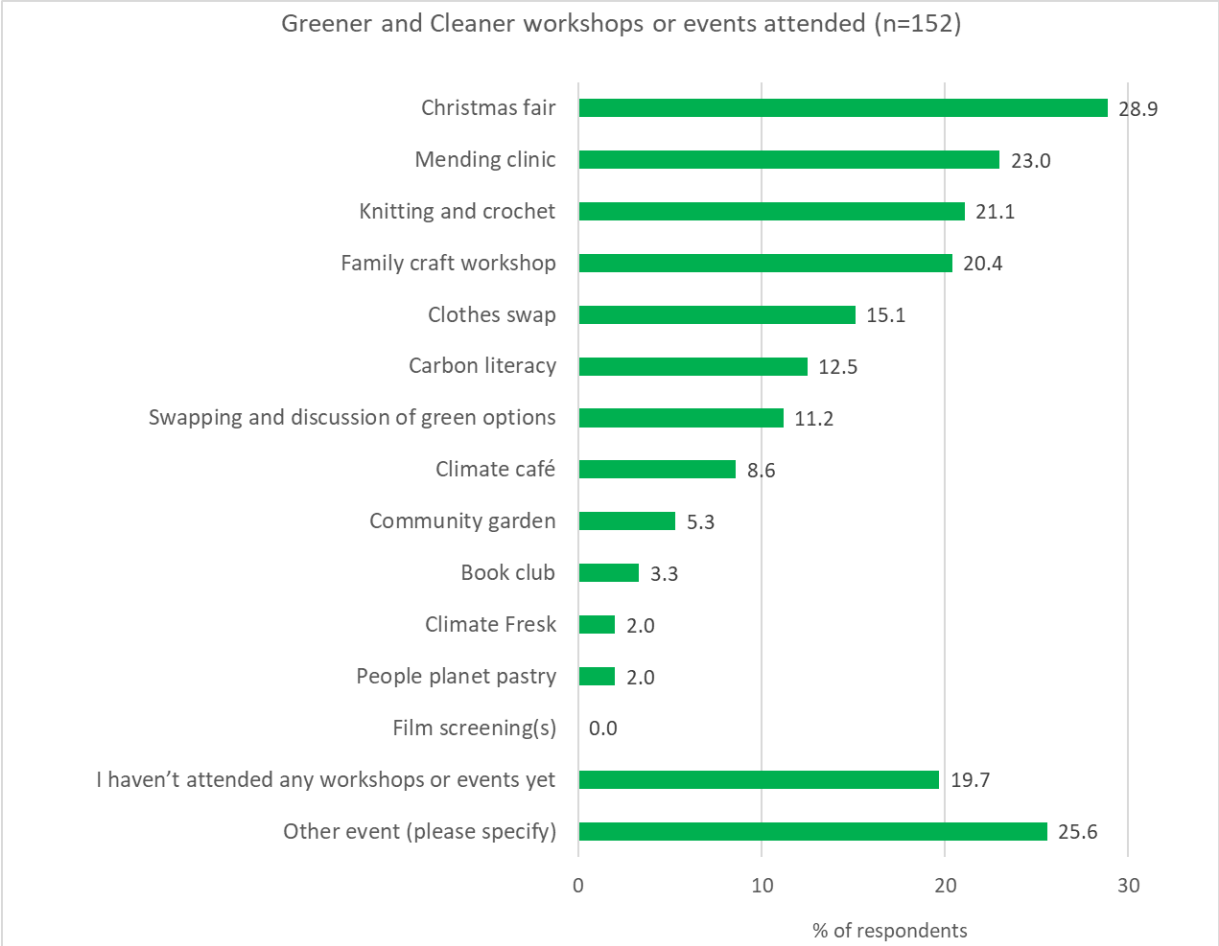


Figure 6, Greener and Cleaner workshops, events or activities attended by Hub users (survey)

### Use of Greener and Cleaner online platforms

Table 11 shows over half of the survey participants have used the Greener and Cleaner Facebook group (58.6%) and the website (54.4%) in the past year. Both of these platforms highlight upcoming events or workshops<sup>45</sup> and provide resources or tips for cutting carbon footprint<sup>46</sup>. One in five (19.7%) do not use any Greener and Cleaner online platforms. A higher proportion of non-volunteers, new Hub users, men, and those without children living at home have not used any of the platforms<sup>47</sup>.

<sup>45</sup> See: <https://www.greenerandcleaner.co.uk/events/>  
<sup>46</sup> See: <https://www.greenerandcleaner.co.uk/get-greener/>  
<sup>47</sup> Fisher's exact tests revealed:

- A higher proportion of non-volunteers (25.7%) than Hub volunteers (6.4%) have not used any Greener and Cleaner online resources. This difference in proportions is statistically significant,  $p = .003$
- A higher proportion of new Hub users (i.e., joined the Hub in March, April, or May 2024; 32.4%) than longer term Hub users (i.e., joined the Hub prior to March 2024; 15.7%) have not used any Greener and Cleaner online resources. This difference in proportions is statistically significant,  $p = .026$

Table 11, Greener and Cleaner online platforms used in the past year (survey)

Online platform	Frequency (n=152)	%
Facebook group	89	58.6
The Greener and Cleaner website	83	54.6
Instagram	28	18.4
LinkedIn	10	6.6
YouTube	10	6.6
Twitter/X	9	5.9
Pinterest	1	0.7
None of the above	30	19.7

Those who had used a Greener and Cleaner online platform were then asked how often they use it (Table 12). Over one third (36.2%) use these resources at least once a week. Younger Hub users use online resources less frequently<sup>48</sup>.

Table 12, Frequency of using Greener and Cleaner online platforms in the past year (survey)

Frequency of using online platforms	Frequency (n=152)	Valid %
3 - 4 times a week or more	18	15.5
1 - 2 times a week	24	20.7
Once a fortnight	18	15.5
Once a month	20	17.2
A few times over the year	31	26.7
Never/only once in the past year	4	3.4
Not applicable - I only recently started using Greener and Cleaner online platforms/resources	1	0.9

- A higher proportion of men (33.3%) than women (15.4%) have not used any Greener and Cleaner online resources. This difference in proportions is statistically significant,  $p = .023$

- A higher proportion of Hub users without children living at home (29.0%) than Hub users with children (under the age of 18) living at home (12.0%) have not used any Greener and Cleaner online resources. This difference in proportions is statistically significant,  $p = .008$

- See Appendix 5.10 for further statistically significant differences between sub-groups of the survey sample (based on sociodemographic characteristics or their level of Hub engagement) that have used the Greener and Cleaner website or the Facebook group.

<sup>48</sup> A Mann-Whitney U test revealed Hub users aged 35 or older (mean rank = 55.16) use online resources statistically significantly more frequently than Hub users aged 34 or younger (mean rank = 75.56),  $U = 511.000$ ,  $z = -2.320$ ,  $p = .020$ . The median response for Hub users aged 35 or older = once a fortnight, whereas the median response for Hub users aged 34 or younger = once a month.

### 3.2.4 Why people visit the Hub or attend workshops

Survey participants were presented with ten possible reasons for engaging with the Hub and asked 'How motivated are you by the following factors to engage with the Greener and Cleaner Hub and workshops?' (Figure 7). Concern about the environment or biodiversity loss was the most important motivation for engaging, followed by an interest in learning how to reduce carbon footprint, and opportunities to be involved in community action.

In terms of variation in the survey sample, Hub volunteers reported stronger motivation than non-volunteers for 'concern about the environment', 'involvement in local community action' and the 'opportunity to make social connections'. 'Making social connections' and 'improving health and wellbeing' are especially important for frequent Hub users and those in low-income households. The 'variety of workshops' and the 'opportunity to learn new skills' are strong motivations for frequent Hub users and women<sup>49</sup>.

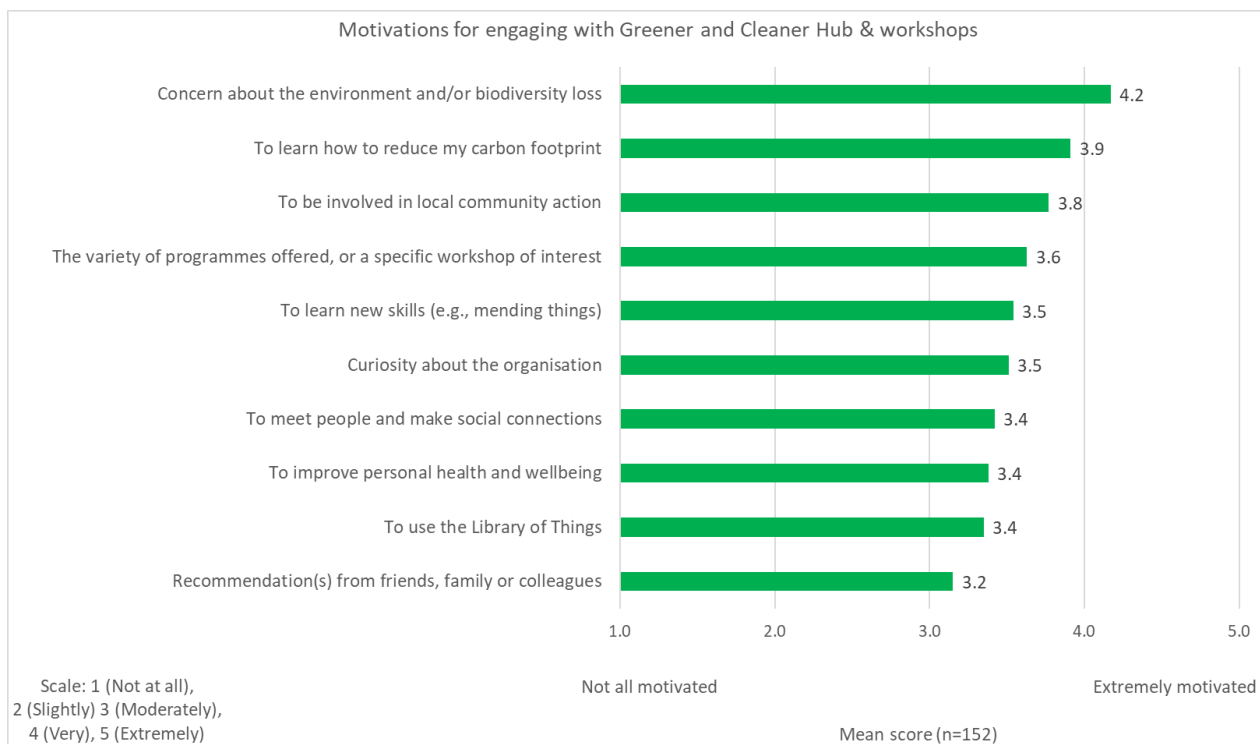


Figure 7, Motivations for engaging with the Greener and Cleaner Hub and workshops (survey)

Interview participants described their motivations for continued engagement with the Hub (i.e., as opposed to their motivation for their first visit) and the benefits they gain (Table 13).

<sup>49</sup> See Appendix 5.11 for the statistically significant differences described above – the variation in the survey sample (according to sociodemographic characteristics or level of engagement with the Hub) in terms of Hub users' motivations for engaging with the Greener and Cleaner Hub or workshops (Mann-Whitney U tests).

Table 13, Motivations for continued engagement with the Hub (interviews)

Motivation for continued engagement	Frequency (n=20)
Continued learning and raising awareness	11
Supporting the Hub and its cause	8
To contribute and feel a sense of purpose	7
Inspiring ideas	5
Engage with others in person	4
Feel part of a team or community	4
Shared sense of values	4
Enjoyment of volunteering and engaging with the public	4
Participate in more workshops or activities	3
Social outlet	3
Sense of making a difference	2

A key motivation for continued engagement was the desire for ongoing learning and increasing their understanding of sustainability. Participants valued having a physical location they could visit for in-person educational activities:

*"It's also good to have physical and human being interactions because, I mean, everything happening online is good for some topics, but I thought it was really good to have human interactions."* (GC1)

Supporting the Hub and its cause as a community-based sustainability organisation was also a significant driver for continued involvement:

*"This is something that I'm a strong believer in, in the kind of the ground up initiative that I think Parisa is trying to run and I hope that it is successful."* (GC19)

This indicates that the participants' values align with the ethos of the Hub and this is a strong motivation for contributing to its success. Participants also reported sustained involvement because they feel a sense of purpose:

*"It's also really good to be volunteering in something that I really care about and hopefully try to make a difference."* (GC2)



### 3.2.5 Changes in how people engage with the Hub over time

The interviews also explored whether users' engagement with the Hub had changed over time. For example, many users choose to volunteer and so become more involved in the Hub's activities. The interviews revealed no typical engagement pattern (Table 14).

*Table 14, Changes in engagement with the Hub over time (interviews)*

Change in engagement	Frequency (n=20)
Hub engagement increased (time availability increased)	3
Hub engagement increased (increased need for volunteers)	1
Hub engagement increased (training/experience increased)	1
Hub engagement increased (more active engagement)	1
Hub engagement unchanged (but role has changed)	3
Hub engagement unchanged (primarily online)	2
Hub engagement unchanged (drops in when visiting the Glades)	1
Hub engagement decreased (time availability decreased)	3
Hub engagement decreased (less demand for a specific workshop)	1
Hub engagement decreased (health issues)	1
Hub engagement decreased (colleague left)	1
Hub engagement decreased (reduced need for volunteers)	1
Hub engagement decreased (changed role)	1
Hub engagement decreased (shift to domestic lifestyle focus)	1
Hub engagement decreased (shift to online engagement)	1

Amongst those for whom engagement had increased, a few participants attributed this to having more time available, indicating that flexibility in participants' personal schedules significantly influences their ability to commit to Hub activities. One participant's engagement increased in response to the Hub's need for volunteers. Another participant increased her involvement to gain more experience, highlighting that offering skill development opportunities can encourage deeper engagement:

*"It was just a little bit to begin with. But since then, I've been to many workshops. I've been to training. As well as doing like regular volunteering where I can, I've done sort of many extra things." (GC10)*

Time constraints were the most common reason for reducing engagement, and so flexible or short-term volunteering options may support these individuals. Health-related issues were a factor for one participant:

*"When I started doing 3-hour shifts and, you know, the journey in and back, I found that too much sometimes. And so I started volunteering for sort of one-and-a-half hour shifts, which sort of felt as if I could do that better."* (GC11)

This highlights the importance of making participation accessible, potentially through remote or low-impact roles for those with health challenges. One participant explained that their engagement decreased when their colleague left, suggesting that social relationships also play a role in sustained participation.

### 3.3 Influence of the Hub on people's understanding of climate change and environmental issues

A key objective of the Greener and Cleaner Hub is to support people to “learn, start or continue to make meaningful changes to fight climate change, reduce their carbon footprint and above all, not feel alone doing so”<sup>50</sup>. Thus, many of the Hub's activities focus on increasing users' understanding of climate change and highlighting the personal and collective actions they can take to cut their carbon emissions. This section explores how the Hub influences users' understanding through three different but complementary approaches: cognitive training on key concepts and terminology, workshops which teach practical skills, and peer-to-peer learning.

Survey participants were asked ‘Since engaging with Greener and Cleaner, to what extent has your awareness of environmental issues increased?’. Figure 8 shows over half (56.2%) of Hub users believe their awareness has increased ‘significantly’ or ‘very much’. Only five participants (3.3%) had not experienced an increase in their environmental awareness since engaging with Greener and Cleaner. Exploring variation within the survey sample revealed that those who engage more with the Hub (i.e., Hub volunteers, frequent Hub users, longer term Hub users<sup>51</sup>) reported a larger increase in their environmental awareness than those who engage less. Moreover, Hub users in low-income households reported a greater increase in their environmental awareness than those in higher income households<sup>52</sup>.

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<sup>50</sup> See: [The Hub from Greener and Cleaner - Greener and Cleaner](#)

<sup>51</sup> These sample groupings are not mutually exclusive. For example, 23 out of 47 Hub volunteers are also frequent Hub users (i.e., they visit the Hub at least once a fortnight), and 47 of the 115 longer term Hub users (i.e., joined the Hub prior to March 2024) are volunteers.

<sup>52</sup> Mann-Whitney U tests revealed:

- Hub volunteers (mean rank = 74.22) reported a statistically significantly larger increase in environmental awareness since engaging with Greener and Cleaner than non-volunteers (mean rank = 52.89),  $U = 1117.000$ ,  $z = -3.387$ ,  $p = .001$ . The median response for Hub volunteers = significantly, whereas the median response for non-volunteers = moderately.

- Frequent Hub users (i.e., they visit Hub at least once a fortnight; mean rank = 69.62) reported a statistically significantly larger increase in environmental awareness since engaging with Greener and Cleaner than infrequent Hub users (i.e., they visit less than once a fortnight; mean rank = 52.49),  $U = 1013.000$ ,  $z = -2.687$ ,  $p = .007$ . The median response for frequent Hub users = significantly, whereas the median response for infrequent Hub users = moderately.

- Longer term Hub users (i.e., they started using the Hub prior to March 2024) reported a statistically significantly larger increase in environmental awareness since engaging with Greener and Cleaner (mean rank = 62.75) than new Hub users (i.e., they started using the Hub in March, April, or May 2024; mean rank = 32.50),  $U = 598.500$ ,  $z = 2.311$ ,  $p = .021$ . The median response for longer term Hub users = significantly, whereas the median response for new Hub users = moderately.

- Hub users in low-income households (i.e., a combined annual household income, before tax deductions, of £25,999 or less) reported a statistically significantly larger increase in environmental awareness since engaging with Greener and Cleaner (mean rank = 65.12) than Hub users in higher income households (i.e., a combined annual household income, before tax deductions, of £26,000 or more; mean rank = 47.72),  $U = 362.500$ ,  $z = -2.118$ ,  $p = .034$ . The median response for both groups = significantly.

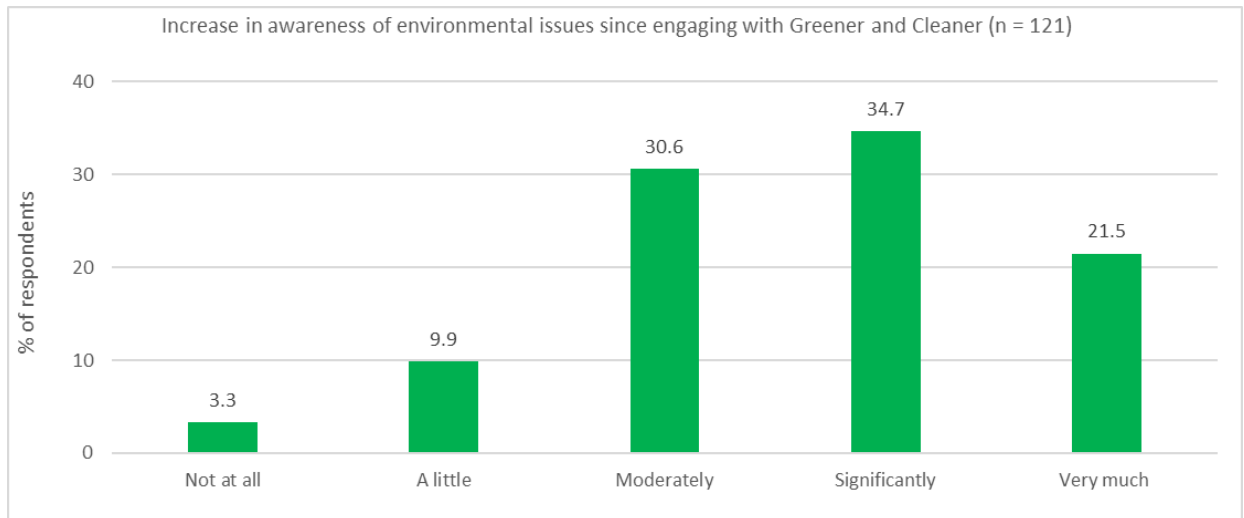


Figure 8, *Impact of engagement with Greener and Cleaner on awareness of environmental issues (survey)*<sup>53</sup>

Survey participants were presented with a list of ten pro-environmental behaviours and asked 'How much do you think each of the following would contribute to reducing the carbon footprint of the average person living in the UK?'. Figure 9 shows Hub users have a relatively high level of climate literacy, compared to a UK representative sample. For example, Hub users correctly identified 'avoid flying', 'live car-free' and 'avoid eating red meat' as three of the most impactful individual actions to cut carbon footprint<sup>54</sup>. The UK sample also correctly identified the importance of reducing car travel to cut carbon emissions but underestimated the potential emission reduction from minimising air travel and eating less red meat<sup>55</sup>.

Considering variation within the survey sample, new Hub users (n=34) correctly identified 'avoid flying' as an important way to cut carbon footprint but overestimated the potential emission

<sup>53</sup> There is a lower number of respondents for this question (n=121), compared to other survey questions (n=152). This is because this question was presented to existing Hub users only in Survey 1 (i.e., those who joined the Hub prior to March 2024 and would therefore have direct experience of how the Hub may have increased their level of environmental awareness). New users, those who started using the Hub in March, April, or May 2024, were presented this question in Survey 2. However, the routing question did not correctly identify all new users, hence the lower number of respondents.

<sup>54</sup> Ivanova, D., Barrett, J., Wiedenhofer, D., Macura, B., Callaghan, M. & Creutzig, F. (2020). Quantifying the potential for climate change mitigation of consumption options. *Environmental Research Letters*, 15, 093001. [Quantifying the potential for climate change mitigation of consumption options - IOPscience](https://doi.org/10.1088/1751-7593/15/9/093001)

<sup>55</sup> Demski, C., Steentjes, K. & Poortinga, W. (2024). *CAST Data Portal: Public perceptions of climate change and climate action*. The Centre for Climate Change and Social Transformations (CAST). Available at: <https://cast.ac.uk/cast-data-portal-public-views-on-climate/>. The CAST survey question wording and format differs from this study, and so the findings are not directly comparable, although the list of low-carbon behaviours presented in the CAST survey are very similar to those shown in Figure 9.

reduction from 'avoiding plastic' and 'recycling'<sup>56</sup>. The responses for longer term Hub users (n=115) match Figure 9, which indicates that continued Hub engagement over time supports greater climate literacy.

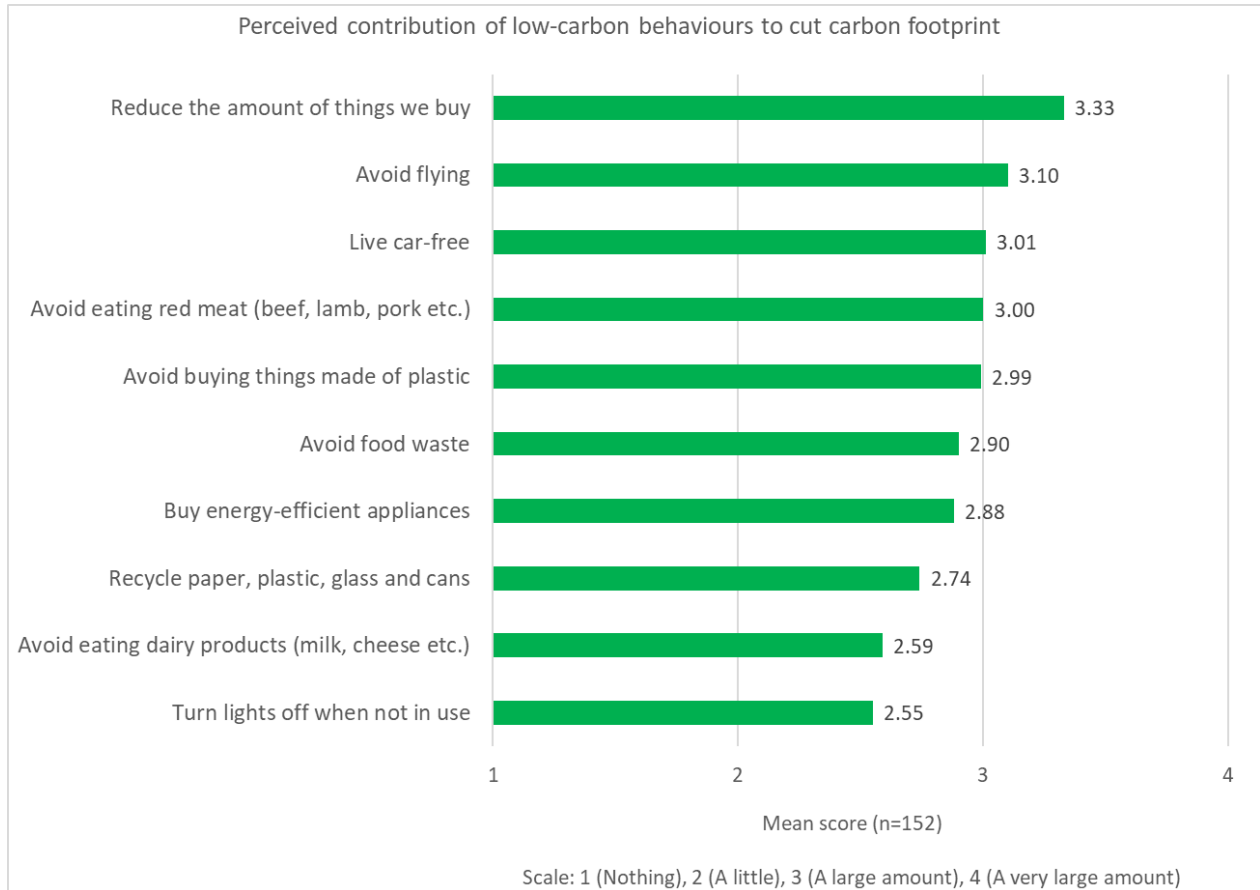


Figure 9, Perceived contribution of green behaviours in reducing the carbon footprint of an average person living in the UK (survey)

Greener and Cleaner is one of many potential sources of information about climate change and so caution should be exercised in attributing this higher level of climate literacy to users' engagement with the Hub. However, the qualitative data supports the survey findings, as the interview participants believe Greener and Cleaner is playing a major role in increasing their environmental awareness and understanding (Table 15).

<sup>56</sup> New Hub users (i.e., they started using the Hub in March, April, or May 2024, and so would have 1 to 3 months' experience of Hub engagement when this study was conducted; n=34) positioned 'avoid buying things made of plastic' as the second most impactful action to reduce carbon footprint, and 'recycle paper, plastic, glass and cans' as the fourth most impactful action. However, compared to the other green behaviours presented in Figure 9, avoiding plastic and recycling have a relatively minor emission reduction potential.

Table 15, Influence of the Hub on participants' understanding of sustainability and environmental issues (interviews)

Influence of the Hub on environmental understanding	Frequency (n=20)
Influenced by Carbon Literacy and Climate Fresk workshops	5
Influenced by craft workshops	2
Influenced by Library of Things	2
Influenced by Hub information provision	2
Changed behaviour based on expanded understanding	7
More focused on accessible solutions to environmental issues	3
Increased confidence to share learning outside the Hub	3
Updated understanding of environmental issues	3
Reading more	2
More aware of consumption	2
More aware of need to collaborate/network on issues	2
More engaged with the science	1
Learned language	1
More critical of corporate 'greenwash'	1
More aware of local issues	1
Deeper understanding of issues	1
More interested in sustainability and environmental issues	1
Expanded understanding reinforced existing behaviour	1

### 3.3.1 Impact of climate literacy and conceptual training on people's understanding

This section explores how the Hub influences users' understanding of low-carbon living through three approaches, the first of which is training on key concepts and terminology. Their website states "Greener & Cleaner means knowledge, there is power in understanding what the jargon or technical words used by councils, government and companies mean – and power in how they apply to our lives"<sup>57</sup>. The Carbon Literacy and Climate Fresk workshops focus on developing this understanding and were frequently mentioned as a source of influence in the interviews:

*"There was a Carbon Literacy training that Parisa invited me to go on. I went to that and that was really quite eye opening and quite shocking. So the stuff about, yeah, just how bad flights were and how bad plastic clothes were. That was pretty surprising. And also things that we hadn't really*

<sup>57</sup> See: [Our impact - Greener and Cleaner](#)

*thought about. So they were talking about green finance...There is your pension being invested and I just hadn't even really given any thought to that at all." (GC7)*

One participant spoke about fostering a deeper engagement with the scientific underpinnings of environmental issues, whilst another had developed the terminology associated with sustainability, which was required to understand and communicate their ideas more effectively:

*"Well, I've got the language. So I've got the carbon literacy. I can talk about my footprint." (GC5)*

Notably, some participants applied this training to calculate their own carbon footprint and identify personal actions they could take to reduce it:

*"Thinking about what we can do ourselves was from attending the carbon literacy training and doing like your own carbon footprint and that sort of thing...So I sort of got a better idea of maybe where our own carbon footprint could be changed." (GC2)*

Hence, for some participants, this cognitive training was key to acquiring a broader understanding about climate change and sustainability. Moreover, understanding the terminology enables them to engage others and communicate more effectively.

### 3.3.2 Impact of practical skills training on people's understanding

The second approach is a range of craft and repair workshops which provide practical, hands-on learning, as well as regular opportunities for social interaction (e.g., Mending clinic, Family craft workshop). These workshops provide an accessible entry point for people to start incorporating green behaviours into their lives:

*"Taking stuff to the repair cafe myself and being encouraged to maybe think a little bit more laterally about it or whatever has absolutely made me do more of mending my own things. I think the 'Stitch It Don't Ditch It' was lovely. I did that through the Hub." (GC9)*

Some interview participants reported how attending these workshops taught them to think more broadly about their own consumption behaviour, for instance, by understanding the environmental impact of fast fashion, and what the possible alternatives are:

*"I think what the sewing club at the Hub did was just make me think more creatively...so it gave me that, that motivation I suppose, to think of a different way of looking at clothing." (GC4)*

Taking part in these workshops provokes discussions about sharing items and waste reduction. These insights can be put in practice using resources that are available at the Hub, such as books on living more sustainably, or the Library of Things:

*"One thing that I think the Hub is really good at is to raise awareness on the little things that we can do, not only clothing, not only knitting, not only sewing, but also as I was saying, you can rent your own tools." (GC1)*

*"I think each time I go there, I'll sit down and pick up one of the books on the shelf and I'll read something that I didn't know before." (GC6)*

Thus, the Hub provides workshops and wider resources which enable people to make practical changes to their behaviour. These workshops also function as an informal space for conversations about environmental issues and consumption practices.

### 3.3.3 Impact of peer-to-peer learning on people's understanding

The third approach is peer-to-peer learning. This occurs through two mechanisms: 1) the Hub volunteers engaging people in the shopping centre who pass by the Hub, and 2) workshops which provide opportunities for discussion on specific themes, for instance, how small businesses can integrate sustainability into their working practices (e.g., People, planet, pastry). Interview participants were asked to reflect on their experiences of using the Hub and describe what had shaped their perspectives on sustainability, and peer learning emerged as a core theme (Table 16).

*Table 16, Things learned at the Hub that have shaped participants' perspectives on sustainability (interviews)*

How learning at the Hub shapes perspectives	Frequency (n=20)
Learning from others in the Hub	9
Value of local community focus	1
Validation from Hub network	1
Challenged assumptions about local issues	1
Co-benefits of sustainable lifestyles	1
Specific Hub resources	1
Specific workshops (Carbon Literacy)	1
Increased sense of self-efficacy	1
Has not been engaged enough with the Hub	1



Several interview respondents highlighted the broad knowledge and helpfulness of the volunteers, and this was also a prominent theme in the survey qualitative feedback (see section 3.8.4). Participants view the Hub as a social learning space:

*"If I have a question, I can always just come to the Hub and ask and I know for sure that I will have the answer." (GC15)*

*"I can always ask like if anybody has any ideas on anything that I'm thinking about that I would like to do in a more eco-friendly way." (GC13)*

Peer learning appeared to be a valuable way for participants to gain new perspectives and share ideas. On occasion, these conversations encouraged Hub users to reflect critically on their own lifestyles or habits:

*"Yeah, I had a conversation about wood burning stoves because I am the guilty owner of a wood burning stove and that was really difficult because we put one in thinking it was a good thing and then I had a conversation with some volunteers at the Hub who said it really is not a good thing. That was hard but helpful." (GC9)*

*"Is it an increase in my knowledge or..? They make me think more about my actions, I think." (GC18)*

Many people who visit the Hub decide to volunteer, by running a workshop or engaging members of the public. There is flexibility to orientate their volunteering activities to their personal expertise and the aspects of sustainability they are most interested in:

*"So this year I've got involved in doing just a couple of displays in the Hub, one on plastics and one on green weddings. So, you know, that's been a bit different." (GC2)*

Other volunteers described how engaging with the Hub helped them to acquire knowledge and build their confidence to share their learning:

*"I feel like the training that we've had and the things that I've learnt...I feel confident to bring them [visitors to the Hub] in, show them round and try to find out what they're interested in, what their own particular area is, and often there's something that the Hub can offer that [they] will really like." (GC10)*

The above quote highlights how learning opportunities provided by the Hub empowers some individuals to act as advocates for sustainability, with the potential to generate further impact through engagement with others.

#### The power of small actions towards sustainability

In summary, the Hub uses multiple educational approaches which cater for different learning styles and interests. A cross-cutting theme of all three learning approaches is that embedding sustainability into daily lives can occur through small, manageable changes in behaviour:

*"I think it [their environmental understanding] has expanded. And I think that the key is the knowledge of how easily accessible solutions are." (GC14)*

*"I think it's sort of legitimised making small changes. Because I think sometimes with environmental issues you try and look for like the silver bullet, like really big bang changes." (GC16)*

The Hub's emphasis on actionable solutions resonates with participants. Continuing to validate small, incremental actions towards sustainability could help promote wider behaviour change, especially for those who are constrained by day-to-day responsibilities, or feel overwhelmed by the prospect of committing to major lifestyle changes.

### 3.4 Influence of the Hub on the adoption of green practices

In addition to increasing people's understanding of climate change, another key objective of Greener and Cleaner is to encourage people to adopt green behaviours in their day-to-day lives. This section focuses on how the Hub influences users' uptake of pro-environmental behaviours or lifestyle choices.

Survey participants<sup>58</sup> were asked 'Which of the following green practices have you adopted since engaging with Greener and Cleaner?'. Figure 10 shows the five most commonly adopted green practices relate to material consumption; almost two thirds of participants have reduced how much stuff they buy (66.1%), mend/repair items where possible (63.6%), or buy second-hand items more frequently (62.0%). A large proportion have also reduced energy use in the home (46.3%), food waste (43.8%), and meat consumption (37.2%). Participants also reported an increase in how frequently they use low-carbon modes of travel.

A larger proportion of Hub volunteers than non-volunteers have adopted these green practices (except recycling). A larger proportion of frequent Hub users than infrequent users have reduced energy and water consumption at home, as well as buying second-hand items and using active travel more frequently. A larger proportion of women than men repair or buy second-hand items. Finally, a larger proportion of Hub users that do not have an undergraduate or postgraduate degree have reduced energy consumption, use active travel more frequently, and recycle more consistently<sup>59</sup>.

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<sup>58</sup> There is a lower number of respondents for this question (n=121), compared to other survey questions (n=152). This is because this question was presented to existing Hub users only in Survey 1 (i.e., those who joined the Hub prior to March 2024 and would therefore have direct experience of how the Hub may have increased their level of environmental awareness). New users, those who started using the Hub in March, April, or May 2024, were presented this question in Survey 2. However, the routing question did not correctly identify all new users, hence the lower number of respondents.

<sup>59</sup> See Appendix 5.12 for the statistically significant differences described above – the variation in the survey sample (according to sociodemographic characteristics or level of engagement with the Hub) in their adoption of green practices since engaging with Greener and Cleaner (Fisher's exact tests).

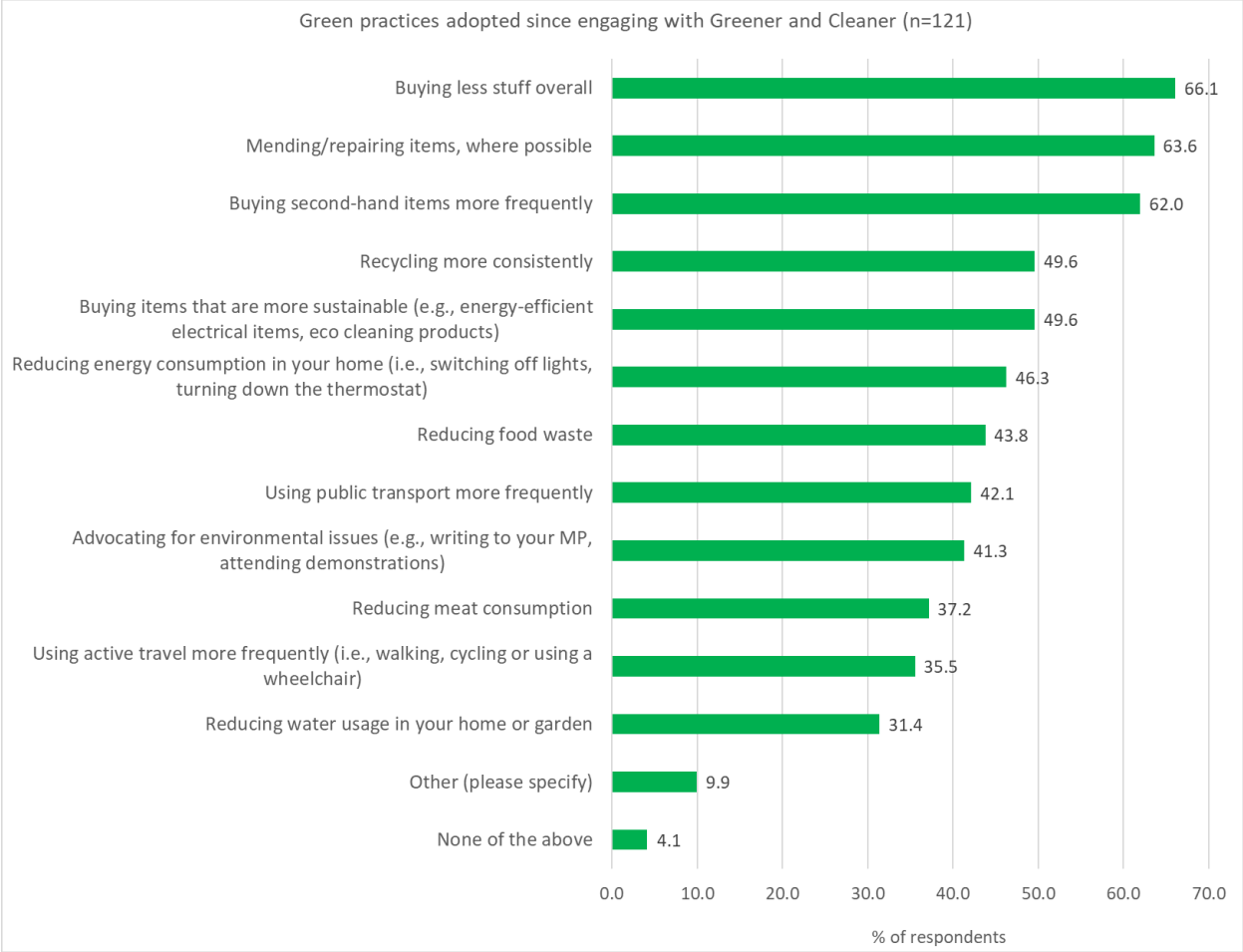


Figure 10, Green practices adopted since engaging with Greener and Cleaner (survey)

Seventeen interview participants reported that the Hub had directly influenced their lifestyle choices and sustainable behaviours (Table 17). They did not always distinguish between practical actions and enhanced environmental understanding, which reflects the interconnectedness of these two aspects of behaviour change.

Table 17, Influence of Hub interaction on participants' thinking and action regarding green issues (interviews)

Influence of Hub engagement	Frequency (n=20)
Reduced material consumption	8
Learned benefit of collective working	4
Learned about impacts of clothing production	2
Energised by workshop	1
Learned ways to reduce personal carbon footprint	1
Changed view of local politicians on environmental issue (air quality)	1
Learned about energy saving	1
Used sustainable transport	1
Legitimised small changes	1
Learned how to communicate effectively (taking people with you)	1

Reduced material consumption was the most frequently mentioned behaviour change in the interviews, which likely relates to the greater number of workshops on this topic. However, both Figure 10 and Table 17 indicate that engagement with the Hub encourages pro-environmental behaviours across a wide range of consumption domains:

*"I've got a little apple tree and I'm growing herbs...you know, mending things...not getting things that we don't need, borrowing things that obviously they have [in] the Library of Things...Just switch to your green energy supplier. Just really thinking about the impact, I mean, I use the car only if I have to. I'll either use public transport or walk. And so it's sort of from a wellbeing perspective and a health perspective as well...it really helps." (GC10)*

This participant describes the adoption of multiple green behaviours, and also mentions perceived co-benefits from making these changes, such as improved health and wellbeing.

Engaging with Greener and Cleaner is one of several possible factors which could motivate more sustainable lifestyles. Survey participants were therefore asked about the relative importance of various influences which may encourage the adoption of green behaviours. Figure 11 shows engaging with Greener and Cleaner was the most important influence, although other factors were also important, notably personal experience of extreme weather events, and media

coverage about climate change<sup>60</sup>. Interestingly, the cost-of-living crisis ‘moderately encourages’ the adoption of green behaviours, suggesting some participants identify cost savings associated with reducing or reusing. Government climate policies or incentives were the lowest ranked influence and only ‘slightly encouraged’ the adoption of green behaviours.

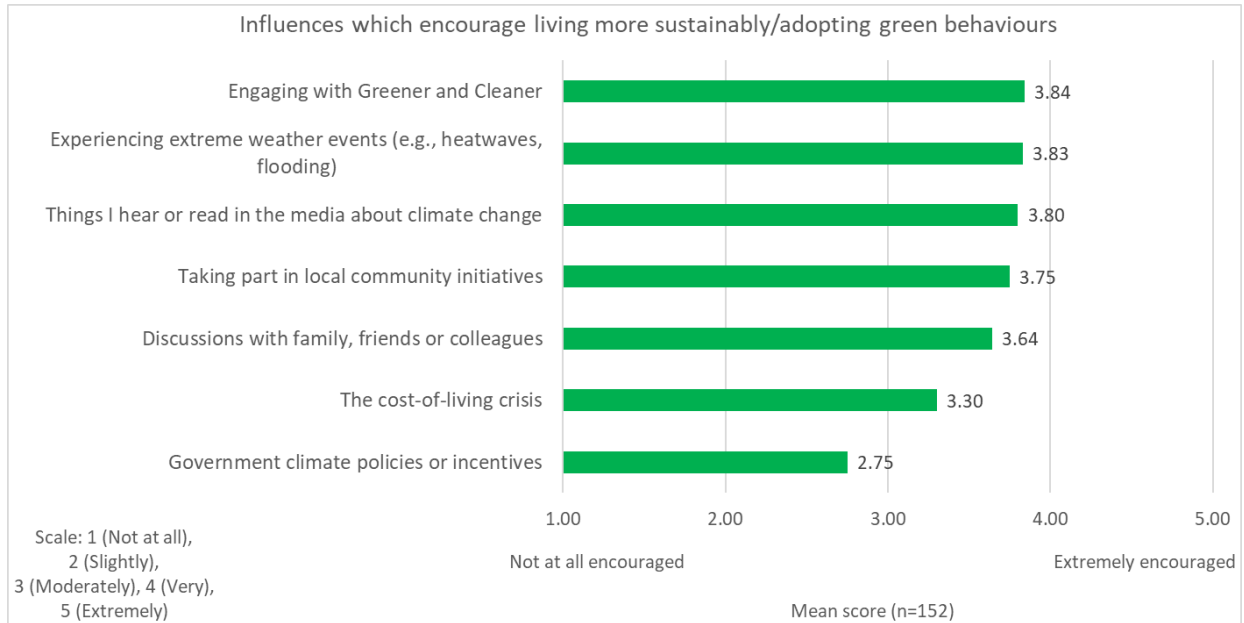


Figure 11, Influences which encourage the adoption of green behaviours (survey)

### Measuring the frequency or extent of green behaviours

A number of green behaviours were measured in both Survey 1 and Survey 2 to identify whether the programme of Greener and Cleaner workshops run during the study period had made a tangible difference in encouraging green behaviours. There were no statistically significant differences in the Hub users’ behaviours during this period (paired samples t-tests). The next three sections present findings from Survey 1, which has a larger number of respondents (n=152), about the frequency or extent of their green behaviours related to material consumption, food, and travel.

<sup>60</sup> ‘Climate change and the environment’ is consistently reported as one of the most important issues facing the UK today, although less commonly reported than other issues such as the NHS and the cost of living. See: Office for National Statistics (ONS), released 15 November 2024, ONS website, statistical bulletin, [Public opinions and social trends, Great Britain: October 2024](#). This perceived importance likely reflects UK residents’ direct experience of extreme weather events as well as media coverage on climate change.

### 3.4.1 Reducing material consumption

Greener and Cleaner places a strong emphasis on actions which 'reduce, reuse, or recycle'<sup>61</sup>. Survey participants were asked how often they engage in three behaviours which relate to reducing material consumption (Figure 12). Hub users 'often' buy second-hand items and 'sometimes' buy products without packaging.

In terms of variation within the survey sample, Hub volunteers and women buy from second hand shops and mend clothes more frequently. Longer term Hub users buy from second hand shops more frequently than new Hub users. Frequent Hub users and women buy products without packaging more frequently<sup>62</sup>.

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<sup>61</sup> This is often referred to as the 'waste hierarchy'. The resource bank on the Greener and Cleaner website includes many suggestions for reduce, reuse, and recycle actions. See: [At home - Greener and Cleaner](#)

<sup>62</sup> Mann-Whitney U tests revealed:

- Hub volunteers (mean rank = 92.73) mend clothes statistically significantly more frequently than non-volunteers (mean rank = 67.64),  $U = 1610.500$ ,  $z = -3.416$ ,  $p = .001$ . The median response for Hub volunteers and non-volunteers = often.
- Women (mean rank = 79.13) mend clothes statistically significantly more frequently than men (mean rank = 57.72),  $U = 1319.000$ ,  $z = -2.606$ ,  $p = .009$ . The median response for women = often, whereas the median response for men = sometimes.
- Hub volunteers (mean rank = 95.39) buy from second hand shops statistically significantly more frequently than non-volunteers (mean rank = 66.42),  $U = 1485.500$ ,  $z = -4.008$ ,  $p = .001$ . The median response for Hub volunteers = regularly, whereas the median response for non-volunteers = often.
- Women (mean rank = 79.93) buy from second hand shops statistically significantly more frequently than men (mean rank = 54.81),  $U = 1226.000$ ,  $z = -3.110$ ,  $p = .002$ . The median response for women = often, whereas the median response for men = sometimes.
- Longer term Hub users (i.e., joined the Hub prior to March 2024; mean rank = 80.12) buy from second hand shops statistically significantly more frequently than new Hub users (i.e., joined in March, April, or May 2024; mean rank = 60.86),  $U = 2579.000$ ,  $z = 2.454$ ,  $p = .014$ . The median response for longer term and new Hub users = often.
- Frequent Hub users (i.e., visit the Hub at least once a fortnight; mean rank = 79.40) buy products without packaging statistically significantly more frequently than infrequent Hub users (i.e., visit the Hub less than once a fortnight; mean rank = 64.71),  $U = 1524.000$ ,  $z = -2.051$ ,  $p = .040$ . The median response for frequent Hub users = often, whereas the median response for infrequent Hub users = sometimes.
- Women (mean rank = 78.73) buy products without packaging statistically significantly more frequently than men (mean rank = 59.16),  $U = 1365.000$ ,  $z = -2.380$ ,  $p = .017$ . The median response for women and men = sometimes.

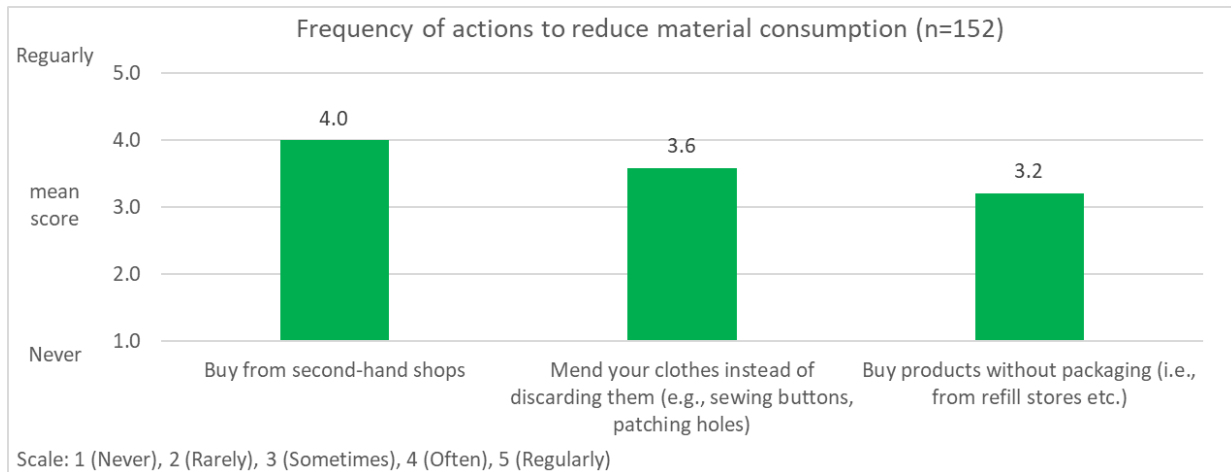


Figure 12, Hub users' frequency of actions to reduce material consumption (survey)

### 3.4.2 Diet, food waste and growing food

Three survey questions explored behaviours connected with food. Participants were asked about their frequency of meat-free days per week, given the high carbon intensity of meat production<sup>63</sup> (Figure 13). Excluding those who eat a vegetarian or vegan diet, over half (52.1%) regularly eat meat (i.e., two or less meat-free days per week). One in five (18.9%) rarely eat meat (i.e., five or more meat-free days per week). Hub volunteers and women eat meat less frequently, whereas people in low-income households eat meat more frequently<sup>64</sup>.

<sup>63</sup> The high carbon intensity of meat production is well documented. For example, see: Rööös, E., Bajželj, B., Smith, P., Patel, M., Little, D. & Garnett, T. (2017). Greedy or needy? Land use and climate impacts of food in 2050 under different livestock futures. *Global Environmental Change*, 47, 1-12.

<sup>64</sup> Mann-Whitney U tests revealed:

- Hub volunteers (mean rank = 81.58) eat meat statistically significantly less frequently than non-volunteers (mean rank = 63.44),  $U = 1466.500$ ,  $z = -2.597$ ,  $p = .009$ . The median response for Hub volunteers = 3 - 4 meat-free days per week, whereas the median response for non-volunteers = 1 - 2 meat-free days per week. Hub volunteers do not have a higher propensity to be vegetarian or vegan than non-volunteers (Fisher's exact test).
- Women (mean rank = 71.65) eat meat statistically significantly less frequently than men (mean rank = 54.66),  $U = 1150.000$ ,  $z = -2.187$ ,  $p = .029$ . The median response for women and men = 1 - 2 meat-free days per week. Women do not have a higher propensity to be vegetarian or vegan than men (Fisher's exact test).
- Hub users in low-income households (i.e., a combined annual household income, before tax deductions, of £25,999 or less; mean rank = 41.53) eat meat statistically significantly more frequently than Hub users in higher income households (i.e., a combined annual household income, before tax deductions, of £26,000 or more; mean rank = 58.23),  $U = 1079.500$ ,  $z = 2.135$ ,  $p = .033$ . The median response for Hub users in low-income households = 1 - 2 meat-free days per week, whereas the median response for Hub users in higher income households = 3 - 4 meat-free days per week. Hub users in higher income households do not have a higher propensity to be vegetarian or vegan than Hub users in low-income households (Fisher's exact test).



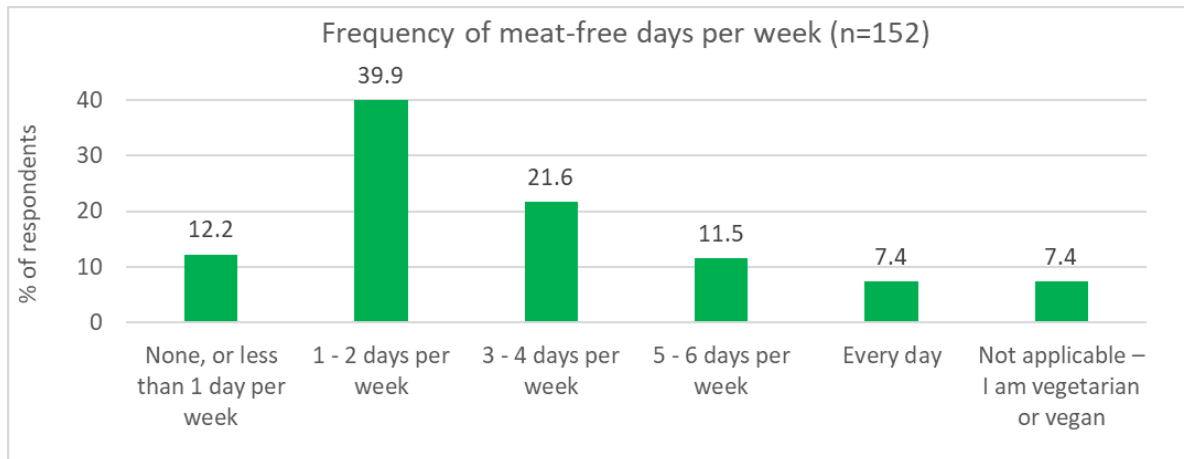


Figure 13, Greener and Cleaner Hub users' frequency of meat-free days per week (survey)

The next question asked was 'In a typical week, how much of the food that you buy is thrown away?'. Figure 14 shows three quarters of participants (77.9%) waste 10% or less of their food, suggesting that Hub users have a strong awareness of avoiding food waste. Hub users in low-income households and those aged 55 or older waste less food<sup>65</sup>.

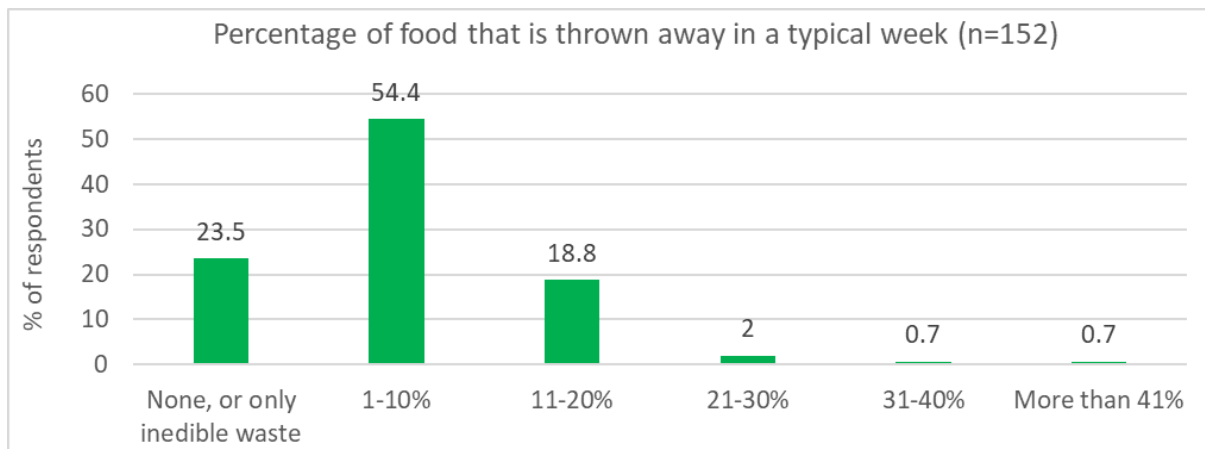


Figure 14, Percentage of food thrown away in a typical week by Greener and Cleaner Hub users (survey)

<sup>65</sup> Mann-Whitney U tests revealed:

- Hub users in low-income households (i.e., a combined annual household income, before tax deductions, of £25,999 or less; mean rank = 44.28) waste less food in a typical week than Hub users in higher income households (i.e., a combined annual household income, before tax deductions, of £26,000 or more; mean rank = 63.36),  $U = 1210.000$ ,  $z = 2.370$ ,  $p = .018$ . The median response for Hub users in low-income households and higher income households = 1-10% of the food they buy in a typical week is thrown away.
- Hub users aged 55 or older (mean rank = 62.89) waste less food in a typical week than Hub users aged 54 or younger (mean rank = 78.23),  $U = 2750.000$ ,  $z = 2.233$ ,  $p = .026$ . The median response for Hub users aged 55 or older and those aged 54 or younger = 1-10% of the food they buy in a typical week is thrown away.

The third question considered Hub users' propensity to grow some of their own food, as Greener and Cleaner run activities at a local community garden. Figure 15 shows a wide distribution of responses; some are extremely motivated (16.8%), whereas others are not motivated at all (14.1%). There were no statistically significant differences between Hub users based on their level of engagement with the Hub or their sociodemographic characteristics.

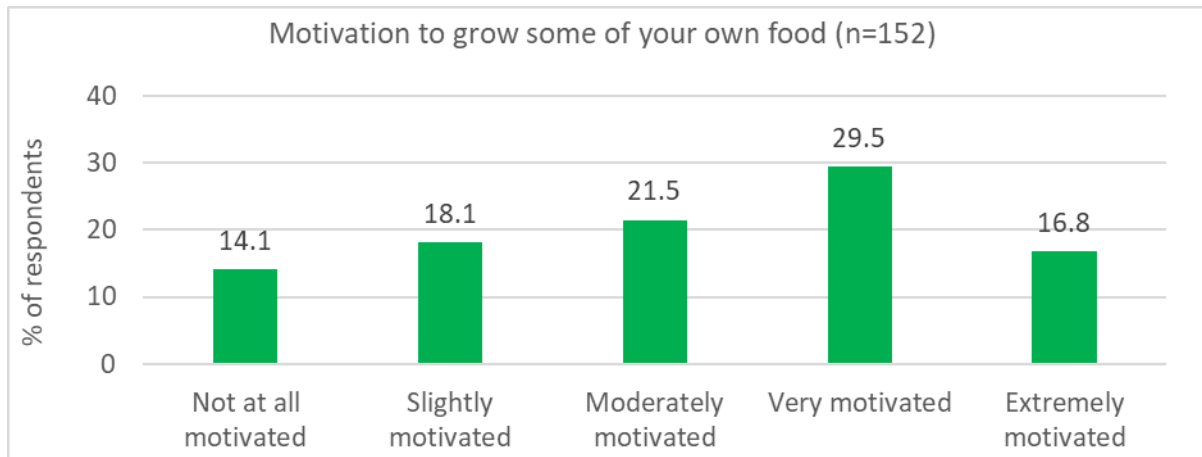


Figure 15, Greener and Cleaner Hub users' motivation for growing some of their own food (survey)

### 3.4.3 Sustainable travel behaviours

Just under half of Hub users' journeys in a typical week are made using public transport (48.3%) and a further 46.4% of journeys are made using active travel (i.e., walking, cycling, or using a wheelchair)<sup>66</sup>. This would suggest using sustainable travel options is very common among Hub users, although this finding should be understood in the context of London, which has very well-developed public transport and active travel infrastructures. Younger Hub users use public transport for greater proportion of their journeys, but there were no statistically significant differences within the survey sample for the use of active travel<sup>67</sup>.

### 3.4.4 Challenges faced in choosing to live more sustainably

Interview participants were invited to talk about any challenges they faced in trying to make lifestyle changes based on what they had learned from their engagement with the Hub (Table 18).

<sup>66</sup> Combining these two proportions would suggest very few journeys are made using private car (i.e., less than 6%), although car use was not measured in this survey and so we cannot make robust assertions about levels of car travel.

<sup>67</sup> An independent samples t-test revealed Hub users aged 34 or younger use public transport for a greater proportion of their journeys in a typical week (60.7% ± 31.1), compared to people aged 35 or older (45.6% ± 30.0), a statistically significant difference of 15.1% (95% CI, 1.0 to 29.1),  $t(143) = 2.116$ ,  $p = .036$

- For active travel, there were no statistically significant differences between Hub users based on their level of engagement with the Hub or their sociodemographic characteristics.

Table 18, Challenges experienced in choosing to live more sustainably (interviews)

Challenges in living more sustainably	Frequency (n=20)
Other people	6
Experiencing feelings of guilt	4
Lack of time	4
Lack of infrastructure	4
Challenge in doing a specific behaviour	3
Lack of resources or equipment	2
Dealing with negative emotions	1
Perceived lack of self-efficacy	1
Living in a system that forces poor decisions	1
Lack of societal leadership	1
Limited by type of home (e.g., no retrofitting)	1
Non-specific limitation	1
Work-related responsibilities	1

The most frequently mentioned challenge was other people. Social dynamics (e.g., family, peers, or broader social influences) had a significant impact on participants' autonomy and ability to make sustainable behaviour changes. This could reflect resistance or a lack of support from others, social pressure, or conflicting priorities within participants' social circles or the wider community who do not prioritise sustainability in their lifestyles:

*"I find that the challenges are not for my behaviour, but it's the other people in my life, trying to change their behaviour is the bigger challenge. So for example, having children that obviously like fast fashion is a difficult one."* (GC12)

Experiencing guilt, a lack of time, and encountering a lack of infrastructure were equally mentioned, with each indicating a different dimension of challenge. From a more individual psychological perspective, guilt was linked to instances where people had to compromise or were unable to consistently align their behaviours with their values:

*"Gosh, I mean, there are challenges to this way of life, aren't there? You can't always do it. You know, I use the tumble dryer sometimes. I have pangs of guilt when I do."* (GC8)

Overall, the most frequently cited challenges pointed to interpersonal and structural constraints, with other people and a lack of infrastructure as key barriers. Addressing these issues might

involve tackling community awareness, creating supportive social networks, and improving access to sustainable infrastructure. A mix of emotional challenges, such as experiencing guilt, and practical ones like a lack of time suggest the need for strategies that can ease the emotional burden of change and integrate sustainability into participants' daily routines in a more time-efficient way.

### 3.5 Influence of the Hub in motivating climate action in different social roles

Taking climate action is often associated with people's role as a consumer, for instance, reducing how much we buy, or purchasing sustainable products. However, there is a wide range of contexts in which individuals can choose to be agents of change<sup>68</sup>. Examples presented on the Greener and Cleaner website include encouraging sustainable practices in the workplace, or investing in banks with strong green credentials<sup>69</sup>. This section explores how Greener and Cleaner influences users to take actions in social roles beyond that of consumer.

Participants who completed Survey 2 (n=59) were presented with a list of everyday situations or contexts and asked 'Which, if any, of these situations or locations do you try to be more green since engaging with Greener and Cleaner?'. Figure 16 shows 'at home' (89.8%) and 'when shopping' (61.0%) are the most common situations, which reflects the consumer role. However, around half of Hub users take actions in their local community (52.5%) or in the workplace (47.5%). One in five (20.3%) consider the environmental policies and practices of banks when choosing where to invest their money. These findings suggest the Hub is encouraging many users to consider the multiple ways they can cut their carbon footprint.

In terms of variation among the survey respondents, a larger proportion of Hub volunteers try to be greener when spending time with family or friends, whereas a larger proportion of frequent Hub users try to be greener when shopping and for everyday travel. A larger proportion of those with children living at home, and those who do not have an undergraduate or postgraduate degree, try to be greener in their workplace or business<sup>70</sup>.

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<sup>68</sup> Hampton, S. & Whitmarsh, L., 2023. Choices for climate action: A review of the multiple roles individuals play. *One Earth*, 6(9), 1157 – 1172. [https://www.cell.com/one-earth/fulltext/S2590-3322\(23\)00354-8#fig1](https://www.cell.com/one-earth/fulltext/S2590-3322(23)00354-8#fig1)

<sup>69</sup> See: [Get Greener - Greener and Cleaner](#)

<sup>70</sup> Fisher's exact tests revealed:

- A larger proportion of Hub volunteers (66.7%) try to be greener when spending time with family or friends, compared to non-volunteers (39.5%). This difference in proportions is statistically significant,  $p = .041$
- A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 81.8%) try to be greener when shopping, compared to infrequent Hub users (i.e., visit the Hub less than once a fortnight; 45.7%). This difference in proportions is statistically significant,  $p = .007$
- A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 63.6%) try to be greener for everyday travel or commuting, compared to infrequent Hub users (i.e., visit the Hub less than once a fortnight; 28.6%). This difference in proportions is statistically significant,  $p = .010$
- A larger proportion of Hub users with children (under the age of 18) living at home (60.0%) try to be greener in their workplace or business, compared to Hub users without children living at home (34.5%). This difference in proportions is statistically significant,  $p = .044$
- A larger proportion of Hub users who do not have an undergraduate or postgraduate degree (76.9%) try to be greener in their workplace or business, compared to Hub users with a degree (37.8%). This difference in proportions is statistically significant,  $p = .014$

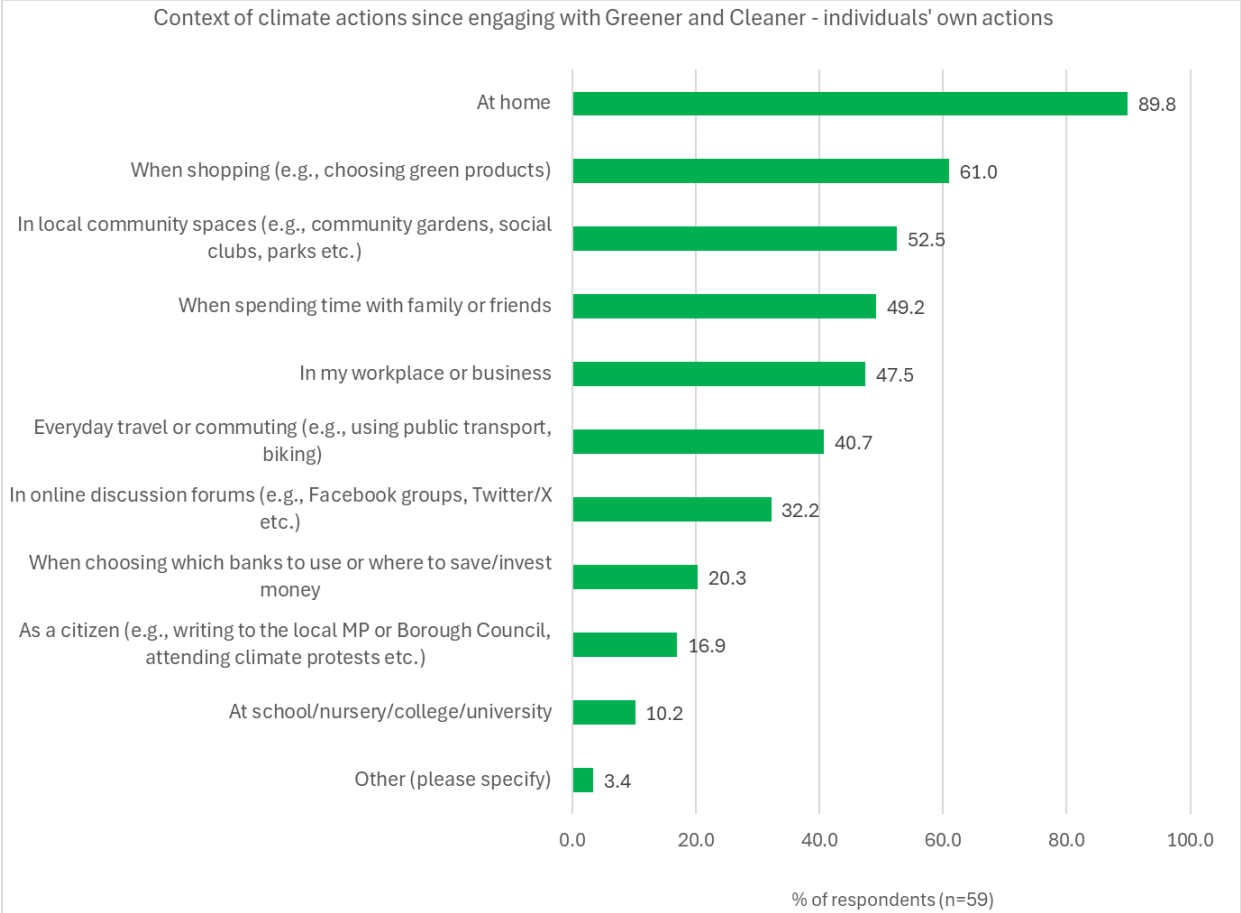


Figure 16, Context or situation of personal climate actions since engaging with Greener and Cleaner (survey)

3.5.1 Engaging others and using social influence

Survey 2 participants were presented with the same list of situations or contexts and asked 'Which, if any, of these situations or locations do they encourage other people to be more green since engaging with Greener and Cleaner?' (Figure 17). This question explored their level of social influence when discussing green behaviours with people in their peer networks. The most frequent responses were 'at home' (72.9%) and 'with family and friends' (61.0%), suggesting most Hub users engage in conversations about green behaviours with people they are closest to. However, these conversations also occur with work colleagues (55.9%), in online forums (35.6%) and in community spaces (35.6%).

A larger proportion of Hub users with children living at home try to encourage others to be greener in their workplace or business, at home, and when spending time with family or friends.

Moreover, a larger proportion of Hub users who do not have an undergraduate or postgraduate degree try to encourage people to be greener in their workplace or business<sup>71</sup>.

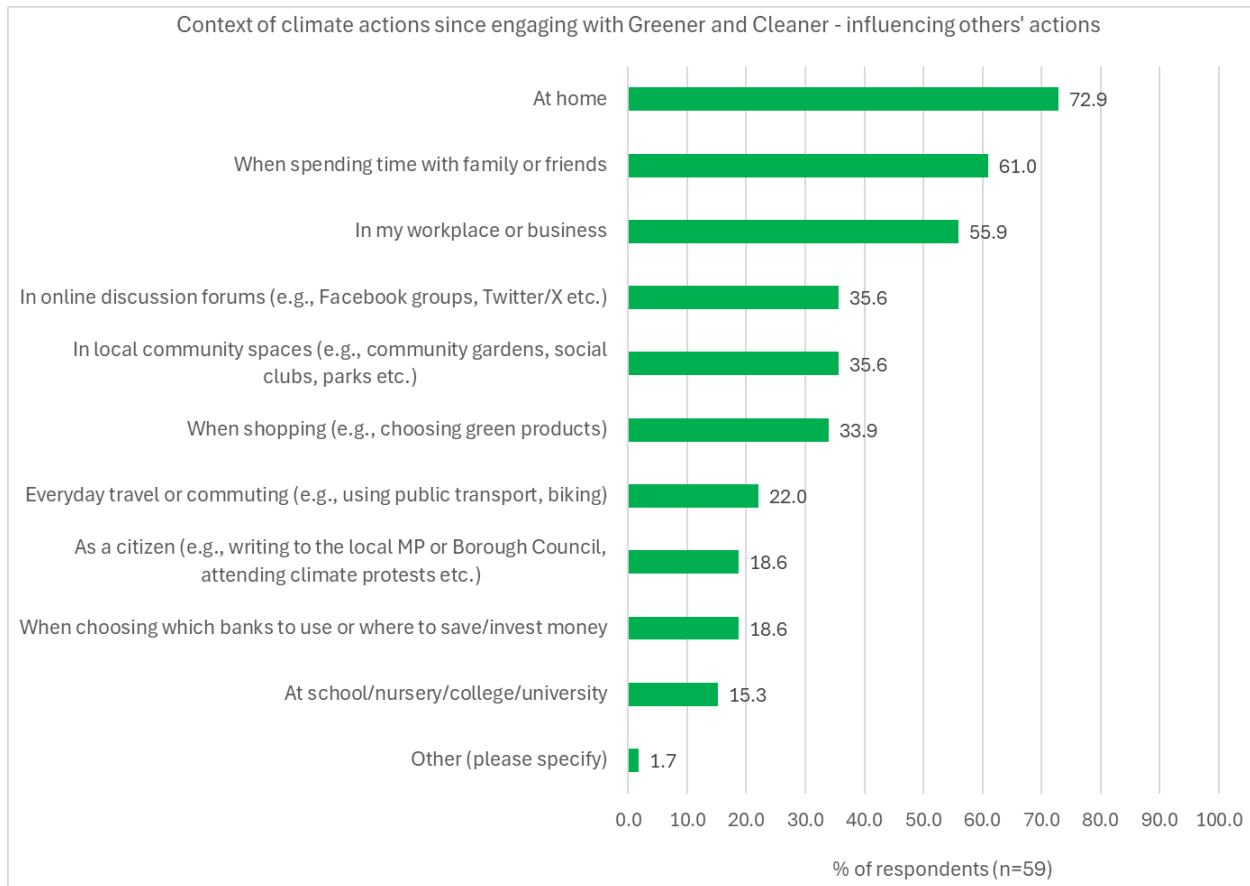


Figure 17, Context or situation for influencing others' climate actions since engaging with Greener and Cleaner (survey)

Survey participants were asked 'Approximately how many people have you spoken with about climate change or environmental issues in the last 3 months?'. The average for Hub staff and

<sup>71</sup> Fisher's exact tests revealed:

- A larger proportion of Hub users with children (under the age of 18) living at home (90.0%) try to encourage others to be greener at home, compared to Hub users without children living at home (55.2%). This difference in proportions is statistically significant,  $p = .003$
- A larger proportion of Hub users with children (under the age of 18) living at home (73.3%) try to encourage others to be greener when spending time with family or friends, compared to Hub users without children living at home (48.3%). This difference in proportions is statistically significant,  $p = .044$
- A larger proportion of Hub users with children (under the age of 18) living at home (70.0%) try to encourage people in their workplace or business to be greener, compared to Hub users without children living at home (41.4%). This difference in proportions is statistically significant,  $p = .025$
- A larger proportion of Hub users who do not have an undergraduate or postgraduate degree (84.6%) try to encourage people in their workplace or business to be greener, compared to Hub users with a degree (48.9%). This difference in proportions is statistically significant,  $p = .021$

volunteers was 51 people, reflecting their public-facing role. However, people who use the Hub but do not volunteer also regularly have these discussions, with 17 people on average in the last three months<sup>72</sup>. This suggests a high level of pro-environmental social influence among Hub volunteers *and* non-volunteers.

Survey respondents<sup>73</sup> were then presented with a list of topics, shown in Figure 18, and asked which topics they discussed with other people; the most common topic was 'ways to live greener/more sustainably' (83.9%). Participants could also specify 'other topics' and the most common were: the severity of the climate crisis (n=4), air pollution (n=3), encouraging pro-environmental behaviours in the workplace (n=3), the failure of governments to tackle climate change (n=3), and flying less frequently (n=2).

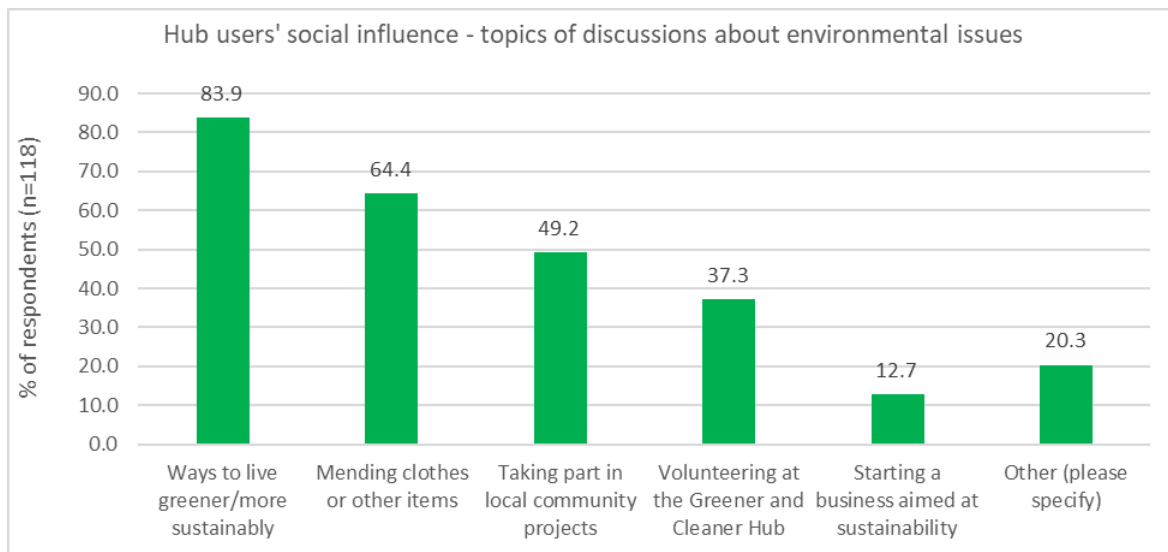


Figure 18, Themes when discussing environmental issues or climate change with others (survey)

<sup>72</sup> The mean number of people spoken to about climate change was inflated by outliers for both Hub volunteers and non-volunteers (e.g., a few individuals who reported speaking to a very large number, for instance 100 people). However, given the Hub focuses on engaging people in the local community, there is no clear reason to remove these outliers as some individuals will likely speak to many people. The median number of people spoken to about climate change was 10 for Hub volunteers, and 9 for non-volunteers.

- There were no statistically significant differences in the number of people spoken to about environmental issues between sub-groups of the survey sample (based on sociodemographic characteristics or level of Hub engagement).

<sup>73</sup> There is a lower number of respondents for this question (n=118), compared to other survey questions (n=152). This is because this question was presented to existing Hub users only in Survey 1 (i.e., those who joined the Hub prior to March 2024, and would therefore have direct experience of how the Hub may have increased their level of environmental awareness). New users, those who started using the Hub in March, April, or May 2024, were presented this question in Survey 2. However, the routing question did not correctly identify all new users, hence the lower number of respondents.



Interview participants were asked whether, and if so how, their patterns of communication regarding green issues had changed since engaging with the Hub (Table 19).

*Table 19, Influence of the Hub on participants' conversations with others about green issues (interviews)*

Hub influence on discussions about green issues	Frequency (n=20)
Hub influenced conversations - better awareness/vocabulary	4
Hub influenced conversations - tries to influence people more	4
Hub influenced conversations - Hub as icebreaker	3
Hub influenced conversations - more confident/natural	2
Hub influenced conversations - more empathetic	1
Hub influenced conversations - importance of community engagement	1
No significant change in conversations	1

Increased environmental awareness and vocabulary were frequently mentioned, resulting in a greater willingness and confidence to influence others:

*"I feel that not only do I dare to influence my friends a little bit more, but also I feel that I have...a better level of awareness and knowledge on some topics. I have the right vocabulary as well, so I feel that it really helps." (GC1)*

Three participants explained that the Hub itself provides a useful way of initiating conversations and engaging others:

*"You can hide behind the fact it's not you, so I can say, oh, you know, we've got this Hub in Bromley. And I went there and they were talking about 'X' and then I can start a conversation because it's not me saying, have you thought about 'X'? So I think it's kind of nice to have that as a conversation starter." (GC6)*

The most frequently cited contexts for discussing environmental issues were at home or with friends:

*"My son...you know how children, they always want some new stuff, new clothes, new games, new, etcetera. But I told him, look, you know how global warming is impacting our planet and you are going to be the first in line basically because you are going to inherit this planet." (GC1)*

One participant described how it was not always easy to start conversations about sustainability in their local community:

*"I guess a little bit in workplaces, thinking a bit about how to be more sustainable but not really in our neighbourhood. That would be the big change, you know, to see it as something that's really alive in my neighbourhood."* (GC9)

This quote suggests discussing environmental issues with people outside of your family or close social groups can be more challenging. However, volunteering at the Hub provides an opportunity to gain confidence and experience in initiating these conversations.

### 3.5.2 Taking part in green community initiatives

Another context for taking climate action is within the local community. Collective action can be an important mechanism for change (this is discussed further in section 3.6) and some interview participants have been involved in community initiatives since engaging with the Hub (Table 20).

*Table 20, Influence of the Hub on participants' engagement in green community initiatives (interviews)*

Engagement in community initiatives	Frequency (n=20)
Has engaged in specific initiative (influence unclear)	2
Has engaged in specific initiative (not influenced by Hub)	2
Has engaged - influenced by Carbon Literacy workshop	1
Has engaged - generally influenced by Hub	1
Has not engaged - due to other commitments	7
Has not engaged - no clear reason provided	5
Has not engaged - unaware of local green initiatives	2
Has not engaged - unaware of how to get involved	1
Has not engaged - lives outside of Bromley	1
Has not engaged - other local initiatives unsuccessful	1
Has not engaged - Hub is more focused on individual actions	1

One participant described how attending the Carbon Literacy workshop had motivated her involvement in community initiatives:

*"When I did the Carbon Literacy training, which was through the Hub, part of that was trying to engage other people. So we do quite a lot on our estate and our road, you know, we have a street party every year. We've always tried to give it a bit of an environmental theme." (GC2)*

The most frequently mentioned reason for not engaging in community initiatives was a lack of time or other priorities:

*"No, it hasn't...I tend to be quite time-poor given my job and my children and things. So you know, I haven't looked into that and I sort of haven't looked into anything locally." (GC19)*

The Hub plays an important role in highlighting opportunities for participation in community projects for those with the time and capacity, and is connected with other local organisations such as the Bromley Environmental Network<sup>74</sup>.

### 3.5.3 Expressing citizenship and environmental advocacy

Over 40% of survey participants have advocated for environmental issues through actions such as writing to their local MP or attending a climate demonstration, since they started using the Hub (see section 3.4, Figure 10). Survey participants were asked about the frequency of these actions; they 'sometimes' sign petitions related to environmental issues, but 'rarely' attend marches or protests<sup>75</sup> (Figure 19). Hub volunteers and longer-term Hub users sign petitions related to environmental issues more frequently, whereas Hub users in low-income households sign petitions less frequently. Those with an undergraduate or postgraduate degree are more likely to attend marches or protests<sup>76</sup>.

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<sup>74</sup> See: [Bromley Environment Network – A collective of Bromley community and charity organisations sharing information for a greener borough](#)

<sup>75</sup> This question was asked of the entire survey sample (n=152), rather than the 32.9% of participants who reported advocating for environmental issues (n=50). The frequency of signing petitions or attending marches is likely to be higher among the 50 participants who reported advocating for environmental issues.

<sup>76</sup> Mann Whitney U tests revealed:

- Hub volunteers (mean rank = 88.97) sign petitions related to environmental issues statistically significantly more frequently than non-volunteers (mean rank = 69.35),  $U = 1787.500$ ,  $z = -2.648$ ,  $p = .008$ . The median response for Hub volunteers = often, whereas the median response for non-volunteers = sometimes.

- Longer-term Hub users (i.e., joined the Hub prior to March 2024; mean rank = 79.34) sign petitions related to environmental issues statistically significantly more frequently than new Hub users (i.e., joined in March, April, or May 2024; mean rank = 63.33),  $U = 2490.000$ ,  $z = 1.990$ ,  $p = .047$ . The median response for longer-term Hub users = often, whereas the median response for new Hub users = sometimes.

- Hub users in low-income households (i.e., a combined annual household income, before tax deductions, of £25,999 or less; mean rank = 39.36) sign petitions related to environmental issues statistically significantly less frequently than Hub users in higher income households (i.e., a combined annual household income, before tax deductions, of £26,000

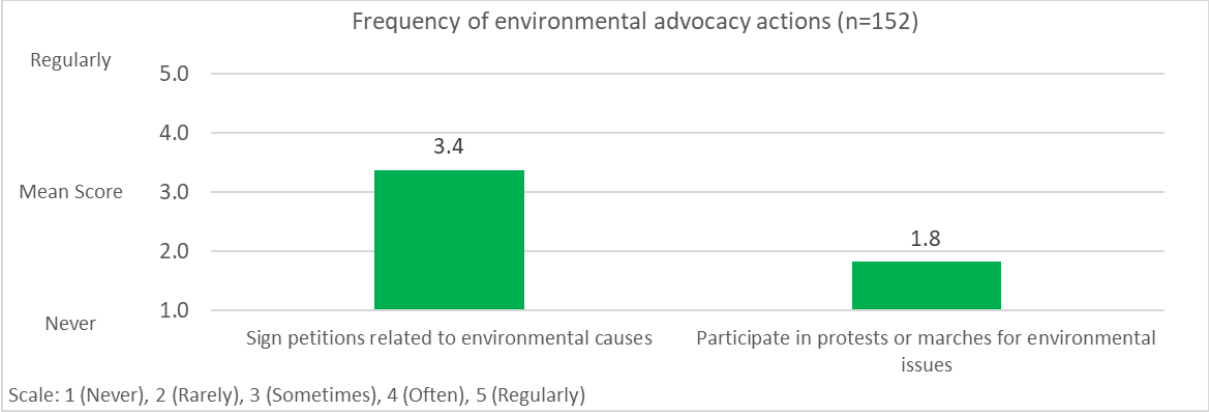


Figure 19, Frequency of participation in environmental advocacy actions (survey)

Interview participants were asked if they had been influenced by the Hub to engage in green advocacy (Table 21). The interview sample was fairly evenly split between those who had engaged and those who had not.

Table 21, Influence of the Hub on participants’ engagement in green political advocacy (interviews)

Engagement in green political advocacy	Frequency (n=20)
Has engaged in specific action - influenced by Hub	7
Has engaged in specific action - not influenced by Hub	2
Has not engaged - Dislike of ‘extreme’ pro-environmental behaviour	4
Has not engaged - lack of time	3
Has not engaged - Hub is less focused on advocacy	1
Has not engaged - lack of ability	1
Has not engaged - lack of social support	1
Has not engaged - risk to reputation	1

Seven interview participants reported that they had engaged in green advocacy and were influenced by the Hub. Actions mainly constituted ‘soft’ advocacy such as signing a petition or writing to their MP:

or more; mean rank = 64.78),  $U = 1316.500$ ,  $z = 2.943$ ,  $p = .003$ . The median response for Hub users in low-income households = sometimes, whereas the median response for Hub users in higher income households = often.  
 - Hub users with an undergraduate or postgraduate degree (mean rank = 79.62) participate in protests or marches for environmental issues statistically significantly more frequently than Hub users without a degree (mean rank = 53.80),  $U = 1193.500$ ,  $z = -3.273$ ,  $p = .001$ . The median response for Hub users with an undergraduate or postgraduate degree = rarely, whereas the median response for those without a degree = never.

*"The clean air thing that Parisa was talking about, which was postcards to all the mayoral candidates asking them to make sure their policies were in line with the clean air agenda, the healthy lungs for kids, 'Mums for Lungs', that was it. I'd say I'm kind of more on the soft side of things, talking to people and trying to live the example." (GC7)*

Another participant remarked that the Hub was less focused on organising groups to attend climate marches:

*"So my husband and I are both engaged with [environmental group], and they are heavily promoting activism, but we don't see that from the Hub, which I think is lacking because actually it would be really good to have a group of local people who could go to the protest together." (GC6)*

Participants' reasons for not engaging in green advocacy varied. Some understood it as protesting, which they felt was too extreme and so were reluctant to get involved:

*"I don't like to go to protests or taking it to more extreme levels. I know you're given some examples of how you could do it, I suppose less aggressively, but, yeah. I guess no, I'm just not motivated to do that." (GC3)*

Other participants had not engaged in green advocacy due to a lack of time or confidence in their ability:

*"The writing to the MP thing. I find that quite a difficult thing because I feel like I'm not eloquent enough. I feel like I won't have the right facts to present. So I'm not confident doing that type of thing." (GC12)*

These extracts reveal green advocacy can take many forms and participants have different views on which types they are prepared to engage in, if at all. Equally, the Greener and Cleaner team may be prepared to support some advocacy actions, such as writing to the local MP or mayoral candidates, but not others.

#### 3.5.4 Choosing where to invest money

One in five (20.3%) survey participants consider the green credentials of banks when choosing where to invest or save their money (see section 3.5, Figure 16). This was not a prominent theme in the interviews, although one participant did acknowledge that engaging with the Hub had encouraged her to consider financial decision-making as one concrete action she could take:

*"So certainly, making informed choices in your own life about what you do, what you buy, where you invest, things like that." (GC7)*

The Greener and Cleaner website offers advice on green investments, as well as practical suggestions for saving money through reduce and reuse actions<sup>77</sup>.

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<sup>77</sup> See: [Getting greener with your money - Greener and Cleaner](#)

### 3.6 Individual and collective actions to address climate change

Greener and Cleaner places a strong emphasis on people as agents of change, through individual and collective forms of climate action. Their website states “Greener & Cleaner means positivity, that our changes however small do have an impact...Greener & Cleaner means community, coming together with different people...”<sup>78</sup>. This section considers Hub users’ perceptions of responsibility to tackle climate change, their views on the effectiveness of individual and collective actions, and the role of the Hub in supporting people and building community.

Survey participants were asked to rank four groups or authorities in terms of their relative responsibility for reducing the risk of climate change. Figure 20 shows the ranked order; the National Government is perceived to have the most responsibility, with 64.3% of respondents placing the Government in first position. Businesses and industries are ranked second, local councils third, and individuals and households are considered to have the least responsibility, with 57.4% of participants placing them in last position. However, it is notable that one in six respondents (14.9%) believe individuals and households have the most responsibility<sup>79</sup>. These rankings are very similar to public perceptions of responsibility identified in a recent study of Cornwall residents<sup>80</sup> and a nationally representative sample<sup>81</sup>.

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<sup>78</sup> See: [Our impact - Greener and Cleaner](#)

<sup>79</sup> All sub-groups of the survey sample (according to sociodemographic characteristics or their level of engagement with the Hub, see Appendix 5.8) ranked ‘National Government’ in first position and ‘Businesses and industries’ in second position. However, there was some variation within the sample for their ranking of the remaining two social groups/authorities in Figure 20. Frequent Hub users (i.e., visit Hub at least once a fortnight), non-volunteers, men, those aged 55 or older, and those who do not have an undergraduate or postgraduate degree believe ‘Individuals and households’ have more responsibility than ‘Local Councils’. However, the mean differences between these sub-groups’ ranked order tended to be quite small.

<sup>80</sup> Wilson, M., & Whitmarsh, L. (2023). [Cornwall Council behaviour change and engagement programme – survey of residents](#). CAST report for Cornwall Council. In this study, 61.7% of Cornwall residents believe the Government has the most responsibility and 14.4% believe individuals and households have the most responsibility.

<sup>81</sup> Demski, C., Steentjes, K. & Poortinga, W. (2024). *CAST Data Portal: Public perceptions of climate change and climate action*. The Centre for Climate Change and Social Transformations (CAST). Available at: <https://cast.ac.uk/cast-data-portal-public-views-on-climate/>. In the most recent wave of this study (2023), 81% of respondents stated they believe the Government has a responsibility to reduce the risk of climate change, and 62% feel a personal responsibility to prevent climate change from worsening. The CAST survey did not ask about the perceived responsibility of businesses or local councils to tackle climate change.

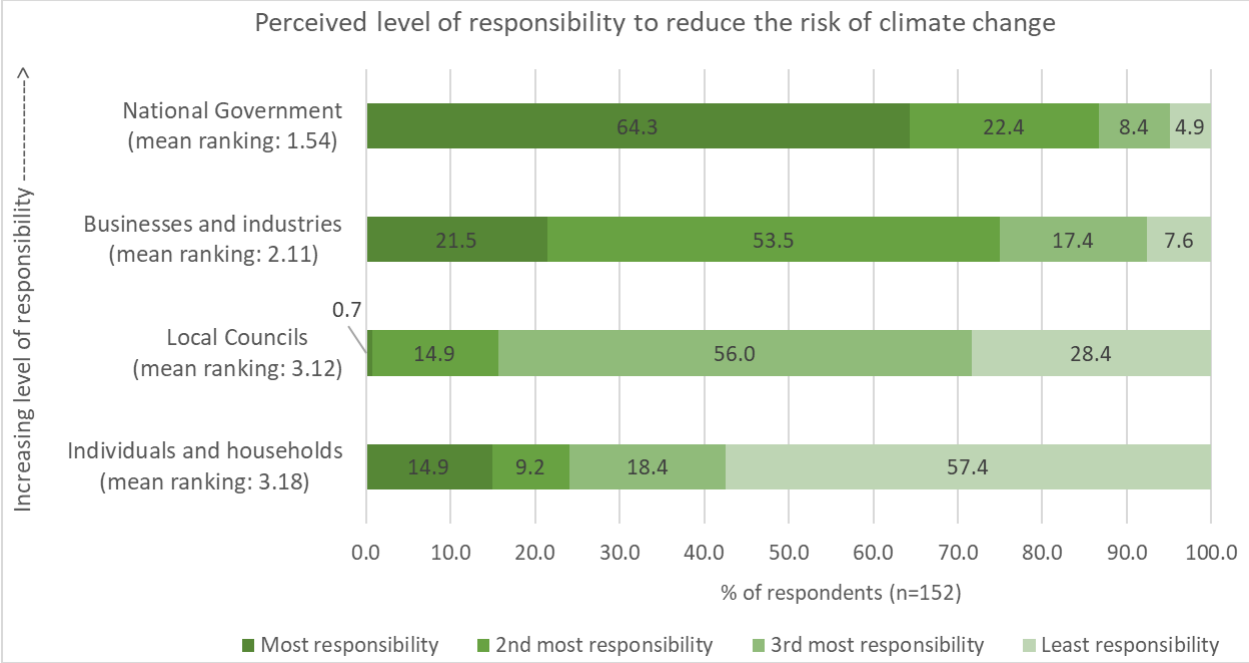


Figure 20, Perceived level of responsibility to reduce the risk of climate change (survey)

### 3.6.1 Sense of individual or personal responsibility to address climate change

All interview participants acknowledged a sense of personal responsibility to address climate change. Table 22 shows Hub users choose to express and manage this responsibility in various ways.

Table 22, Sense of personal responsibility to address climate change and how this responsibility is managed (interviews)

Managing personal responsibility	Frequency (n=20)
Managing difficult choices	12
Increasing awareness	3
Managing cost	2
Engaging with others	1
Avoid judging others	1
Inspired by others	1
Avoiding self-guilt	1
Managing limitations	1
Aggregate impact	1
Establishing good habits	1



The interview responses reflected a range of approaches for managing this responsibility. The dominant theme was around making difficult choices in their lives:

*"I'm more mindful about how many types of transport I'm using... Obviously, yes, I've got to work, so I need to use the car. I've tried to do the two buses, it doesn't really work... I'm getting [to work] a bit later. But yeah, I don't abuse it if that makes sense... I just think because I have a car, I shouldn't just have to get in my car."* (GC19)

This example suggests that participants face challenges in making decisions that align with their sense of responsibility, including trade-offs between environmental concerns and personal needs. They have to balance sustainable choices with convenience, financial constraints, or lifestyle preferences. A few participants saw 'increasing awareness' as a responsibility, whether it involved learning more about climate change or understanding the most effective ways to reduce their personal impact.

#### Perceived efficacy to address climate change through individual actions

Interview participants were also asked whether they felt they could make a difference in addressing climate change as an individual (Table 23).

*Table 23, Perceived efficacy of individual actions to address climate change (interviews)*

Efficacy of individual actions	Frequency (n=20)
Mentions specific impactful action(s)	8
Aggregated impact of individual actions	6
Making informed choices	4
Influencing others	4
Need for mindset change	2
Doing actions properly	1
Need for behavioural policymaking	1

Several interview participants emphasised the cumulative impact of individual actions and the importance of example-setting:

*"Every little bit helps. Every person that can change what they're doing, spread the word, try and encourage other people, that all makes a difference. If...every person says, 'What's the point?', it's not going to make a difference. If we all did that, then what mess would we be in now?"* (GC12)

Such perspectives were framed optimistically, recognising that larger-scale change can be driven by the sum of individual efforts. The idea of aggregate impact reinforces the belief that personal actions are not isolated or insignificant but contribute to a larger movement for climate change mitigation and could help motivate a sense of community responsibility.

Other responses highlighted the importance of making informed decisions, such as using a carbon footprint calculator. One participant emphasised that individual actions need to be supported by policies that encourage or mandate sustainable behaviours. This points to the limitations of individual responsibility without broader policy and structural support.

### 3.6.2 Sense of collective or community responsibility to address climate change

Interview participants were asked if the wider community has a responsibility to address climate change, and, if so, how that responsibility should be managed (Table 24). All participants believe the community has a responsibility.

*Table 24, Sense of community responsibility to address climate change and how this responsibility is managed (interviews)*

Managing collective responsibility	Frequency (n=20)
Difficulty of persuading whole community to take responsibility	7
Need for better communication	3
Need for community initiatives	3
Need for better infrastructure	2
Engagement in wider range of behaviours	2
Influencing the right people in the community	1
What counts as 'community'?	1
Managing limited budgets	1
Negotiating competing priorities	1
Lack of time	1
Countering false climate change beliefs	1
Environmental impacts not distributed evenly across community	1
Need for community cohesion	1
Need for community leadership	1

The difficulty of engaging the whole community to take responsibility was the most frequently mentioned theme, due to differing beliefs, priorities, and levels of engagement:

*"I live in a block of flats with communal recycling bins, and there are people that just ignore them and just put the wrong stuff in the wrong bins. And it infuriates me. It yeah, it is frustrating because it's like the anti-ULEZ lot that were cutting down the traffic lights, ridiculous. I can't understand how they cannot believe the impact of emissions from cars when the evidence is there and they're just ignoring it and they're just blaming [Sadiq] Khan. So, yeah, we should all be working together...it feels like in our area it's fifty-fifty. It feels like half are trying to make a difference and half are not." (GC12)*

This response reflects socially divisive issues affecting the local community, such as low recycling rates and the resistance to traffic congestion charges. This participant emphasised a need for widespread cultural or mindset shifts within the community, but also sees this as a major hurdle.

A few participants described the importance of effective communication to mobilise the community, as existing messaging may not be reaching or resonating with the broader population. Other responses underlined a need for organised community initiatives to foster engagement, collaboration, and a sense of shared responsibility.

#### Perceived efficacy to address climate change through collective actions

Interview participants were also asked whether they felt they could make a difference to climate change through community actions (Table 25).

*Table 25, Perceived efficacy of community actions to address climate change (interviews)*

Efficacy of collective actions	Frequency (n=20)
Volunteering or contributing within the community	7
Through specific community actions	7
Generating awareness across the community	2
Importance of defining 'community'	2
Through Hub outreach	1
Avoid alienating people	1
Organising community events	1
Tailoring messages to community groups	1

One key theme was volunteering or contributing within the community (e.g., through the Hub), reflecting a strong belief in the power of community-based organisations:

*"I think I probably can [make a difference] if I sort of meet the right people and get involved with the right group. I mean obviously with the Hub I'm starting to, but I want to try and find out about others." (GC12)*

Making a difference through direct actions within the community was also a prominent theme:

*"I've given you the example of asking people to turn off their car engines. I live by a primary school, so it's definitely improved I think over the years. Yeah, reducing litter. Yeah, I can't remember what they're called now, it's a 'good neighbour' scheme where I pick up litter and encourage other people to do so, that sort of thing. Yeah, I think things have improved." (GC11)*

This participant believes visible actions, when performed in a community context, can have an impact, reinforcing the idea that personal responsibility and community engagement are interconnected.

Other participants noted that the concept of 'community' was a complex and multifaceted one, and that community responsibility was contingent upon geographical, social, or cultural definitions when thinking about climate action.

### 3.6.3 The role of the Hub in building community

Several interview participants (and also survey participants, see section 3.8.5) described how the Hub plays a crucial role in bringing people together, fostering a sense of community and belonging:

*"I feel like with the Hub I've met more people that share the same values as me, so I feel like I've connected with people better." (GC12).*

The Hub is regarded as a valued social space which provides a welcoming environment and prevents people from feeling isolated:

*"Every Monday the ladies come for the crochet group. Some of them they have disabilities and are very old aged, and they need a community where they can come and spend their time and chat and it's very nice to see...They are all together and they're all supporting each other and I'm happy that I could name myself as part of this community." (GC15)*

Another participant recognised the role of the Hub in reaching out and engaging a disconnected community:

*"We don't have the connections that we used to have, that people just haven't got the time or don't feel safe or confident, kind of, interacting...so I think that's a big problem. It's difficult to galvanise people as a group if they don't feel like a group, if they feel disconnected. I think that's another one of the massive strengths of the Hub, is that it can draw in people from so many different backgrounds and walks of life and do it in such an approachable, friendly way." (GC7)*

This ability to bring diverse groups of people together to engage in green behaviours, combined with various outreach activities with other organisations<sup>82</sup>, positions Greener and Cleaner as a community leader. A sense of community is strong enabler of collective action.

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<sup>82</sup> As well as working with the Bromley Environmental Network, Greener and Cleaner also delivers environmental education at local schools and supported the London Marathon with waste management.

### 3.7 Climate concern, risk perception, and responding to climate anxiety

Concern about the environment or climate change can be a strong motivator for taking climate action<sup>83</sup>. However, it can also lead to inaction or apathy if negative feelings become overwhelming<sup>84</sup>. It is therefore important to understand people's level of climate concern, how it may affect them, and what actions can be taken to support anyone experiencing climate anxiety. Greener and Cleaner tries to support people in several ways: informal conversations with Hub volunteers, providing online advice on dealing with overwhelm<sup>85</sup>, and by running regular 'climate cafes'<sup>86</sup>. This section explores Hub users' level of climate concern and their views on how the Hub helps them to manage these concerns and respond positively.

Survey participants were asked about their level of concern regarding three environmental issues (Figure 21). Most (89.7%) participants stated they are 'very' or 'extremely worried' about climate change. This level of climate concern is notably higher than a recent national study which found 39% of people are very or extremely worried<sup>87</sup>. Hub volunteers are more concerned than non-volunteers, whereas Hub users in low-income households are less concerned than those in higher income households<sup>88</sup>.

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<sup>83</sup> Whitmarsh, L., Player, L., Jiongco, A., James, M., Williams, M., Marks, E. & Kennedy-Williams, P. (2022). Climate anxiety: What predicts it and how is it related to climate action? *Journal of Environmental Psychology*, 83, 101866, <https://doi.org/10.1016/j.jenvp.2022.101866>

<sup>84</sup> Sachet, P., *New Scientist*, published online 21 October 2019. [Stressed about climate change? Eight tips for managing eco-anxiety | New Scientist](https://www.newscientist.com/article/20191021-stressed-about-climate-change-eight-tips-for-managing-eco-anxiety/). Many organisations offer practical suggestions on managing eco-anxiety, for example: <https://friendsoftheearth.uk/climate/top-10-tips-combat-ecoanxiety-simple-actions>

<sup>85</sup> See: <https://www.greenerandcleaner.co.uk/get-greener/dealing-with-overwhelm/>

<sup>86</sup> Climate cafes are an open, inclusive space for people to get together to talk about their emotions associated with climate change and how they can take positive actions. See: [What is a Climate Café®? – Climate Café®](https://www.greenerandcleaner.co.uk/what-is-a-climate-cafe/)

<sup>87</sup> Demski, C., Steentjes, K. & Poortinga, W. (2024). *CAST Data Portal: Public perceptions of climate change and climate action*. The Centre for Climate Change and Social Transformations (CAST). Available at: <https://cast.ac.uk/cast-data-portal-public-views-on-climate/>. In 2023, 39% of a UK representative sample stated they are very or extremely worried about climate change, a drop from 45% in 2022.

<sup>88</sup> Mann-Whitney U tests revealed:

- Hub volunteers are statistically significantly more concerned about climate change (mean rank = 87.64) than non-volunteers (mean rank = 66.79),  $U = 1662.000$ ,  $z = -3.151$ ,  $p = .002$ . The median response for Hub volunteers = extremely worried, whereas the median response for non-volunteers = very worried.
- Hub users in low-income households (i.e., a combined annual household income, before tax deductions, of £25,999 or less) are statistically significantly less concerned about climate change (mean rank = 41.67) than Hub users in higher income households (i.e., a combined annual household income, before tax deductions, of £26,000 or more; mean rank = 62.71),  $U = 1221.000$ ,  $z = 2.760$ ,  $p = .006$ . The median response for Hub users in low-income households = very worried, whereas the median response for Hub users in higher income households = extremely worried.

Concern about biodiversity loss is also high among Hub users, with 79.3% stating they are very or extremely worried. Again, this is somewhat higher than concern at the national level<sup>89</sup>. Hub volunteers are more concerned than non-volunteers<sup>90</sup>.

Concern about localised air pollution is relatively high among Hub users, with 61.0% of respondents stating they are very or extremely worried about this issue. Previous research identified a limited public awareness of air pollution and the health implications<sup>91</sup>, yet the UK Government considers it a major public health risk<sup>92</sup>. Women who use the Hub are more concerned about air pollution than men<sup>93</sup>.

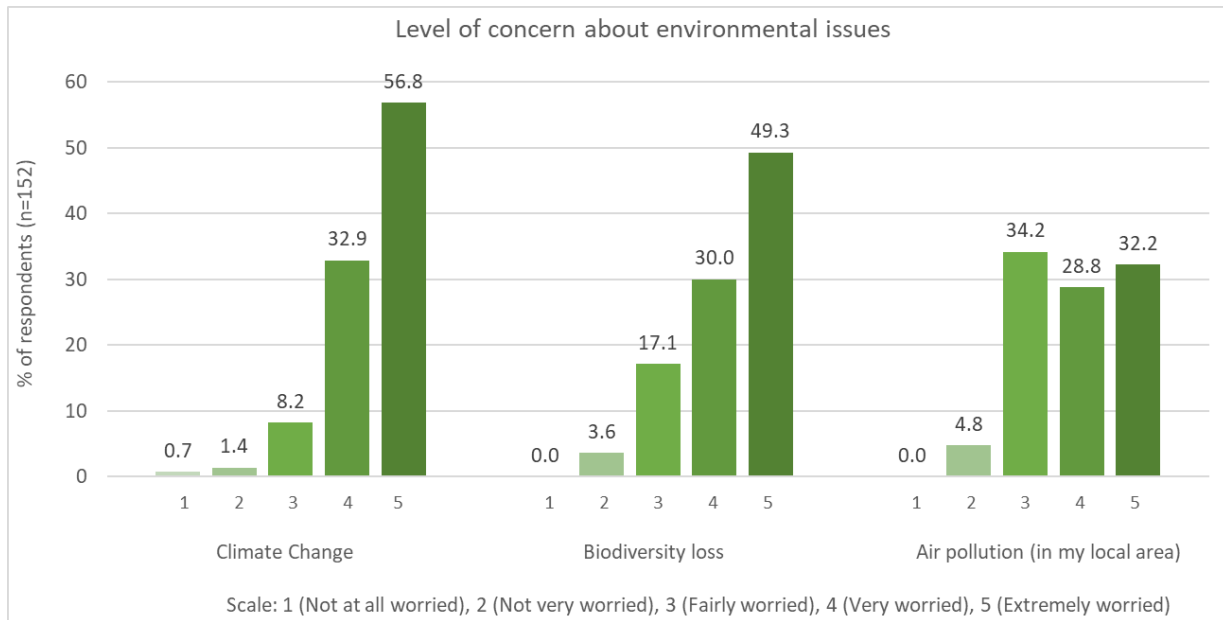


Figure 21, Level of concern about three environmental issues (survey)

<sup>89</sup> Royal Society (2023) reported that almost half of the UK population show some level of awareness and engagement with biodiversity loss (49% in 2018), but only a small minority are engaged in direct action to protect and support UK biodiversity (11% in 2018). See: [Contemporary public views of climate change and biodiversity loss in the UK | Royal Society](#). However, a difference in the question wording invalidates a direct comparison.

<sup>90</sup> A Mann-Whitney U test revealed Hub volunteers are statistically significantly more concerned about biodiversity loss (mean rank = 85.26) than non-volunteers (mean rank = 63.28),  $U = 1483.000$ ,  $z = -3.271$ ,  $p = .001$ . The median response for Hub volunteers = extremely worried, whereas the median response for non-volunteers = very worried.

<sup>91</sup> Kelly, F. J. & Fussell, J. C. (2015). Air pollution and public health: emerging hazards and improved understanding of risk. *Environmental Geochemistry and Health*, 37, 631–649. <https://doi.org/10.1007/s10653-015-9720-1>.

<sup>92</sup> UK Health Security Agency (2023) [HECC 2023 report. Chapter 4: Impacts of climate change and policy on air pollution and human health](#). Air pollution is associated with an estimated 29,000 to 43,000 deaths a year in the UK.

<sup>93</sup> A Mann-Whitney U test revealed women are statistically significantly more concerned about air pollution in their local area (mean rank = 76.32) than men (mean rank = 58.58),  $U = 1320.000$ ,  $z = -2.208$ ,  $p = .027$ . The median response for women = very worried, whereas the median response for men = fairly worried.

Survey participants were presented with four well-documented climate impacts, such as extreme heat waves and severe storms, and asked 'When, if at all, do you think people in your local borough will start feeling the effects of climate change listed below?'. Most Hub users believe people in Bromley and nearby London boroughs are already feeling these effects, or that they will do within the next 10 years (Figure 22). This temporal distance is comparable with the findings from a recent study of Cornwall residents<sup>94</sup>, as well as a national level study<sup>95</sup>.

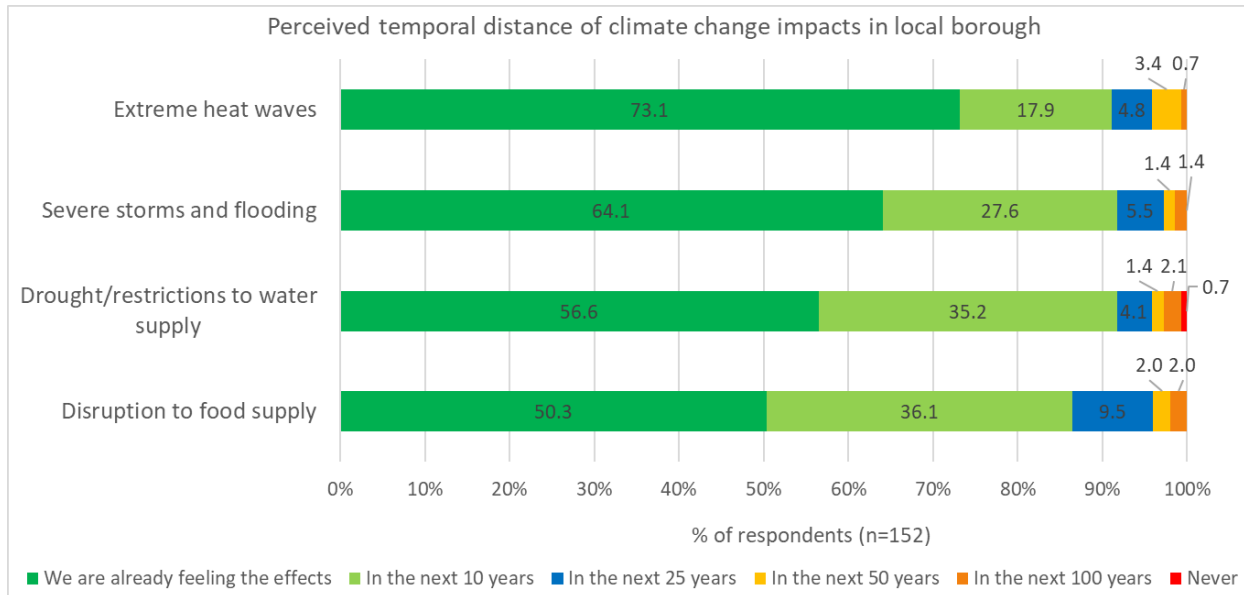


Figure 22, Perceived temporal distance of climate impacts in local borough (survey)

The interviews also explored climate concern; participants were asked to label any feelings associated with the topic of climate change (Table 26).

<sup>94</sup> Wilson, M., & Whitmarsh, L. (2023). [Cornwall Council behaviour change and engagement programme – survey of residents](#). CAST report for Cornwall Council. This study explored the same four climate impacts presented in Figure 22 and found a similar range of 54-81% reporting 'we are already feeling the effects'.

<sup>95</sup> Demski, C., Steentjes, K. & Poortinga, W. (2024). *CAST Data Portal: Public perceptions of climate change and climate action*. The Centre for Climate Change and Social Transformations (CAST). Available at: <https://cast.ac.uk/cast-data-portal-public-views-on-climate/>. This study asked 'When, if at all, do you think your country will start feeling the effects of climate change?', rather than presenting specific climate impacts. In 2023, 72% of a UK nationally representative sample stated 'we are already feeling the effects'.



Table 26, Feelings associated with thinking about climate change (interviews)

Feelings associated with climate change	Frequency (n=20)
Fear	6
Frustration	6
Anxiety/Worry/Concern	5
Anger	2
Overwhelmed	2
Stress	1
Optimism	1
Rational	1
Unemotional	1
Helpless	1
Inevitability	1
Disappointment	1
Sadness	1

The interview responses largely reflect a sense of fear and frustration, common in discussions about climate change, where uncertainty and the scope of the problem can evoke these emotions. Anxiety, worry, and concern are closely related and suggest an underlying sense of unease about the future:

*"I suppose it makes me feel anxious. Makes me feel a little bit cross because I think a lot of people don't necessarily think that it's, you know, it's an actual thing, but yeah, it does make me fractious. I think we're feeling the effects of it." (GC10)*

The additional presence of anger and feeling overwhelmed demonstrated that some participants may have felt powerless in influencing climate outcomes. It also indicates that climate change is perceived by some participants as an uncontrollable force that is already having impacts. There were few instances of positive or neutral feelings, with only one mention each of optimism, rationality, and unemotional detachment:

*"I think because my background's been so research and information systems-focused that I'm much more able to think about it in a rational way, rather than in an emotive way." (GC5)*

### 3.7.1 The role of the Hub in supporting people to deal with climate concern

Greener and Cleaner provides different forms of support, in particular the regular 'climate cafes'. Interview participants were asked whether engaging with the Hub had affected the way they deal with climate concern (Table 27).

Table 27, Contribution of the Hub in dealing with feelings linked to climate change (interviews)

How Hub engagement supports dealing with eco-anxiety	Frequency (n=20)
Increased solidarity/connection with others	10
Increased self-efficacy	4
Increased optimism	3
Increased sense of purpose	2
Helped guide behaviour to address climate change	2
Increased motivation	2
Reassured that action is being taken	1
Increased stress	1
Not engaged with the Hub on climate change feelings	3

Most participants reported that their engagement with the Hub had positively influenced how they manage their feelings associated with climate change. The most common theme was twofold; a sense of solidarity and connection with others; and being part of a proactive community of people, bought together by the Hub's engagement model that should be rolled out to help other communities:

*"I think being around the Hub does help me feel, firstly, part of the community that are trying to do something about it. And secondly, it is a reminder that there are people you know that are trying to do something. So it's a comfort. And I just really hope that we can sort of expand and people can use the space as a blueprint so that we can have more spaces like it." (GC14)*

This sense of community was clearly important in dealing with eco-anxiety or feelings of isolation related to climate change. By connecting with like-minded individuals, participants feel more supported and less alone in their concerns and could see tangible impacts being made. Four participants mentioned that engaging with the Hub had increased their self-efficacy and they felt more equipped to engage and support others:

*"Yes, because I feel like I'm doing my bit and even though it may be quite small. You know you've been doing your carbon footprint calculator and everything. How powerful it is when you can just get a couple of people to understand something or make a slight shift in their perspective." (GC10)*

Notably, one participant stated their engagement with the Hub had increased their feeling of stress, though this was due to the idea that a Hub *needed to exist at all*. Three other participants reported they had not engaged with the Hub on their climate change feelings, though this appeared to reflect that they had engaged only minimally with the Hub in general.

### 3.8 Evaluation of Greener and Cleaner workshops, events and activities

The final results section presents participants' feedback on Greener and Cleaner workshops and their suggestions for improvements or additional Hub activities.

#### 3.8.1 Workshop quality, relevance, and application of learnings

Greener and Cleaner ran a series of workshops in May – June 2024, and 27 of the 59 people who completed Survey 2 attended at least one workshop during this period. These participants were asked several questions about their experience of the workshops. The overall perception of the quality of workshops was very positive, with 81.4% of participants reporting 'excellent' or 'very good' (Figure 23).

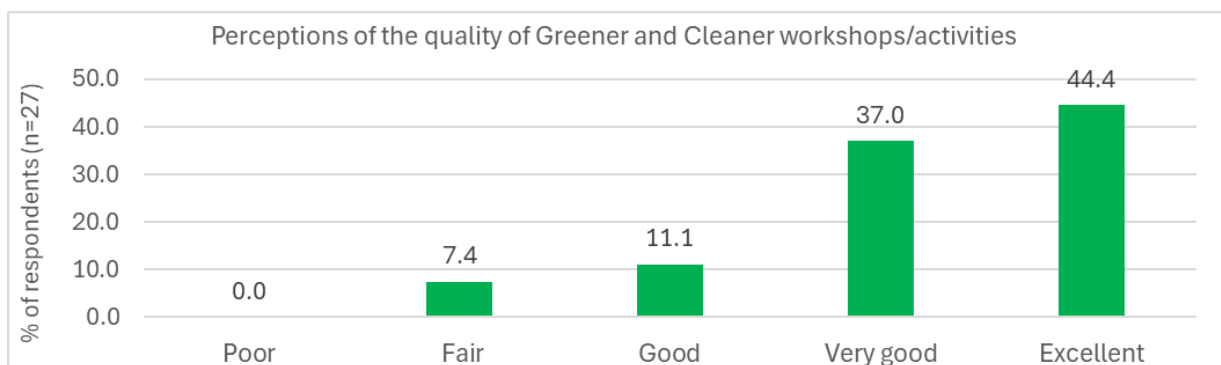


Figure 23, Participants' perceptions of the quality of Greener and Cleaner workshops (survey)

Moreover, Figure 24 shows most participants (59.3%) are 'very likely' to recommend the workshops to others.

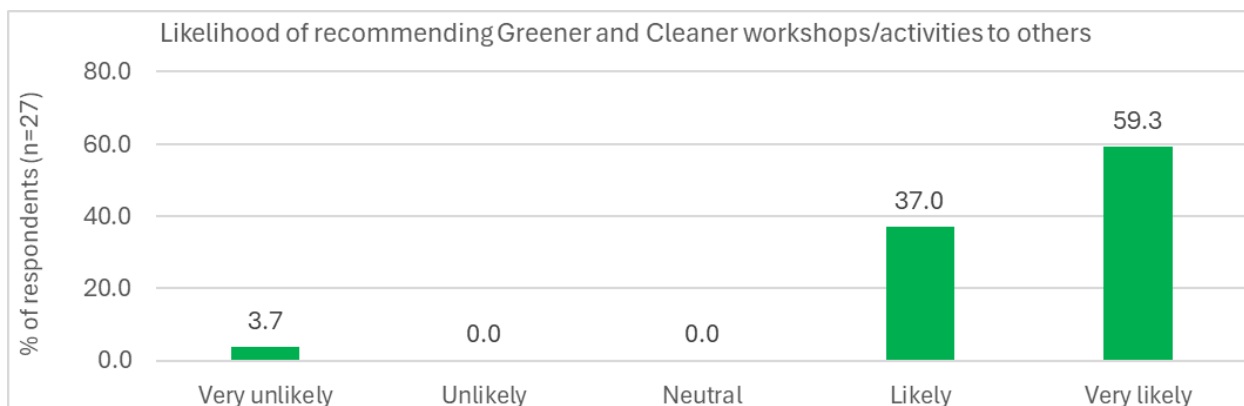


Figure 24, Participants' likelihood of recommending Greener and Cleaner workshops (survey)

The participants were then asked 'How relevant was the information presented in the workshop/activity/event(s) to achieving your green goals or reducing your personal carbon

footprint?'. Two thirds of respondents (66.7%) stated 'very relevant' and a further 14.8% stated 'extremely relevant' (Figure 25). This is an important finding, as it indicates that the workshops are not only interesting or enjoyable, but also align with Greener and Cleaner's objective of helping people to reduce their carbon emissions.

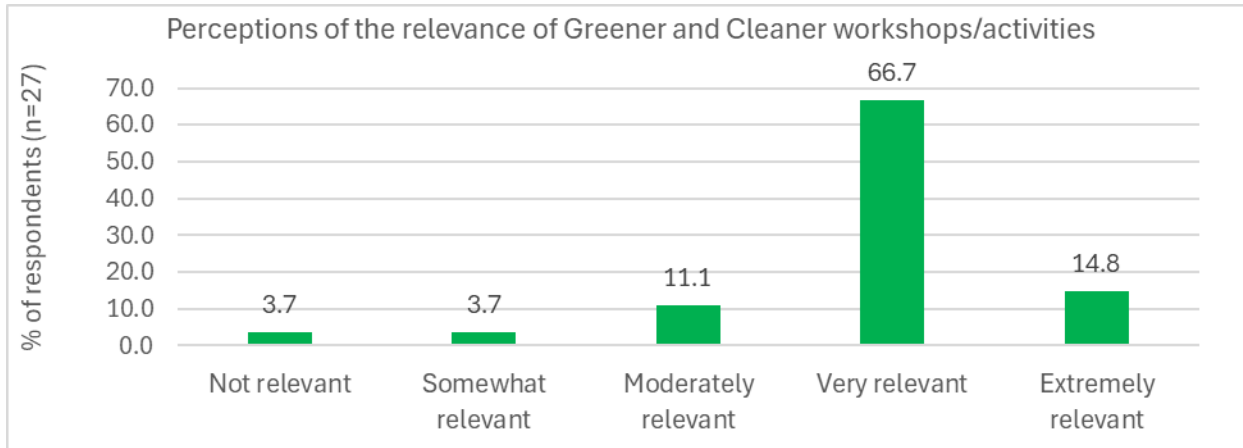


Figure 25, Perceived relevance of Greener and Cleaner workshops in achieving green goals (survey)

Participants were asked 'How confident are you in your ability to make environmentally-friendly choices in your daily life since attending the workshop/activity/event(s)?'. Figure 26 shows most participants are 'very confident' (55.6%) or 'extremely confident' (14.8%).

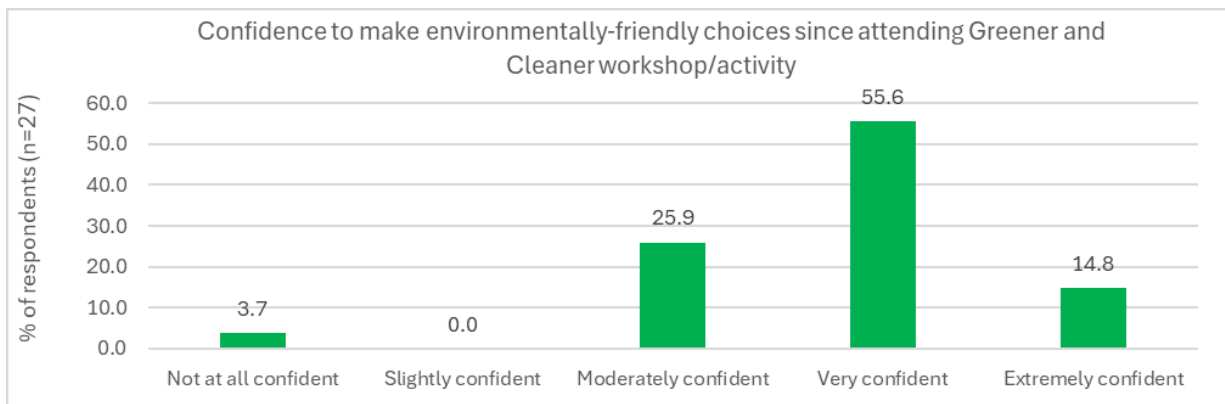


Figure 26, Confidence to make environmentally-friendly choices since attending Greener and Cleaner workshop(s) (survey)

Interview participants were asked which aspects of the workshops they found impactful, and how they planned to apply what they had learned (Table 28).

Table 28, How participants plan to apply learning and skills from workshops (interviews)

Applying learning from workshops	Frequency (n=20)
To repair/repurpose items rather than throwing away	5
To attend more workshops	2
To make items learned at workshop (gift bags)	2
To have conversations about sustainability outside the Hub	2
To use learning to inform conversations (Carbon Literacy)	2
To become involved in other projects at the Hub	1
To become more personally responsible for sustainable decisions	1

The most frequent response was to put their training to use in repairing or repurposing old items, rather than throwing them away. The workshops inspire creativity and a sense of achievement:

*"She sat me down at a sewing machine and she showed me how to use it and it was so much fun. It was so rewarding and I enjoyed it so much. A very relaxing time sitting there doing it and then like half an hour later or something, I was walking through The Glades holding my dress where I'd fixed the hem myself."* (GC10)

Gaining new skills and building self-confidence was a key takeaway for some (e.g., knitting and crochet), whereas others were impacted by observing the intergenerational transfer of skills when taking their children to a workshop (e.g., one participant remarked on seeing her daughter using a sewing machine). Another response discussed how a workshop led to rediscovering forgotten abilities and crafts (at the Bunting Workshop). One participant became more aware of the environmental impact of paper use through a Gift Bag Making workshop, while another discussed how the same workshop had validated their existing practices of minimising waste:

*"People waste a lot of Christmas paper, packages and things like that...I think I was just doing it [minimising waste] without realising, if that makes sense, but having this conversation has made me remind myself that 'actually, [name], you've been doing this for a long time'."* (GC20)

Two responses discussed being emotionally moved by a one-man play staged at the Hub, with one commenting that this motivated them to take more responsibility for their own environmental behaviour:

*"The play, yeah, made me feel, I think it, trying to think how to articulate my emotional response to the play. I suppose it maybe it heightened my feeling of personal responsibility for changing my own lifestyle choices."* (GC19)

Artistic and performance-based events can have a strong emotional and behavioural impact. Such examples highlight how the Hub engages people not just through teaching practical skills or climate literacy, but also through emotional and narrative-driven experiences.

Finally, an appreciation of the knowledge, skills and competence of the Hub volunteers and staff delivering the workshops was a prominent theme throughout:

*"They demonstrated what they, showed what they were doing, so that was already really helpful. The person was really interacting and engaging and talking it all through, which I thought was really helpful as well."* (GC4)

Further survey and interview findings on participants' views on the workshops can be found in Appendix 5.13.

### 3.8.2 Challenges faced during workshops

The challenges faced by participants and facilitators during the workshops and events are summarised in Table 29.

*Table 29, Challenges faced during workshops/events (interviews)*

Challenges faced during workshops	Frequency (n=20)
No specific challenges	4
Difficulties accessing events at times scheduled	2
Difficulties finding the Hub	1
Engaging the audience and getting the message across (as facilitator)	1
Physical demands of running workshops (as facilitator)	1
Keeping focused (health-related)	1
Controlling children	1
Inability to engage in some workshop actions (availability/cost)	1
Not all clothing can be repaired	1
Managing balance between positivity and concern	1

For workshop facilitators, effectively communicating complex concepts and engaging the audience could be challenging:

*"I suppose that the challenge of running any workshop sometimes...that you haven't perhaps engaged your audience in the way that you thought you were going to, that you haven't put that message across. You haven't, perhaps enthused them or explained the concept well enough." (GC8)*

Another participant (not a workshop facilitator) discussed finding a balance between positivity and concern in motivating change:

*"To advocate for a more sustainable society we have got to be positive that that it can be achieved. Yeah, we've got to believe that we can do this and that we can solve this problem. Well, but on the other hand, if you're too positive and confident, then you could be blasé." (GC19)*

This touches on the emotional aspect of sustainability discussions, where participants or facilitators must balance optimism with the gravity of environmental issues. On a more practical level, one volunteer spoke about the physicality of running some workshops:

*"The Christmas Fair and the Clothes Swap, the challenge is it's just the physically demanding nature of it. So it's just really heavy work. And yeah, so it would just be frustrating if things aren't organised as well as they could be." (GC5)*

Other challenges included managing children's attention spans during workshops, which could be addressed by offering more family-oriented workshops. Two participants reported finding it difficult to attend workshops scheduled during working hours, while another had initially been unable to find the Hub in The Glades.

### 3.8.3 Suggestions for improving workshops and Hub support

Interview participants were asked if they could suggest any ways of improving the workshops (Table 30).



Table 30, Ways to improve workshops to better support learning and motivation (interviews)

Ways to improve workshops and support learning	Frequency (n=20)
More advertising of workshops/events	4
More promotion of the Hub	3
Maintain quality of workshop facilitators	3
Schedule some workshops outside normal working hours	2
Issue of peripheral noise outside the Hub	2
No improvements needed	2
Wider range of craft workshops	1
Keep less structured format for children's workshops	1
Keep informal 'drop-in' sessions	1
Schedule events in other locations outside the Hub	1
Better signposting of the Hub in the Glades	1
Reach out to bigger audiences	1
Create a group to tackle difficult questions on sustainability	1
Better design of Hub promotional material	1
Ensure sessions begin on time	1
More dedicated sewing machine use workshops	1
Record workshops/events to view online	1
Online forum/network to share knowledge/practice	1
Improve access to Hub for those with mobility issues	1

The most frequently cited suggestions concerned a lack of awareness of Hub events, which could result in low attendance:

*"Probably just spreading the word more so that there can be more people come...the room could be full...and then there's others where perhaps, you know, not everyone knows about it. And I always think it's a shame because there's so many amazing things going on there."* (GC10)

Despite the perceived quality of workshop content and delivery, the learning environment was not always conducive due to the background noise of the shopping centre. One participant suggested that some events could be held in locations other than the Hub, to reach other demographics and extend the Hub's influence in the community. Another participant mentioned improving access for those with mobility issues, although they did not expand on which factors limit physical accessibility.

## Recommendations for how Greener and Cleaner could support people in the future

Interview participants were asked if they had any suggestions for additional Hub activities or ways in which the Hub might support them in the future (Table 31). They provided a wide range of suggestions, although there is some overlap with the previous question (i.e., on ways to improve workshops).

*Table 31, How the Hub could help support people in the future (interviews)*

How the Hub could support people in the future	Frequency (n=20)
Continue online updates and advice	2
Group investments (e.g., community solar/retrofit schemes)	1
Facilitating local green advocacy groups	1
Targeting meat consumption	1
Managing sustainability at different life stages	1
Space/opportunities to address difficult topics	1
Continue providing workshops	1
More workshops with new content	1
Sharing workshop information online	1
Scheduling workshops outside weekdays	1
Extend Hub opening hours	1
Entertainment-based events with sustainable themes	1
Information sessions on bigger lifestyle changes	1
Information sessions on sustainability for businesses	1
Advanced repair/mending workshops	1
Providing a 'Which' guide to sustainable products	1
Increase Hub communications online	1
Continue raising awareness	1
Greater focus on community and small actions	1
Tailored events for mothers and children	1

### Communication and outreach

Four participants noted that the Hub would benefit from better outreach and communication:

*"A better sharing of what is, actually what you have available, what's the services that are there, the workshops that are there. Yeah, I think if there was more advertisement...I think you you'd most probably catch more people." (GC3)*

They suggested increasing visibility through different media such as podcasts and advertising. Two participants valued online updates because they consolidated learnings and provided an alternative source of information if they were unable to reach the Hub in person:

*"I love receiving emails from them because they always give tips about how you can improve your own behaviour that needs to continue, hopefully. Because as I said, the human brain tends to forget a lot of things, and it's always good to be reminded. So if I don't have time to go to the Hub for any kind of reason, at least I receive an e-mail from them reminding me." (GC1)*

Related suggestions were recording the workshops so they could be viewed online, and the creation of an online discussion forum to share knowledge and best practice.

### Supporting people to navigate different life stages

Another participant mentioned the benefit of information tailored to people at specific life stages such as retirement:

*"Helping people manage later life in a sustainable way would be an interesting thought, wouldn't it? Not a particularly attractive one perhaps, but important to people of my age." (GC8)*

On a similar note, one person recommended tailored workshops aligned with being a parent:

*"For me personally, anything that's mother and child related will be very interesting. There probably is a big community of mums and children on the street always advising other mums and children. So rather than, like, in their face talk about climate change, you know, it can be subtle. So if there are any mother-child activities there [in the Hub], you bring mothers there and then expose them to all these ideas." (GC18)*

These quotes suggest that sustainability practices and needs can evolve as an individual's circumstances change. These life-stage related circumstances present opportunities for the Hub to create workshops which cater for the interests and needs of specific social groups.

### Organising community-buying initiatives

One participant was interested in the Hub supporting green community investments:

*"I think if...we took part in the [green community investment] scheme, it's something that, you know, that could help sort of bring people together on a sort of group buying thing if they want." (GC2)*

This quote highlights the potential for collaborative, community-scale solutions, although some individuals face constraints in community involvement such as lack of time.

#### More emphasis on behaviours that are difficult to change

Dietary shift as a targeted individual or household behaviour change was seen by one participant as having been overlooked by the Hub:

*"If there was some more acknowledgement of the impact of meat and also kind of moving more towards vegetarian, veganism...it would just be really nice if there was, again, they could work their magic like that. A gentle kind of introduction without it feeling preachy, without it feeling in your face. I think that that could be really powerful." (GC7)*

Similarly, one participant suggested the Hub could offer more opportunities for discussing challenging issues, such as how to effectively engage the local community:

*"Maybe a space where it was possible to talk about the difficulties of getting things going really, locally, would be good to have some thinking about community building or, you know, just how you have those conversations, how you get people excited." (GC9)*

This indicates that some participants valued the Hub as a forum for open dialogue about complex environmental issues and deeper thinking around sustainability.

#### Volunteering and fundraising

One participant expressed concern about the reliance on a small group of volunteers and the difficulty of attracting new ones, which could impact the Hub's ability to grow and sustain itself. Another spoke about fundraising and the precarity of the Hub's continued operation:

*"I would love to feel it had a more secure future and I just, I don't know the answer to that, but I know there's just been a fundraiser and Parisa has posted and said, you know, this is only one, we're doing other fundraising things. And this makes the Hub safe until April. But I'm sorry that it's not more stable than that." (GC9)*

#### 3.8.4 Survey open feedback

In both surveys, participants were asked, 'Is there anything else you would like to say about your experience of using the Greener and Cleaner Hub or attending the workshops?'. In total, 92 participants provided qualitative feedback. Thematic analysis identified ten main themes, which are summarised in Table 32.

Table 32, Survey open feedback – key themes and example quotes

Theme	Example quotes	Frequency (n=152)
Support and appreciation for Hub volunteers and staff	"Staff are very polite and knowledgeable" (ID15) "Volunteers are super helpful" (ID48)	24
Awareness and actions around sustainability and environmental issues	"We can all make a difference by changing our behaviours" (ID55) "It is an amazing platform to understand the impact of climate change at a community level" (ID140)	23
How the Hub fosters a sense of community	"Great place to meet people and find friends with similar concerns" (ID17) "The Hub is a welcoming space for all" (ID19)	21
Suggestions for improving Hub workshops	"I wish they had more weekend activities" (ID12) "Would be better if there are more clothes and items swapping activities" (ID146)	15
How the Hub improves skills or raises awareness	"I always learn something" (ID44) "The Hub has helped me save two pairs of pyjama trousers" (ID54)	12
How the Hub creates positive emotions, such as hope or inspiration	"Feeling part of a community has made me feel more connected, active, and passionate" (ID27) "It gives true hope and positivity to so many" (ID55)	11
Difficulties in attending events due to personal schedules or circumstances	"Haven't got round to attending as I have a young child" (ID7) "I would love to participate in more workshops but they don't work with my office schedule" (ID12)	9
Improving awareness or visibility of the Hub	"Marketing in slightly more varied ways is critical" (ID14) "I wish more people knew the Hub existed" (ID153)	7
General expressions of appreciation and encouragement	"Keep going!" (ID56) "Keep up the great work!!" (ID59)	5
Feedback on the Hub's physical layout	"The front should be more of a shop with a proper till" (ID 89) "The interior placement is quite messy" (ID 146)	4

## 4.0 Key findings and recommendations

This section summarises the key findings of this study and concludes with some recommendations for engaging people and maximising the impact of the Hub.

### 4.1 Key findings

#### Who uses the Greener and Cleaner Hub?

- The Hub is used by a wide range of age groups. Over half (55%) have children under the age of 18 living at home and this indicates its appeal to families.
- A high proportion of survey participants are volunteers (31%), which highlights that many people who use the Hub subsequently choose to become more involved.
- The Hub is used by different minority groups; one in four participants (25%) are from ethnic minorities, one in ten (11%) have a disability or long-standing health condition, and one in ten (12%) are in low-income households.

#### How people discover and engage with the Hub

- The most common way of first hearing about the Hub is through word of mouth (29%). Greener and Cleaner's online presence is also important; one in four participants (26%) became aware of the Hub via the Facebook group.
- One in five (21%) discovered the Hub when they passed by it in The Glades shopping centre. The Hub's physical location is therefore effective at engaging people, including those who may have no prior interest in environmental issues.
- One in four (27%) visit the Hub at least once a fortnight. However, many Hub users (38%) visit it occasionally (i.e., 'a few times over the year'). Work schedules and a lack of time are the main limitations to engagement.
- Over half have used the Greener and Cleaner Facebook group (59%) and the website (54%) in the past year. Over one third (36%) use these resources at least once a week.

#### Motivations for using the Hub

- Concern about the environment or biodiversity loss was the most important motivation for engaging, followed by an interest in learning how to reduce carbon footprint, and opportunities to be involved in community action.
- Making social connections and improving health and wellbeing are especially important for frequent Hub users and those in low-income households.
- The interviews revealed additional motivations, including opportunities for in-person continuous learning and supporting the Hub's ethos as a community-orientated sustainability initiative.

- Interview responses highlighted the role of the Hub in bringing people together and fostering a sense of community around environmental issues. It also provides a welcoming social space which prevents people from feeling isolated, particularly older people or those with disabilities.

### Three approaches the Hub uses to cater for different learning styles and interests

- Interview participants described how the carbon literacy workshops enable them to engage others and communicate more confidently and effectively. They also apply this training to calculate their own carbon footprint and inform their consumption decisions.
- Practical, hands-on workshops provide an accessible entry point for people to start incorporating green behaviours into their lives.
- Peer-learning occurs through engaging people who pass by the Hub and during workshops which focus on specific aspects of low-carbon living. This social interaction strengthens community networks and enables informal knowledge exchange.
- A cross-cutting theme for all three learning approaches is that embedding sustainability into daily lives can occur through small, manageable changes in behaviour. This emphasis on actionable solutions resonates with Hub users, especially those who are constrained by day-to-day responsibilities, or feel overwhelmed by the prospect of committing to major lifestyle changes.

### Influence of the Hub on people's understanding of climate change

- Over half (56%) of survey participants stated that their awareness of environmental issues has increased 'significantly' or 'very much' since engaging with the Hub.
- Those who engage more (i.e., volunteers, frequent Hub users, longer term Hub users) reported a larger increase in their environmental awareness than those who engage less.
- Hub users have a relatively high level of climate literacy, compared to a UK representative sample. Longer term Hub users could more accurately identify high-carbon behaviours than those who recently joined the Hub. This indicates that continued engagement over time supports greater understanding of low-carbon lifestyles.

### Influence of the Hub on the adoption of green practices

- Engagement with the Hub encourages uptake of low-carbon behaviours in multiple areas of everyday life.
- The five most adopted green practices relate to material consumption; almost two thirds of survey participants have reduced how much stuff they buy (66%), repair items where possible (64%), or buy second-hand items more frequently (62%).

- A large proportion have reduced energy use at home (46%), food waste (44%), and meat consumption (37%).
- Some use public transport (42%) and active travel (36%) more frequently.
- Those with higher levels of engagement (i.e., volunteers, frequent Hub users) adopt more green practices than those who engage less.
- The most frequently mentioned challenges to low-carbon living were a lack of interest from family members and experiencing guilt if they are unable to consistently align their actions with their values. Hub users have to balance sustainable choices with convenience, financial constraints, and the preferences of those in their household.

#### Influence of the Hub in motivating climate action in different social roles

- Engaging with the Hub encourages many users to consider the multiple ways they can cut their carbon footprint.
- The most common contexts where Hub users try to be greener are 'at home' (90% of survey participants) and 'when shopping' (61%). Around half also take actions in their local community (53%) or in their workplace (48%).
- Two in five (41%) have advocated for environmental issues through actions such as signing petitions or writing to their local MP. One in five (20%) consider the green credentials of banks when choosing where to invest their money.
- The most frequent contexts for encouraging other people to be greener were 'at home' (73%) and 'with family and friends' (61%). This suggests Hub users tend to engage in conversations about low-carbon living with people they are closest to.
- Conversations about green behaviours also occur with work colleagues (56%), in online forums (36%) and in community spaces (36%).

#### Perceptions of individual and collective responsibility to address climate change

- Hub users perceive the National Government to have the most responsibility for reducing the risk of climate change, followed by businesses and industries, and then local councils. Individuals and households are considered to have the least responsibility.
- However, one in six survey respondents (15%) believe individuals and households have the most responsibility. The interview participants also emphasised personal responsibility.
- The difficulty of engaging people in the wider community was frequently mentioned. This is particularly apparent with socially divisive issues, such as low recycling rates or resistance to traffic congestion charges.



### Levels of climate concern and responding to climate anxiety

- Most survey participants (90%) stated they are 'very' or 'extremely worried' about climate change. Concern about biodiversity loss (79%) and air pollution (61%) was also high.
- Most participants (86%-92%) believe people in Bromley are already feeling the effects of climate change, or that they will do within the next 10 years.
- Emotions associated with climate change include anxiety, frustration and feeling overwhelmed. Engagement with the Hub positively influences how people manage these feelings, due to a sense of solidarity and connection with others, and being part of a community that is proactive in taking climate action.

### Evaluation of Greener and Cleaner workshops and activities

- The overall perception of the quality of workshops was very positive, with 81% of survey participants reporting 'excellent' or 'very good'. Most participants (96%) are 'likely' or 'very likely' to recommend the workshops to others.
- Most (82%) believe the information presented in the workshops is 'very relevant' or 'extremely relevant' to achieving green goals or reducing personal carbon footprint.
- The majority (70%) are 'very confident' or 'extremely confident' in their ability to make environmentally friendly choices in their daily life since attending a Greener and Cleaner workshop.
- Interview participants described how the workshops inspire creativity and a sense of achievement, and that they gain new skills and build self-confidence.

## 4.2 Recommendations

### Recommendations relating to Hub discovery and engagement

- Word of mouth is a key driver of initial engagement and personal recommendations are more likely to motivate people to visit the Hub, particularly if they are already interested in sustainability. The Hub should continue to encourage a 'refer a friend' culture among existing users.
- Some Hub users stated that upcoming events were not always widely promoted, which could result in low attendance. They recommended better outreach and communication to raise awareness of upcoming workshops.
- Some reported difficulty finding the Hub and so clearer signs and maps could be placed in key locations within The Glades, although this would require approval from the shopping centre management.
- Offering flexible arrangements may enable those who are time-constrained or have health conditions to participate in more Hub activities. Options include providing

workshops outside of working hours, shorter volunteering shifts, or opportunities to facilitate online workshops.

#### Recommendations relating to raising awareness through collective actions

- Regular updates on the Hub's achievements (both in the Hub and online) could showcase how cumulative individual actions help advance sustainability goals. This can be based on simple metrics such as the combined number of clothing items repaired each month, or the number of Hub users' car journeys avoided by participating in the active travel challenge<sup>96</sup>. Highlighting these achievements can reinforce low-carbon behaviours.
- Visible actions (e.g., litter picking), when performed in a community context, were considered to have a strong impact in motivating a sense of collective responsibility. The Hub already participates in several highly visible activities (e.g., supporting waste collection at the London Marathon) and should continue to do so to promote wider awareness of the Hub.
- Some participants suggested holding more events in locations other than the Hub to reach other demographics and extend the Hub's influence in the community.
- The Hub could also benefit from highlighting other local community projects (in addition to Hub initiatives) and providing clear, actionable steps for getting involved, as some participants expressed uncertainty about how to participate.

#### Recommendations relating to motivating climate action in different social roles

- The Hub could focus on reframing green advocacy actions (i.e., signing petitions, writing to your local MP) as 'expressing citizenship'. This may alleviate the concerns of some Hub users who understood advocacy as engaging in forms of activism.
- Hub users identified engaging people in the wider community on environmental issues as particularly challenging. However, some found it easier to broach sustainability topics by referencing their involvement with the Hub as a 'conversation starter', highlighting the Hub's positive community impact as well as its ethos of 'sustainability is for everyone'. The Hub could promote this as an effective engagement strategy.
- The Hub is already recognised for its leadership role and its positive impact, having won multiple awards. Greener and Cleaner could consider fostering stronger links with local authorities to explore collaboration opportunities. Focus areas may include policies that make sustainable living more accessible, piloting interventions or messaging that focus

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<sup>96</sup> See: [Active Travel Challenge](#)

on shifting high-carbon behaviours, and identifying potential funding options for the Hub's provision of education and community wellbeing services.

#### Recommendations relating to climate concern

- The Hub enables people to acknowledge their climate concern and creates a supportive environment in which to express or articulate their emotions. Although the number of people attending the climate cafes is lower than some of the other workshops, the Hub should continue to provide this valuable support service.

#### Recommendations relating to Greener and Cleaner workshops

- Consider tailoring some workshops to particular social groups. People at different life stages, such as retirement or being a parent, face distinct challenges and therefore may have specific needs in relation to sustainable living.
- Some participants highlighted intergenerational aspects of Hub workshops, where they share experiences with family members, as especially enjoyable. Tailoring events to encourage family involvement can embed sustainable practices within households and support pro-environmental values among younger people.
- Some workshop facilitators find communicating complex concepts and engaging participants to be a challenge. Achieving a balance between the positivity of taking action and the gravity and urgency of climate change is a further challenge. The Hub could introduce sessions where experienced facilitators share their best practices of communication and facilitation techniques with newer members. This could include a mentorship scheme.
- Some participants indicated their interest in more advanced workshops to expand their skills, discuss individual and systemic barriers to behaviour change, and explore more complex aspects of achieving sustainable lifestyles. The Hub could extend its programme of workshops to offer progressive learning pathways, potentially inviting guest speakers from other sustainability organisations, to encourage continued engagement.
- The one-man play was well-received and had a strong emotional and behavioural impact on those attending. The Hub could consider running more artistic or performance-based events, alongside their programme of conceptual and practical workshops, to widen engagement through narrative-driven experiences.

#### 4.3 The role of community climate hubs in motivating low-carbon behaviours

Community climate hubs are springing up across the UK<sup>97</sup> and in other countries such as France and Canada<sup>98</sup>. In parallel with the emergence of these hubs, there is a growing academic and policy interest in the role of grassroots initiatives in climate action<sup>99</sup>. This is because existing strategies, for instance top-down information campaigns which aim to educate the public on environmental issues, are not always effective in leading to behaviour change<sup>100</sup>. Community climate hubs offer an alternative approach because they are physically located within the communities they aim to support, and so they become a part of those communities. By 'going to where people live', these climate hubs are accessible to local residents who are interested in climate action and, crucially, the hubs also engage people who may not have a strong awareness or interest in environmental issues.

This study has identified how engaging with the Greener and Cleaner Hub increases people's understanding of climate change and encourages the adoption of pro-environmental behaviours. It also highlights Greener and Cleaner's peer-learning model as a template which can be replicated in other climate hubs. This model caters for different learning styles by combining theoretical elements (e.g., carbon literacy training) with practical ones (e.g., repair cafes), as well as different interests by offering by a broad programme of workshops. The Hub space creates opportunities for informal knowledge exchange between people who know and trust each other, as well as people who may simply be passing by. This social interaction and exchange of information reinforces social norms around green behaviours, as well as fostering a sense of community and confidence in taking positive steps. Finally, the model emphasises that embedding sustainability into daily lives can occur through small, manageable changes in behaviour and can include actions beyond individual consumption decisions, such as talking to others about environmental issues. In summary, community climate hubs may be more effective than other behaviour change approaches because they are accessible, inclusive, social, and relatable. This engagement model exemplifies Greener and Cleaner's ethos, that sustainability is for everyone.

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<sup>97</sup> For example, across Scotland - [Climate Action Hubs/Networks – Scottish Communities Climate Action Network & Transition Scotland Hub](#) ; Guildford - [Building Community Action Through Climate Hubs - resilience](#) ; Bath - [Climate Hub B&NES | 3sg.org.uk](#); Stratford - [Net Zero – Stratford's home for community climate action](#) ; Horsham - [Community Climate Hub Horsham](#) ; Totnes - [About | Totnes Climate Hub](#) ; There is also guidance on how to establish a community climate hub - [Create a Community Hub | Carbon Copy](#)

<sup>98</sup> See: [ClimateHub France](#) ; [What we do - Community Climate Hub](#)

<sup>99</sup> Minas, A. & Mander, S. (2024). Unpacking the transformative potential of grassroots climate action: when, why, and how do actors drive decarbonisation? *Journal of Cleaner Production* [Under review].

<sup>100</sup> Whitmarsh, L., Poortinga, W., & Capstick, S. (2021). Behaviour change to address climate change. *Current Opinion in Psychology*, 42, 76-81. <https://doi.org/10.1016/j.copsyc.2021.04.002>

## 5.0 Appendices

### 5.1 - Survey 1 protocol

To move through the survey...

Click 'Next' to move onto the next question.

Or click the 'Up' arrow to return to the previous question.

For some questions, you may need to scroll down to see all of the response options.

#### **Participant information sheet**

##### **What is this research project about?**

The project aims to explore people's engagement with the Greener and Cleaner Hub and understand its impacts on low-carbon behaviours.

##### **What will I be asked to do?**

You will be asked to complete two online surveys:

1. The first survey includes questions about your engagement with Greener and Cleaner, your views on climate change, and your everyday behaviours. The survey is designed in two parts; the first part will take approximately 6 minutes to complete, and the second part will take approximately 5 minutes.
2. The second survey will be in 6 - 8 weeks' time and will explore your ongoing experience of using the Hub or attending Greener and Cleaner workshops. It will take approximately 7 minutes.

We will also ask whether you would be interested in participating in a one-to-one interview about your experience of using the Greener and Cleaner Hub (at a later date).

##### **Who can take part?**

Anyone aged 16 or over who has engaged with the Greener and Cleaner Hub in some way. This can be visiting the Hub, attending a workshop, or using their website.

##### **What are the benefits and risks of taking part?**

The information you provide will be very useful for the research team and Greener and Cleaner to understand the views of people who use the Hub. Greener and Cleaner will then use this

information to improve their service to you and to apply for future funding to support the Hub's activities.

You will have the option of entering a prize draw to win one of three £150 vouchers for [Ethical Superstore](#). There are no risks involved in taking part.

This research has been reviewed and approved by the University of Bath Biomedical Research Ethics Committee.

### **Do I have to take part?**

Taking part in this study is entirely voluntary. You are free to withdraw your data from Survey 1 & 2, without giving a reason, at any time until 14 days after you have completed the second survey. We will then anonymise your data, which means we will remove any personal details about you and only store the rest of your answers. Prior to your data being anonymised, you can request for your data to be removed from the study by contacting the research team at the University of Bath (see contact details below). You do not have to answer any questions that you do not want to.

### **What happens to all the information?**

All the information you provide is confidential and will be stored on a secure drive at the University of Bath (password-protected). The University of Bath privacy notice can be found [here](#). All anonymised data will be permanently deleted within ten years. Any incomplete surveys (i.e., because you withdrew from the study) will be removed from the data and permanently deleted within two weeks.

You will not be identifiable in any reports or data sets. The research team will share this anonymised data with the Greener and Cleaner team, who may use this data to design a follow up study in the future. They will retain this anonymised data for up to five years.

We will ask for your email address. This is to:

1. Match your responses for the two surveys
2. Enter you into the prize draw (if you choose to enter)
3. Enable Greener and Cleaner to contact you for follow up research (this is entirely optional. Your survey responses will remain anonymised)

The research team at the University of Bath will permanently delete your email within two months of completing the second survey. If you consent to being contacted by Greener and Cleaner, they will retain your email address for up to three years.

### **What do I do if I have any questions?**

Please contact the research team at the University of Bath for further information: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmnican@bath.ac.uk](mailto:psmnican@bath.ac.uk))

Or, if you have any concerns about this study, please contact the University of Bath Research Governance and Compliance Team: ([research-ethics@bath.ac.uk](mailto:research-ethics@bath.ac.uk); University of Bath, Claverton Down, Bath, BA2 7AY). The REC reference number is: 0832-3936

### **How can I take part?**

Please click 'Next' below

### **Consent form**

#### **Please read these statements carefully**

1. I have been provided with information explaining what my participation in this project involves. The participant information sheet, shown on the previous page, is also available on the Greener and Cleaner website and is displayed in the Greener and Cleaner Hub.
2. I have received enough information about the project to make a decision about my participation. I have had an opportunity to ask questions and discuss this project.
3. I understand that my participation in this study is entirely voluntary. I understand that I am free to withdraw my consent at any time up until 14 days after completing the second survey, without giving a reason for withdrawing. I can withdraw from the study by closing the browser during the survey, or by notifying the researchers.
4. I understand that I do not have to answer any questions that I do not want to.
5. I understand that I will be asked to provide my email address – this is to send me the second survey and to match my responses for the two surveys. I understand my email address will be permanently deleted within 2 months of completing the second survey - unless I consent to Greener and Cleaner contacting me for follow up research.

6. I understand the data I provide will be treated as confidential, and that I will not be identifiable in any research outputs or reports.
7. I understand that personal data will be processed in accordance with current UK data protection legislation. The University of Bath privacy notice can be found [here](#).
8. I understand and acknowledge that this study is designed to promote scientific knowledge and that the University of Bath will use the data I provide only for the purpose(s) set out in the information sheet.
9. I understand that the University of Bath may use the data collected for this project in a future research project but that the conditions on this form under which I have provided the data will still apply.
10. I understand that I am free to discuss any concerns I may have with the research team: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmncan@bath.ac.uk](mailto:psmncan@bath.ac.uk))

If they are unable to resolve your concern or you wish to make a complaint, please contact the University of Bath Research Governance and Compliance Team ([research-ethics@bath.ac.uk](mailto:research-ethics@bath.ac.uk)).  
The REC reference number is: 0832-3936

**Please provide your consent by selecting the option below:**

- **I consent to participate in this study**
- **I do not consent to participate in this study**

1.2 Please enter your e-mail address below. This is so we can send you the second survey in 6 - 8 weeks' time.

If you choose to enter the prize draw, we will also use your email to enter you into the draw.



1.3 Would you like to enter the prize draw to receive one of three £150 Ethical Superstore vouchers?

1. Yes
2. No

1.4 Do you consent for Greener and Cleaner to contact you for follow up research in the future?

This is entirely optional. Your email address will be kept completely separate from your survey responses, and so you cannot be identified from your responses. We will not share your email address with anyone else.

1. Yes, I consent for Greener and Cleaner to contact me by email
2. No, I do not consent for Greener and Cleaner to contact me by email

1.5 We are looking for volunteers to take part in a follow-up interview. This will take place online, via Microsoft Teams, at a time that suits you. It will last up to 60 minutes. The interview data collected would be confidential and completely anonymised.

After completing the interview, you will be given a £20 Ethical Superstore voucher to thank you for taking part.

1. Yes, I am interested in taking part in an interview
2. No, I am not interested in taking part in an interview

**Routing question: If Q1.6 = 'Yes', skip to Block 2, if Q 1.6 = 'No', continue to Q1.7.**

**Also, Routing question for Block 3: If Q1.6 = 'Yes', present Block 3**

1.6 Are you a Greener and Cleaner Hub volunteer or member of staff?

1. Yes
2. No

1.7 Is a Greener and Cleaner volunteer or staff member currently helping you complete this survey?

1. Yes
2. No

**Routing question for Block 3: If Q1.8 = 'No', present Block 3; if Q1.8 = 'Yes' or 'I have not yet visited the Hub', do not present Block 3**

1.8 Was your first visit to the Greener and Cleaner Hub within the last month?

1. Yes
2. No
3. I have not yet visited the Hub

**Block 2: Motivations for engaging with the Greener and Cleaner Hub**  
*This is Part 1 of the survey.*

*It will take you about 5 minutes to complete Part 1.*

*First, we would like to know why you engage with Greener and Cleaner.*

**Display logic: If Q1.8 = 'Yes' or 'No', present Q2.1; If Q1.8 = 'I have not yet visited the Hub', do not present Q2.1**

2.1 What was your **main motivation** for your **first visit** to the Greener and Cleaner Hub?

1. I passed by the Hub and was interested to know more about it
2. I was already engaging with Greener and Cleaner online and I wanted to see the Hub
3. To learn about sustainability or reduce my carbon footprint
4. To take part in a community event or workshop
5. To meet like-minded individuals or make social connections
6. A recommendation from a friend, family member or colleague
7. To use the Library of Things
8. Other (please specify)

2.2A **How motivated** are you by the following factors to engage with the Greener and Cleaner Hub and workshops?

Part A

	Not at all motivated	Slightly motivated	Moderately motivated	Very motivated	Extremely motivated
Concern about the environment and/or biodiversity loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To learn how to reduce my carbon footprint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To improve personal health and wellbeing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The variety of programmes offered, or a specific workshop of interest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To learn new skills (e.g., mending things)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2B **How motivated** are you by the following factors to engage with the Greener and Cleaner Hub and workshops?

Part B

	Not at all motivated	Slightly motivated	Moderately motivated	Very motivated	Extremely motivated
To be involved in local community action	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Curiosity about the organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To meet people and make social connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recommendation(s) from friends, family or colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To use the Library of Things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.3 To what extent has the following encouraged you to live more sustainably/adopt green behaviours?

	Not at all encouraged	Slightly encouraged	Moderately encouraged	Very encouraged	Extremely encouraged
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

			d		
Engaging with Greener and Cleaner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The cost-of-living crisis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Things I hear or read in the media about climate change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Experiencing extreme weather events (e.g., heatwaves, flooding)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking part in local community initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government climate policies or incentives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussions with family, friends or colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Block 3: Hub impacts (existing users only)**

**Block 3 is presented to Hub volunteers and existing Hub users only. New Hub users will answer Block 3 questions in Survey 2**

*The next few questions explore whether engaging with Greener and Cleaner may have influenced some of your behaviours.*

3.1 Since engaging with Greener and Cleaner, to what extent has your awareness of environmental issues increased?

1. Not at all
2. A little
3. Moderately
4. Significantly
5. Very much

3.2 Which of the following green practices have you adopted **since engaging with Greener and Cleaner**?

*Please select all that apply*

1. Buying less stuff overall
2. Buying second-hand items more frequently
3. Mending/repairing items, where possible
4. Buying items that are more sustainable (e.g., energy-efficient electrical items, eco

- cleaning products)
5. Recycling more consistently
  6. Reducing energy consumption in your home (i.e., switching off lights, turning down the thermostat)
  7. Reducing water usage in your home or garden
  8. Using public transport more frequently
  9. Using active travel more frequently (i.e., walking, cycling or using a wheelchair)
  10. Reducing meat consumption
  11. Reducing food waste
  12. Advocating for environmental issues (e.g., writing to your MP, attending demonstrations)
  13. Other (please specify)
  14. None of the above

3.3 Approximately how many people have you spoken with about climate change or environmental issues in the last 3 months?

**Display logic: If Q3.3 does NOT = '0', present Q3.4**

3.4 Which of the following topics did you discuss with them?

*Please select all that apply*

1. Ways to live greener/more sustainably
2. Mending clothes or other items
3. Taking part in local community projects
4. Starting a business aimed at sustainability
5. Volunteering at the Greener and Cleaner Hub
6. Other (please specify)

#### **Block 4: Sociodemographics**

***Next, a few questions about you.***

***These questions are to understand who uses the Hub.***

***All of your responses will be anonymised.***

4.1 What is your age?

- 16 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 and over
- Prefer not to say

4.2 How do you self-identify?

- Female
- Male
- Non-binary
- None of the above
- Prefer not to say

4.3 What is your ethnic group?

1. White
2. Mixed/Multiple ethnic groups
3. Asian/Asian British
4. Black/African/Caribbean/Black British
5. Middle Eastern
6. Other ethnic group
7. Prefer not to say

4.4 Do you have children (under the age of 18) living at home?

1. Yes
2. No
3. Prefer not to say

4.5 Where do you live?

1. Bromley Borough
2. Greenwich Borough
3. Lewisham Borough
4. Croydon Borough
5. Another London borough
6. Elsewhere in the UK
7. Another country
8. Prefer not to say

4.6 What is your employment status?

*Please select all that apply*

1. Employed full time (30+ hrs/wk)
2. Employed part time (less than 30 hrs/wk)
3. Self-employed
4. Unemployed
5. Looking after home/family
6. Studying
7. Retired
8. Other
9. Prefer not to say

4.7 Do you have a long-standing illness, injury or disability that limits your normal day-to-day activities?

By 'long-standing' we mean anything that has troubled you over a period of time, or is likely to affect you over a period of time. 'Normal day-to-day activities' includes things like eating, washing, walking and going shopping.

1. Yes
2. No
3. Prefer not to say

4.8 What is the highest level of education you have achieved so far?

1. No formal qualifications
2. GCSE or O-level
3. A-level
4. Undergraduate degree (e.g., Bachelor's)
5. Postgraduate degree (e.g., Master's, Level 7 degree, PhD)
6. Vocational qualification
7. Other
8. Prefer not to say

4.9 Please indicate the **combined income** of your **household** (per year, before tax deductions):

1. Less than £6,000
2. £6,000 - £12,999
3. £13,000 - £18,999
4. £19,000 - £25,999
5. £26,000 - £31,999
6. £32,000 - £47,999
7. £48,000 - £63,999
8. £64,000 - £95,999
9. £96,000 or more
10. Prefer not to say

### **Block 5: Pro-environmental behaviours**

***Thank you for completing Part 1!***

***It will take you about 5 minutes to complete Part 2.***

***We'll ask you about some green behaviours in more detail, your views on climate change, and a few more questions about your involvement with Greener and Cleaner.***

5.1 How often do you:

	Never	Rarely	Sometime	Often	Regularly
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			s		
mend your clothes instead of discarding them? (e.g., sewing buttons, patching holes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
buy from second-hand shops?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
buy products without packaging? (i.e., from refill stores etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sign petitions related to environmental causes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
participate in protests or marches for environmental issues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.2 In a typical week, what proportion (%) of your journeys is made using the following modes of travel:

*Please move the slider into the correct position*

Public transport	<input type="checkbox"/>
Active travel (i.e., walking, cycling or using a wheelchair)	<input type="checkbox"/>

5.3 In a typical week, how many days is your diet 'meat-free'? (i.e., you do not eat any meat or fish)

1. None, or less than 1 day per week
2. 1 - 2 days per week
3. 3 - 4 days per week
4. 5 - 6 days per week
5. Every day
6. Not applicable – I am vegetarian or vegan

5.4 In a typical week, how much of the food that you buy is thrown away?

Please include food past its 'sell by' date, leftovers, food that is composted or put into the food waste bin etc.

1. None, or only inedible waste such as teabags, eggs, shells and bones
2. 1-10%

3. 11-20%
4. 21-30%
5. 31-40%
6. More than 41%

5.5 How motivated are you to grow some of your own food?

1. Not at all motivated
2. Slightly motivated
3. Moderately motivated
4. Very motivated
5. Extremely motivated

**Block 6: Climate perceptions**

***You're doing great!***

***The following questions explore your views on climate change.***

6.1 How worried, if at all, are you about the following:

	Not at all worried	Not very worried	Fairly worried	Very worried	Extremely worried	I don't know enough about this topic to say
Climate change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air pollution (in my local area)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biodiversity loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.2 When, if at all, do you think people in your local borough will start feeling the effects of climate change listed below?

	We are already feeling the effects	In the next 10 years	In the next 25 years	In the next 50 years	In the next 100 years	Never
Extreme heat waves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought/restrictions to water supply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe storms and flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruption to food supply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.3 How much do you think each of the following would contribute to reducing the carbon footprint of the average person living in the UK?

	Nothing	A little	A large amount	A very large amount
Avoid eating red meat (beef, lamb, pork etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avoid eating dairy products (milk, cheese etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Live car-free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avoid flying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avoid food waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turn lights off when not in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recycle paper, plastic, glass and cans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buy energy-efficient appliances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avoid buying things made of plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduce the amount of things we buy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.4 Who, in your view, has the most responsibility to reduce the risk of climate change?

*Please rank the four options by dragging each option into the correct position in the box - 1 has the most responsibility and 4 has the least responsibility*

- 1. Individuals and households \_\_\_\_\_
- 2. Businesses and industries \_\_\_\_\_
- 3. Local Councils \_\_\_\_\_

4. National Government \_\_\_\_\_

## **Block 7: Use of Hub**

***You're almost finished!***

***The final questions ask how you engage with Greener and Cleaner.***

7.1 How did you first hear about Greener and Cleaner?

1. I passed by the Hub, in The Glades shopping centre
2. A recommendation from a friend, family member or colleague
3. From a Greener and Cleaner event or workshop
4. From a local community group or social club
5. From my place of work
6. From our local school
7. From advertising for Library of Things
8. Facebook
9. Twitter/X
10. Instagram
11. LinkedIn
12. YouTube
13. Pinterest

7.2 How often have you visited the Greener and Cleaner Hub in the past year?

(i.e., going to the Hub in person, in The Glades shopping centre)

1. 3 - 4 times a week or more
2. 1 - 2 times a week
3. Once a fortnight
4. Once a month
5. A few times over the year
6. Never/only once in the past year
7. Not applicable - I only recently started visiting the Greener and Cleaner Hub

7.3 Which of the following Greener and Cleaner workshops or events have you attended?

*Please select all that apply*

1. I haven't attended any workshops or events yet
2. Community garden
3. Film screening(s)
4. Knitting and crochet
5. Mending clinic
6. Family craft workshop
7. Swapping and discussion of green options
8. Climate café
9. People planet pastry
10. Book club
11. Carbon literacy
12. Climate Fresk
13. Clothes swap
14. Christmas fair
15. Other event (please specify)

7.4 Have you used any of the following Greener and Cleaner online platforms/resources?

*Please select all that apply*

1. The Greener and Cleaner website
2. Facebook group
3. Twitter/X
4. Instagram
5. LinkedIn
6. YouTube
7. Pinterest
8. None of the above

**Display logic: If Q7.4 does NOT = 'None of the above', present Q7.5**

7.5 How often have you used Greener and Cleaner online platforms/resources in the past year?

(e.g., the Greener and Cleaner website, the Facebook group etc.)

1. 3 - 4 times a week or more
2. 1 - 2 times a week
3. Once a fortnight
4. Once a month

5. A few times over the year
6. Never/only once in the past year
7. Not applicable - I only recently started using Greener and Cleaner online platforms/resources

### **Block 11: Open Feedback**

11a Is there anything else you would like to say about your experience of using the Greener and Cleaner Hub or attending the workshops?

### **Debrief**

**Thank you very much for taking part!**

**We'll send you the second survey in 6 - 8 weeks' time.**

The project is a collaboration between Greener and Cleaner and researchers from the University of Bath/the Centre for Climate Change and Social Transformations (CAST).

The aim of the project is to understand how Greener and Cleaner supports people to adopt green behaviours. The insights from this research can help Greener and Cleaner tailor their programmes and services to better meet the needs and interests of people who use the Hub.

All the information you provide is confidential and you will not be identifiable in any reports or data sets. If for any reason you wish to withdraw your data, please contact one of the researchers within two weeks of your participation. After this date, we will anonymise your data and so we would be unable to identify and remove your data.

If you have any questions about the study, please contact the research team: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmnican@bath.ac.uk](mailto:psmnican@bath.ac.uk))

If you have concerns about your participation in this study or you wish to make a complaint, please contact the University of Bath Research Governance and Compliance Team ([research-ethics@bath.ac.uk](mailto:research-ethics@bath.ac.uk)). The REC reference number is: 0832-3936

Privacy Notice: Your data will be used only for the purposes set out in the information sheet and consent form. Your consent is conditional upon the University complying with its duties and obligations under current UK data protection legislation. The University of Bath privacy notice can be found [here](#).

Please click '**Done**' to submit your responses.

## 5.2 - Survey 2 protocol

To move through the survey...

Click 'Next' to move onto the next question.

Or click the 'Up' arrow to return to the previous question.

For some questions, you may need to scroll down to see all of the response options.

### **Participant information sheet (repeated from Survey 1)**

**This information sheet is identical to the information sheet for Survey 1 - if you wish, please review this information again.**

#### **What is this research project about?**

The project aims to explore people's engagement with the Greener and Cleaner Hub and understand its impacts on low-carbon behaviours.

#### **What will I be asked to do?**

You will be asked to complete two online surveys:

1. The first survey includes questions about your engagement with Greener and Cleaner, your views on climate change, and your everyday behaviours. The survey is designed in two parts; the first part will take approximately 6 minutes to complete, and the second part will take approximately 5 minutes. **You have already completed Survey 1 - thank you!**
2. The second survey will be in 6 - 8 weeks' time and will explore your ongoing experience of using the Hub or attending Greener and Cleaner workshops. It will take approximately 7 minutes. **This is Survey 2.**

We will also ask whether you would be interested in participating in a one-to-one interview about your experience of using the Greener and Cleaner Hub (at a later date).

#### **Who can take part?**

Anyone aged 16 or over who has engaged with the Greener and Cleaner Hub in some way. This can be visiting the Hub, attending a workshop, or using their website.

#### **What are the benefits and risks of taking part?**



The information you provide will be very useful for the research team and Greener and Cleaner to understand the views of people who use the Hub. Greener and Cleaner will then use this information to improve their service to you and to apply for future funding to support the Hub's activities.

You will have the option of entering a prize draw to win one of three £150 vouchers for [Ethical Superstore](#). There are no risks involved in taking part.

This research has been reviewed and approved by the University of Bath Biomedical Research Ethics Committee.

### **Do I have to take part?**

Taking part in this study is entirely voluntary. You are free to withdraw your data from Survey 1 & 2, without giving a reason, at any time until 14 days after you have completed the second survey. We will then anonymise your data, which means we will remove any personal details about you and only store the rest of your answers. Prior to your data being anonymised, you can request for your data to be removed from the study by contacting the research team at the University of Bath (see contact details below). You do not have to answer any questions that you do not want to.

### **What happens to all the information?**

All the information you provide is confidential and will be stored on a secure drive at the University of Bath (password-protected). The University of Bath privacy notice can be found [here](#). All anonymised data will be permanently deleted within ten years. Any incomplete surveys (i.e., because you withdrew from the study) will be removed from the data and permanently deleted within two weeks.

You will not be identifiable in any reports or data sets. The research team will share this anonymised data with the Greener and Cleaner team, who may use this data to design a follow up study in the future. They will retain this anonymised data for up to five years.

We will ask for your email address. This is to:

4. Match your responses for the two surveys
5. Enter you into the prize draw (if you choose to enter)
6. Enable Greener and Cleaner to contact you for follow up research (this is entirely optional. Your survey responses will remain anonymised)

The research team at the University of Bath will permanently delete your email within two months of completing the second survey. If you consent to being contacted by Greener and Cleaner, they will retain your email address for up to three years.

### **What do I do if I have any questions?**

Please contact the research team at the University of Bath for further information: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmncan@bath.ac.uk](mailto:psmncan@bath.ac.uk))

Or, if you have any concerns about this study, please contact the University of Bath Research Governance and Compliance Team: ([research-ethics@bath.ac.uk](mailto:research-ethics@bath.ac.uk); University of Bath, Claverton Down, Bath, BA2 7AY). The REC reference number is: 0832-3936

### **How can I take part?**

Please click 'Next' below

### **Consent form (repeated from Survey 1)**

**This consent form is identical to the one you completed for Survey 1. If you wish, please review these statements again before choosing whether to take part in Survey 2.**

1. I have been provided with information explaining what my participation in this project involves. The participant information sheet, shown on the previous page, is also available on the Greener and Cleaner website and is displayed in the Greener and Cleaner Hub.
2. I have received enough information about the project to make a decision about my participation. I have had an opportunity to ask questions and discuss this project.
3. I understand that my participation in this study is entirely voluntary. I understand that I am free to withdraw my consent at any time up until 14 days after completing the second survey, without giving a reason for withdrawing. I can withdraw from the study by closing the browser during the survey, or by notifying the researchers.
4. I understand that I do not have to answer any questions that I do not want to.
5. I understand that I will be asked to provide my email address – this is to send me the second survey and to match my responses for the two surveys. I understand my email address will be permanently deleted within 2 months of completing the second survey - unless I consent to Greener and Cleaner contacting me for follow up research.

6. I understand the data I provide will be treated as confidential, and that I will not be identifiable in any research outputs or reports.
7. I understand that personal data will be processed in accordance with current UK data protection legislation. The University of Bath privacy notice can be found [here](#).
8. I understand and acknowledge that this study is designed to promote scientific knowledge and that the University of Bath will use the data I provide only for the purpose(s) set out in the information sheet.
9. I understand that the University of Bath may use the data collected for this project in a future research project but that the conditions on this form under which I have provided the data will still apply.
10. I understand that I am free to discuss any concerns I may have with the research team: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmnacan@bath.ac.uk](mailto:psmnacan@bath.ac.uk)).

If they are unable to resolve your concern or you wish to make a complaint, please contact the University of Bath Research Governance and Compliance Team ([research-ethics@bath.ac.uk](mailto:research-ethics@bath.ac.uk)).  
The REC reference number is: 0832-3936

**Please provide your consent by selecting the option below:**

- **I consent to participate in Survey 2**
- **I do not consent to participate in Survey 2**

1.2b What is your email address?

This is so we can match your responses for Survey 1 and Survey 2.

**Routing Question: If Q 3B Routing Q = 'Before March 2024', skip to Block 5B; If Q 3B Routing Q = 'In March, April or May 2024' OR 'Not applicable - I have not visited the Hub yet', move to Block 3B**

3B Routing Q When was your first visit to the Greener and Cleaner Hub?

1. Before March 2024
2. In March, April or May 2024
3. Not applicable - I have not visited the Hub yet

**Block 3B: Hub impacts (new users only)**

***The first few questions explore whether engaging with Greener and Cleaner may have influenced some of your behaviours.***

3.1b Since engaging with Greener and Cleaner, to what extent has your awareness of environmental issues increased?

1. Not at all
2. A little
3. Moderately
4. Significantly
5. Very much

3.2b Which of the following green practices have you adopted **since engaging with Greener and Cleaner**?

*Please select all that apply*

1. Buying less stuff overall
2. Buying second-hand items more frequently
3. Mending/repairing items, where possible
4. Buying items that are more sustainable (e.g., energy-efficient electrical items, eco cleaning products)
5. Recycling more consistently

6. Reducing energy consumption in your home (i.e., switching off lights, turning down the thermostat)
7. Reducing water usage in your home or garden
8. Using public transport more frequently
9. Using active travel more frequently (i.e., walking, cycling or using a wheelchair)
10. Reducing meat consumption
11. Reducing food waste
12. Advocating for environmental issues (e.g., writing to your MP, attending demonstrations)
13. Other (please specify)
14. None of the above

3.3b Approximately how many people have you spoken with about climate change or environmental issues in the last 3 months?

**Display logic: If Q3.3b does NOT = '0', present Q3.4b**

3.4b Which of the following topics did you discuss with them?

*Please select all that apply*

- Ways to live greener/more sustainably
- Mending clothes or other items
- Taking part in local community projects
- Starting a business aimed at sustainability
- Volunteering at the Greener and Cleaner Hub
- Other (please specify)

**Block 5B: Pro-environmental behaviours (repeated from Survey 1)**

**(Questions repeated from Survey 1 – to measure change in behaviours over study period)**

***The following questions ask about some green behaviours.***

**These questions are similar to ones you answered in Survey 1, a few weeks ago. This is intentional!**

5.1b How often do you:

	Never	Rarely	Sometimes	Often	Regularly
mend your clothes instead of discarding them? (e.g., sewing buttons, patching holes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
buy from second-hand shops?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
buy products without packaging? (i.e., from refill stores etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sign petitions related to environmental causes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
participate in protests or marches for environmental issues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.2b In a typical week, what proportion (%) of your journeys is made using the following modes of travel:

*Please move the slider into the correct position*

Public transport	<input type="checkbox"/>
Active travel (i.e., walking, cycling or using a wheelchair)	<input type="checkbox"/>

5.3b In a typical week, how many days is your diet 'meat-free'? (i.e., you do not eat any meat or fish)

1. None, or less than 1 day per week
2. 1 - 2 days per week
3. 3 - 4 days per week
4. 5 - 6 days per week
5. Every day
6. Not applicable – I am vegetarian or vegan

5.4b In a typical week, how much of the food that you buy is thrown away? Please include food past its 'sell by' date, leftovers, food that is composted or put into the food waste bin etc.

1. None, or only inedible waste such as teabags, eggs, shells and bones
2. 1-10%
3. 11-20%
4. 21-30%
5. 31-40%
6. More than 41%

5.5b How motivated are you to grow some of your own food?

1. Not at all motivated
2. Slightly motivated
3. Moderately motivated
4. Very motivated
5. Extremely motivated

### **Block 8: Climate action in different roles**

8.1 In which, if any, of the following situations or locations do **you** try to be more green **since engaging with Greener and Cleaner?**

*Please select all that apply*

1. At home
2. In my workplace or business
3. At school/nursery/college/university
4. When spending time with family or friends
5. In local community spaces (e.g., community gardens, social clubs, parks etc.)
6. In online discussion forums (e.g., Facebook groups, Twitter/X etc.)
7. When shopping (e.g., choosing green products)
8. Everyday travel or commuting (e.g., using public transport, biking)
9. When choosing which banks to use or where to save/invest money
10. As a citizen (e.g., writing to the local MP or Borough Council, attending climate protests etc.)
11. Other (please specify)
12. Not applicable – I do not try to be more green

8.2 In which, if any, of the following situations or locations do you **encourage other people** to be more green **since engaging with Greener and Cleaner?**

*Please select all that apply*

1. At home
2. In my workplace or business
3. At school/nursery/college/university
4. When spending time with family or friends
5. In local community spaces (e.g., community gardens, social clubs, parks etc.)
6. In online discussion forums (e.g., Facebook groups, Twitter/X etc.)
7. When shopping (e.g., choosing green products)
8. Everyday travel or commuting (e.g., using public transport, biking)
9. When choosing which banks to use or where to save/invest money
10. As a citizen (e.g., writing to the local MP or Borough Council, attending climate protests etc.)
11. Other (please specify)
12. Not applicable – I do not try to encourage other people to be more green

### **Block 9: Workshop evaluation**

***These next few questions are about your experiences of attending Greener and Cleaner workshops, activities or events.***

**Routing Question: If Q9.1 = 'Yes', move to Q9.2; If Q9.1 = 'No', skip to Block 11**

9.1 Have you attended a Greener and Cleaner workshop, activity or event in the last 2 months?

- Yes
- No

9.2 Which of the following workshops, activities or events did you attend?

*Please select all that apply*

- 1) Community garden
- 2) Film screening(s)
- 3) Knitting and crochet



- 4) Mending clinic
- 5) Family craft workshop
- 6) Swapping and discussion of green options
- 7) Climate café
- 8) People planet pastry
- 9) Book club
- 10) Carbon literacy
- 11) Climate Fresk
- 12) Clothes swap
- 13) Christmas fair
- 14) Other workshop/event (please specify)

9.3 Overall, how would you rate the **quality** of the workshop/activity/event(s) you attended?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent

9.4 Are there any aspects of the workshop/activity/event(s) you found particularly valuable?

*Please select all that apply*

1. The workshop content and materials provided
2. The knowledge and expertise of the presenter(s)
3. Taking part in group discussions about sustainability or climate change
4. Practical demonstrations or hands-on activities
5. Opportunities to network and build connections with other participants
6. Other (please specify)

9.5 How **relevant** was the information presented in the workshop/activity/event(s) to achieving your green goals or reducing your personal carbon footprint?

1. Not relevant
2. Somewhat relevant
3. Moderately relevant
4. Very relevant

5. Extremely relevant

9.6 Based on your experience, how likely are you to **recommend** the workshop/activity/event(s) to others?

1. Very unlikely
2. Unlikely
3. Neutral
4. Likely
5. Very likely

### **Block 10: Workshop behaviour change**

***The final questions explore whether attending the workshops or events may have influenced some of your behaviours.***

10.1 To what extent have you been able to apply what you learned in the workshop/activity/event(s) in your daily life?

1. Not at all
2. A little
3. Moderately
4. Significantly
5. Very much

10.2 Which of the following green practices have you adopted **since attending the workshop/activity/event(s)**?

*Please select all that apply*

1. Buying less stuff overall
2. Buying second-hand items more frequently
3. Mending/repairing items, where possible
4. Buying items that are more sustainable (e.g., energy-efficient electrical items, eco cleaning products)
5. Recycling more consistently
6. Reducing energy consumption in your home (i.e., switching off lights, turning down the thermostat)

7. Reducing water usage in your home or garden
8. Using public transport more frequently
9. Using active travel more frequently (i.e., walking, cycling or using a wheelchair)
10. Reducing meat consumption
11. Reducing food waste
12. Advocating for environmental issues (e.g., writing to your MP, attending demonstrations)
13. Other (please specify)
14. None of the above

10.3 To what extent did attending the workshop/activity/event(s) contribute to your **understanding** of environmental issues?

1. Not at all
2. A little
3. Moderately
4. Significantly
5. Very much

10.4 How **motivated** do you feel to engage in green behaviours since attending the workshop/activity/event(s)?

1. Not at all motivated
2. Slightly motivated
3. Moderately motivated
4. Very motivated
5. Extremely motivated

10.5 How **confident** are you in your ability to make environmentally-friendly choices in your daily life since attending the workshop/activity/event(s)?

1. Not at all confident
2. Slightly confident
3. Moderately confident
4. Very confident
5. Extremely confident

10.6 How often do you discuss sustainability or green behaviours with friends, family, or colleagues since attending the workshop/activity/event(s)?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Regularly

10.7 What **barriers**, if any, have you faced in trying to adopt more green behaviours since attending the workshop/activity/event(s)?

Please select all that apply

1. Lack of information
2. Financial constraints
3. Lack of support or interest from family, friends or colleagues
4. Lack of time
5. Other (please specify)
6. I have not faced any barriers

10.8 What **additional support or resources** would help you to continue applying what you learned in the workshop/activity/event(s)?

*Please select all that apply*

1. Follow-up sessions or workshops
2. Online resources or discussion forums
3. Regular updates on sustainability topics from Greener and Cleaner
4. Opportunities to network with experts, or other people who use the Hub
5. Other (please specify)
6. None, I have sufficient resources and support

### **Block 11 – Open Feedback**

11 Is there anything else you would like to say about your experience of using the Greener and Cleaner Hub or attending the workshops?



**Debrief (repeated from Survey 1)**

**Thank you very much for taking part!**

The project is a collaboration between Greener and Cleaner and researchers from the University of Bath/the Centre for Climate Change and Social Transformations (CAST).

The aim of the project is to understand how Greener and Cleaner supports people to adopt green behaviours. The insights from this research can help Greener and Cleaner tailor their programmes and services to better meet the needs and interests of people who use the Hub.

All the information you provide is confidential and you will not be identifiable in any reports or data sets. If for any reason you wish to withdraw your data, please contact one of the researchers within two weeks of your participation. After this date, we will anonymise your data and so we would be unable to identify and remove your data.

If you have any questions about the study, please contact the research team: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmncan@bath.ac.uk](mailto:psmncan@bath.ac.uk))

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Privacy Notice: Your data will be used only for the purposes set out in the information sheet and consent form. Your consent is conditional upon the University complying with its duties and obligations under current UK data protection legislation. The University of Bath privacy notice can be found [here](#).

Please click '**Done**' to submit your responses.

## 5.3 - Interview participant information sheet



### PARTICIPANT INFORMATION SHEET - INTERVIEWS

#### **What is this research project about?**

The project aims to explore people's engagement with the Greener and Cleaner Hub and understand its impacts on low-carbon behaviours.

#### **What will I be asked to do?**

You will be asked to take part in a one-to-one interview. We will ask you questions about your engagement with Greener and Cleaner, your views on climate change, and your everyday behaviours. The interview will last up to 60 minutes and will be completed online via Microsoft Teams at a convenient time for you.

#### **Who can take part?**

Anyone aged 16 or over who has engaged with the Greener and Cleaner Hub in some way. This can be visiting the Hub, attending a workshop, or using their website.

#### **What are the benefits and risks of taking part?**

The information you provide will be very useful for the research team and Greener and Cleaner to understand the views of people who use the Hub. Greener and Cleaner will then use this information to improve their service to you and to apply for future funding to support the Hub's activities.

To thank you for your time, you will have the option of receiving a £20 voucher for Ethical Superstore. There are no risks involved in taking part.

This research has been reviewed and approved by the University of Bath Biomedical Research Ethics Committee.

### **Do I have to take part?**

Taking part in this study is entirely voluntary. You are free to withdraw your data, without giving a reason, at any time until 14 days after you have completed the interview. We will then anonymise your data, which means we will remove any personal details about you and only store the rest of your answers. Prior to your data being anonymised, you can request for your data to be removed from the study by contacting the research team at the University of Bath (see contact details below). You do not have to answer any questions that you do not want to.

### **What happens to all the information?**

All the information you provide is confidential and will be stored on a secure drive at the University of Bath (password-protected). The University of Bath privacy notice can be found [here](#). All anonymised data will be permanently deleted within ten years.

The interview will be recorded so we can listen to it again afterwards. The recording will be destroyed once we have transcribed it, within 21 days of the date of the interview. You will be assigned an anonymous ID code and so you will not be identifiable in any reports or data sets. The research team will share this anonymised data with the Greener and Cleaner team, who may use this data to design a follow up study in the future. They will retain this anonymised data for up to five years.

The research team at the University of Bath will permanently delete your email within two months of completing the interview. If you consent to being contacted by Greener and Cleaner, they will retain your email address for up to three years.

### **What do I do if I have any questions?**

Please contact the research team at the University of Bath for further information: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmncan@bath.ac.uk](mailto:psmncan@bath.ac.uk))

Or, if you have any concerns about this study, please contact the University of Bath Research Governance and Compliance Team: ([research-ethics@bath.ac.uk](mailto:research-ethics@bath.ac.uk); University of Bath, Claverton Down, Bath, BA2 7AY). The REC reference number is: 0832-3936

### **How can I take part?**

Please respond to our email confirming you would like to take part in the interview. We will then contact you to arrange a suitable day and time.

## 5.4 - Interview consent form



### CONSENT FORM - INTERVIEWS

#### **Please read these statements carefully**

1. I have been provided with information explaining what my participation in this study involves. The participant information sheet was emailed to me and is also available in the Greener and Cleaner Hub.
2. I have received enough information about the study to make a decision about my participation. I have had an opportunity to ask questions and discuss this study.
3. I understand that my participation in this study is entirely voluntary. I understand that I am free to withdraw my data at any time up until 14 days after completing the interview, without giving a reason for withdrawing. I can withdraw from the study by notifying the researchers (see contact details below).
4. I understand that I do not have to answer any questions that I do not want to.
5. I understand the data I provide will be treated as confidential, and that I will not be identifiable in any research outputs or reports.
6. I understand that personal data will be processed in accordance with current UK data protection legislation. The University of Bath privacy notice can be found here.
7. I understand and acknowledge that this study is designed to promote scientific knowledge and that the University of Bath will use the data I provide only for the purpose(s) set out in the information sheet.
8. I understand that the University of Bath may use the data collected for this project in a future research project but that the conditions on this form under which I have provided the data will still apply.
9. I understand that I am free to discuss any concerns I may have with the research team: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmnican@bath.ac.uk](mailto:psmnican@bath.ac.uk)). If they are unable to resolve your concern or you wish to make a complaint, please contact the



University of Bath Research Governance and Compliance Team ([research-ethics@bath.ac.uk](mailto:research-ethics@bath.ac.uk)). The REC reference number is: 0832-3936 Please provide your consent by selecting the option below:

- I consent to participate in this interview
- I do not consent to participate in this interview

### **G & C Interview Protocol v3**

#### **Remind the interviewee about the participant information sheet and the consent form.**

*Text colour code: Black = normal priority question; Blue = elicitation question if required/not previously answered*

#### **Section 1. Introduction to the interview and background questions**

The interview should take up to an hour. We are interested in hearing about your experiences and thoughts in your own words. There's no right or wrong answer here; we're just looking for your perspective.

Before we dive deeper, I want to assure you that your responses will be kept confidential and used for the purpose of the current research project and for helping Greener and Cleaner. Do you have any questions or concerns about this?

I need to check whether it's ok to record the interview? (If yes, inform the ppt before starting the recorder).

1.1 Could you start by telling me a little bit about yourself, for example, what do you do for a living?

1.2 What sparked your interest in taking part in our interview?

#### **Section 2. Motivations (initial interest in the Hub vs 'routeway commitment')**

Next, I would like to ask you some questions about your involvement with the Greener and Cleaner Hub.

##### **Motivations for *Initial* Engagement with the Hub**

2.1 How did you first hear about the Greener and Cleaner Hub?

2.2 What inspired you to visit the Greener and Cleaner Hub for the first time? *(If necessary, follow up on motivation(s) to elicit further detail)*

2.3 *Were there any particular events, issues, or needs you had that prompted your initial engagement with the Greener and Cleaner Hub? (If necessary prompt for further detail)*

##### **Motivations for *Continuous* Engagement with the Hub**

2.4 Can you tell me why you continue engaging with the Greener and Cleaner Hub?

- 2.5 Has your involvement with the Hub changed since you first became involved? If it has, can you explain to me how it has changed?')
- 2.6 Can you think of any benefits that have come from your continued involvement with the Hub? *(If necessary, follow up on each benefit to elicit further detail).*
- 2.7 Have there been any programmes, activities, or other aspects of the Hub that have helped keep you involved? If so, can you tell me what has helped?

### **Section 3. General Questions on Engagement**

- 3.1 Can you share a story or an example of how your interaction with the Hub has influenced the way you think or act concerning green issues?

### **Section 4. Impacts**

#### Section 4a. General Impact on Sustainability Practices

- 4.1 Can you tell me if your visit(s) to the Hub have influenced you to do any sustainable behaviours in your everyday life? If so, can you share one or two specific examples?
- 4.2 Has your involvement with the Hub changed the way you think about sustainability? If so, could you please tell me what has changed, and why?

#### Section 4b. Lifestyle changes and environmental awareness (Identify changes in behaviours and attitudes)

- 4.3 Has your engagement with the Hub impacted your decision-making regarding things like buying clothes, mending things, travel decisions, or other lifestyle choices? If so, could you please give some examples that makes this clear?
- 4.4 Has your understanding of sustainability and environmental issues expanded since visiting the Hub? If so, can you give some examples of the differences this change in understanding has made in your life?
- 4.5 Have you experienced any challenges in trying to make changes based on what you've learned or experienced at the Hub? If so, how have you tackled these challenges?

#### Section 4c. Engagement and advocacy for environmental issues (Identify 1. climate action in different social roles. 2. inclusion in climate action)

- 4.6 Have your experiences at the Hub motivated you to engage in any green advocacy or activism, such as writing to your MP or attending a climate demonstration? If so, could you please tell me what you have done, and why?
- 4.7 Have your experiences at the Hub motivated you to engage in any green community initiatives or collaborative projects, such as community solar energy or green urban spaces? If so, could you please tell me what you have done, and why?

- 4.8 Have your interactions at the Hub influenced the way you talk about environmental issues with friends, family, or colleagues? If so, in what ways?
- 4.9 Before you became involved with the Hub, did you have opportunities to discuss issues like climate change or the environment? If so, can you give an example? If not, was there a particular reason why?
- 4.10 Has becoming involved with the Hub affected your discussions of these issues in any way? If so, could you tell me how?

### **Section 5. Climate anxiety and risk**

- 5.1 Could you tell me what you *feel* when you think about climate change?
- 5.2 (If participant mentions anxiety/concern/worry or negative affect): Has using the Hub affected how you deal with or respond to these feelings? If so, could you explain how?
- 5.3 (If not already covered in Section 4): Has the way you feel about climate change motivated you to take action or change any behaviours in your life? If so, could you please give me some examples?

### **Section 6. Responsibility and efficacy (individual and community)**

- 6.1 Do you feel a sense of responsibility to address climate change as an individual? If so, could you explain how you manage this responsibility in your everyday life?
- 6.2 Do you feel that the community you live in has a responsibility to address climate change? If so, could you explain how your community should manage this responsibility?
- 6.3 Do you feel that you can make a difference in addressing climate change as an individual? If so, could you explain how you can make a difference? If not, why not?
- 6.4 What about as a part of your community? If not, why not?

### **Section 7. Personal reflections, lifestyle, and future actions for sustainability**

- 7.1 (If not already covered): Reflecting on your experiences of visiting the hub, can you think of any things you have learned that have shaped your perspective on sustainability and environmental responsibility?
- 7.2 Thinking about sustainability and your lifestyle, is there anything else that the Hub could help you with in the future?

## **Section 8. Workshop-specific questions**

I'd now like to spend some time talking about the workshops, activities or events that Greener and Cleaner organise. Have you attended a workshop or activity, and if so, which ones?

### [Section 8a. General workshop/event questions](#)

- 8.1 Can you describe a particular moment or aspect of the workshop/event that was especially impactful for you?
- 8.2 How do you plan to apply the skills and knowledge you gained from the workshop/event in the future?
- 8.3 In what ways do you think the workshop/event could be improved to better support participants' learning and motivation?
- 8.4 Please share any challenges you faced during the workshop/event and how you overcame them.

## **Section 8b. Practical workshops**

### [Mending clinic/family craft/Knitting and crochet](#)

(three similar workshops, just different target audiences)

- 8.5 Has attending the workshop changed the way you think about clothing repair/family craft/knitting and crochet and sustainability? If so, can you tell me how?
- 8.6 Have you used or do you plan to use what you learned about clothing repair/family craft/knitting and crochet since attending the workshop? If so, could you tell me how?

### [Community garden](#)

- 8.7 Has attending the workshop changed the way you think about gardening and sustainability? If so, can you tell me how?
- 8.8 Have you used or do you plan to use what you learned about gardening since attending the workshop? If so, could you tell me how?

### [Clothes swap](#)

- 8.9 Has attending the workshop changed the way you think about clothing use and reuse and sustainability? If so, can you tell me how?
- 8.10 Have you used or do you plan to use what you learned about clothing use and reuse since attending the workshop? If so, could you tell me how?

### [Repair cafe](#)

- 8.11 Has attending the workshop changed the way you think about repairing and reusing items and sustainability? If so, can you tell me how?

8.12 Have you used or do you plan to use what you learned about repairing and reusing items since attending the workshop? If so, could you tell me how?

### **Section 8c. Conceptual workshops**

#### [Climate Fresk or Climate Literacy Course](#)

8.13 Has attending the course changed the way you think about climate change? If so, can you tell me about the ideas and concepts that have changed how you think?

8.14 Have you used or do you plan to use the knowledge you learned about climate change gained from the course in your life, work or community? If so, could you tell me how?

### **Section 8d. Community-building, ideas exchange or peer support workshops**

#### [People, planet, pastry](#)

8.15 Has attending the workshop changed the way you think about running a business and sustainability? If so, can you tell me how?

8.16 Have you used or do you plan to use what you learned about sustainable business practices since attending the workshop? If so, could you tell me how?

8.17 Did the workshop help you to build social connections, share ideas, or foster a sense of community?

#### [Swapping and discussion of green options](#)

8.18 Has attending the workshop changed the way you think about what you buy and sustainability? If so, can you tell me how?

8.19 Have you used or do you plan to use what you learned about green options since attending the workshop? If so, could you tell me how?

8.20 Did the workshop help you to build social connections, share ideas, or foster a sense of community?

#### [Climate café](#)

8.21 Has attending the workshop changed the way you think or feel about climate change? If so, can you tell me how?

8.22 Have you used or do you plan to use what you learned about responding to climate change since attending the workshop? If so, could you tell me how?

8.23 Did the workshop help you to build social connections, share ideas, or foster a sense of community?

#### [Book club](#)

8.24 Have you used or do you plan to use anything that you learned during the session in your life or community linked to sustainability? If so, could you tell me how?

8.25 Did the workshop help you to build social connections, share ideas, or foster a sense of community?

### **Section 9. Final Question and wrapping up**

9.1 Is there anything else that you would like to add on this topic before we stop recording and conclude the interview?

Thank the participant, stop the recorder, move onto the debrief and then receipt of £20 voucher.

## 5.6 - Interview debrief



### G & C Debrief Form - Interviews

#### **Thank you very much for taking part!**

The project is a collaboration between Greener and Cleaner and researchers from the University of Bath/the Centre for Climate Change and Social Transformations (CAST).

The aim of the project is to understand how Greener and Cleaner supports people to adopt green behaviours. The insights from this research can help Greener and Cleaner tailor their programmes and services to better meet the needs and interests of people who use the Hub. All the information you provide is confidential and you will not be identifiable in any reports or data sets. If for any reason you wish to withdraw your data, please contact one of the researchers within two weeks of your participation. After this date, we will anonymise your data and so we would be unable to identify and remove your data.

If you have any questions about the study, please contact the research team: Mark Wilson ([mw2640@bath.ac.uk](mailto:mw2640@bath.ac.uk)) or Nick Nash ([psmncan@bath.ac.uk](mailto:psmncan@bath.ac.uk)).

If you have concerns about your participation in this study or you wish to make a complaint, please contact the University of Bath Research Governance and Compliance Team ([research-ethics@bath.ac.uk](mailto:research-ethics@bath.ac.uk)). The REC reference number is: 0832- 3936.

Privacy Notice: Your data will be used only for the purposes set out in the information sheet and consent form. Your consent is conditional upon the University complying with its duties and obligations under current UK data protection legislation. The University of Bath privacy notice can be found here



## 5.7 - Interview methodology and theoretical approach

This appendix is a more detailed description of the interview methodology.

### Semi-structured interviews

Semi-structured interviews are a widely used qualitative research method in social science, designed to balance the flexibility of open-ended interviews with the consistency of structured interviews. This approach allows researchers to explore complex phenomena while maintaining a degree of comparability across the sample.

The semi-structured interview method is underpinned by constructivist and interpretivist paradigms, which posit that social reality is co-constructed through interaction between the researcher and the participant. This method acknowledges the subjective nature of knowledge and emphasises understanding participants' perspectives and experiences in their terms. The flexibility inherent in semi-structured interviews enables the exploration of topics in depth, allowing participants to express their views and experiences in their own words. This approach is particularly effective in uncovering the meanings and interpretations individuals assign to their social world, thereby generating rich and detailed accounts.

From a theoretical standpoint, semi-structured interviews are suitable for exploring how social processes, relationships, and contexts influence individual behaviours and perceptions. They facilitate the investigation of sensitive or complex issues by providing a conversational space where participants feel comfortable sharing personal and potentially emotive information.

In practical terms, the interview protocol ensures that all relevant areas are addressed while allowing the interviewer flexibility to probe further based on participants' responses. This adaptability is crucial for capturing the depth and breadth of participants' experiences. Developing an effective interview protocol requires a thorough understanding of the research objectives and the context of the study. Questions should be open-ended to elicit detailed responses and sequenced logically to facilitate a natural flow of conversation.

The role of the interviewer is critical in semi-structured interviews. Interviewers must be skilled in active listening, probing, and maintaining rapport with participants. They must navigate the balance between guiding the conversation and allowing participants to lead the discussion to topics of importance to them. Establishing trust and ensuring participants' comfort is essential.

### Selection criteria for the interview participants

As mentioned in section 2.2, interview participants were sampled strategically using predefined quotas, to try to ensure that the sample was as diverse as possible (e.g., in terms of sociodemographic characteristics, and level of engagement with the Hub). The interview sample comprised Greener and Cleaner volunteers, and non-volunteers (aged 18+) who had visited the Hub and attended at least one workshop or event. The range of workshops included the following:

1. Community Garden
2. Film Screening
3. Knitting and Crochet Workshop
4. Mending Clinic
5. Family Craft Workshop
6. Swapping and Green Options Workshop
7. Climate Cafe
8. People, Planet, Pastry workshop
9. Book Club
10. Carbon Literacy
11. Climate Fresk
12. Clothes Swap

Individuals who fitted the recruitment quotas were contacted via email and invited to participate in an online interview. The initial invitation email included two attachments: an information sheet about the study (Appendix 5.3) and a consent form (Appendix 5.4). Ultimately, we had to compromise on recruitment quota targets based on the available participants. Whilst the sample was diverse in terms of staff/volunteers, non-volunteers and sociodemographic variables, we were unable to represent every type of workshop.

### Interview process

Before each interview, the researcher provided a verbal description of the study and the interview process, addressing any questions from the participants. Verbal consent to proceed was then obtained from the participant, and this consent was confirmed again at the end of the interview. A verbal debrief was provided by the researcher at the conclusion of each interview, followed by a written debrief sent via email. This email included further details about the study, researcher contact information, and a £20 voucher for [Ethical Superstore](#). Ethical issues are paramount in semi-structured interviews. The researcher remained sensitive to the emotional well-being of participants throughout.

The interviews were recorded using Microsoft Teams and transcribed verbatim to maintain accuracy of responses. Transcription allowed for detailed analysis and the identification of themes and patterns across interviews. Confidentiality and anonymity was maintained by anonymising each transcript and assigning it a reference code.

### Theoretical foundations and implementation of Thematic Analysis

We used Thematic Analysis to interpret the data. It provides a systematic yet flexible approach to analysing interview material, enabling researchers to uncover rich, detailed, and nuanced insights. This method involved reading each transcript several times and applying basic codes to organise the material. The coding process identified key themes, which were then used to construct an interpretive narrative that reflected the participants' perspectives.

Thematic Analysis is rooted in qualitative research paradigms, particularly *constructivism* (the idea that knowledge and meaning are constructed through interactions and experiences within social contexts) and *interpretivism* (the idea that individuals assign subjective meanings to the world and experience it subjectively), emphasising the complexities of human experience and subjective interpretation. The method aligns with the view that reality is to some degree socially constructed, and that knowledge is co-created through interactions between researcher and participant. From an epistemological standpoint, the analytic approach avoids an essentialist/realist framework assuming a straightforward relationship between language, meaning, and experience) in favour of a more contextualist perspective (where meaning and experience are embedded within specific social contexts).

From a practical perspective, Thematic Analysis can be applied to a variety of research questions, data, and theoretical frameworks. It allows for a deep, detailed understanding of the data, highlighting the complexities and nuances of participants' experiences. In terms of practical implementation, in line with a more deductive approach (i.e., approaching the interview responses with an interest in certain predefined themes) and less inductive (approaching the interview responses more openly without predefined themes of interest), the thematic analytic framework was based on the following steps, broadly guided by Braun and Clarke's (2006) approach<sup>101</sup>:

— Preparation: Predefined themes and codes:

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<sup>101</sup> Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

- Codebook development: Before analysing the data, we developed a codebook that included predefined themes and codes based on our research questions as the theoretical framework.
- Define codes: We then clearly defined each code in the codebook to ensure consistency in coding.
- Data familiarisation:
  - Initial Reading: We read through each transcript to get an overall sense of the material, noting any immediate thoughts or additional codes that might emerge naturally.
- Applying Predefined Codes:
  - Systematic coding: We then went through each transcript systematically, applying the predefined codes to relevant segments of text, using the codebook to guide this process.
  - Additional codes: We were also open to adding new codes if material did not fit into the predefined codes/themes but were relevant to the research questions.
- Review and Refine Codes:
  - Checking consistency: Next, the application of codes was reviewed to ensure they were used consistently across the dataset. Definitions were adjusted if necessary.
  - Merge codes: Similar codes were combined if they overlapped significantly.
- Theme Development:
  - Grouping codes into themes: Codes were organised into broader themes. As we started with predefined themes, the main purpose of this step was checking how well the data fitted into these themes.
  - Sub-themes: Any identified sub-themes were integrated within the main themes if the material showed more nuanced patterns.
- Theme Review:
  - Internal homogeneity and external heterogeneity: The material was checked to ensure that there was meaningful coherence within each theme while maintaining clear distinctions between themes.
- Define and Name Themes:
  - Refine theme definitions: Themes were reviewed to clearly define what each theme captured and naming themes to reflect meanings.
  - Selection of illustrative quotes: Illustrative quotes were selected for each theme to provide evidence.
- Writing up:
  - Narrative description: A detailed narrative explaining each theme, supported by quotes from the data was then developed (see next section).
  - Interpretation: Finally, we considered how the themes answer the research questions and the implications of the findings.

## 5.8 - Description of survey sample sub-groups (for between-group analysis)

This appendix presents the sub-groups used in the between-group analyses presented in Sections 3.2-3.8 and Appendices 5.9-5.12. The between-group statistical tests used were: independent-samples t-test, Mann-Whitney U test, and Fisher's exact test.

### Level of Hub engagement:

- **Volunteer status:** Hub staff or volunteer (n=47) or non-volunteer (n=105).
- **Duration using the Hub:** Longer term Hub user (i.e., joined the Hub before March 2024; n=115) or new Hub user (i.e., joined the Hub in March, April, or May 2024, and so would have 1-3 months' experience of using the Hub when this study was conducted; n=37).
- **Frequency of Hub visits:** Frequent Hub user (i.e., visit the Hub at least once a fortnight; n=40) or less frequent Hub user (i.e., visit the Hub less than once a fortnight=97). 15 participants had not visited the Hub when Survey 1 was conducted.

### Sociodemographic characteristics:

- **Older age:** Older Hub users (i.e., aged 55 or over; n=45) or young(er) Hub users (i.e., aged 54 or younger; n=104). 3 participants did not answer the question on age.
- **Younger age:** Younger Hub users (i.e., aged 34 or younger; n=22) or older(er) Hub user (i.e., aged 35 or older; n=127). 3 participants did not answer the question on age.
- **Gender:** Female (n=117) or Male (n=33). The sample sizes of non-binary or other gender participants (n=2) were too small to conduct between-group analysis.
- **Household composition:** Have children (under the age of 18) living at home (n=83) or does not have children (under the age of 18) living at home (n=69).
- **Health status:** Have a long-term health condition (n=17) or does not have long-term health condition (n=131). 4 participants did not answer the question on health condition.
- **Low income:** Hub user in a low-income households (i.e., a combined annual household income, before tax deductions, of £25,999 or less; n=18) or Hub user in a higher income household (i.e., a combined annual household income, before tax deductions, of £26,000 or more; n=105). 29 participants did not answer the question on household income.
- **High income:** Hub user in a high-income household (i.e., a combined annual household income, before tax deductions, of £64,000 or more; n=58) or Hub user in a lower income household (i.e., a combined annual household income, before tax deductions, of £63,999 or less; n=65). 29 participants did not answer the question on household income.
- **Education level:** Has an undergraduate or postgraduate degree (n=117) or does not have an undergraduate or postgraduate degree (n=32). 3 participants did not answer the question on education level.

## Diet

- **Diet:** Vegetarian or vegan (n=11) or carnivore (n=137). 4 participants did not answer the question on frequency of meat-free days.

## Excluded

- **Employment status:** excluded because the employment categories are not mutually exclusive.
- **Level of climate concern:** excluded because most Hub users have high climate concern and so the sample size of those with low climate concern was too small to conduct between-group analysis.

## 5.9 - Variation in Hub users' attendance at Greener and Cleaner workshops

Following on from Section 3.2.3, this appendix presents statistically significant differences in the survey sample sub-groups' attendance at Greener and Cleaner workshops.

### Summary

In terms of the level of engagement with the Hub, a larger proportion of Hub volunteers, frequent Hub users and longer term Hub users attend all of the workshops, except the climate café where no statistically significant differences were identified. A larger proportion of women have attended the mending clinic, knitting and crochet, and family craft workshops. A smaller proportion of younger Hub users have attended the family craft workshop and Christmas Fair. Unsurprisingly, a larger proportion of Hub users with children have attended the family craft workshop.

### Knitting and crochet

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (34.0%) than non-volunteers (15.2%) have attended the knitting and crochet workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .009$

#### Frequent or infrequent Hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 55.0%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 9.3%) have attended the knitting and crochet workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### New or longer term Hub users

A larger proportion of longer term Hub users (i.e., joined the Hub prior to March 2024; 26.1%) than new users (i.e., joined the Hub in March, April, or May 2024; 5.4%) have attended the knitting and crochet workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .004$

#### Gender

A larger proportion of women (23.9%) than men (6.1%) have attended the knitting and crochet workshop (%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .016$

#### Hub users in low-income households

A larger proportion of Hub users in low-income households (i.e., a combined annual household income, before tax deductions, of £25,999 or less; 44.4%) than Hub users in higher income households (i.e., a combined annual household income, before tax deductions, of £26,000 or more; 16.2%) have attended the knitting and crochet workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .011$

#### Mending clinic

##### Volunteers or non-volunteers

A larger proportion of Hub volunteers (38.3%) than non-volunteers (16.2%) have attended the mending clinic. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .003$

##### Frequent or infrequent hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 40.0%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 19.6%) have attended the mending clinic. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .013$

##### New or longer term Hub users

A larger proportion of longer term Hub users (i.e., joined the Hub prior to March 2024; 29.6%) than new users (i.e., joined the Hub in March, April, or May 2024; 2.7%) have attended the mending clinic. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

##### Gender

A larger proportion of women (28.2%) than men (3.0%) have attended the mending clinic. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Family craft workshop

##### Volunteers or non-volunteers

A larger proportion of Hub volunteers (31.9%) than non-volunteers (15.2%) have attended the family craft workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .018$



#### Frequent or infrequent hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 37.5%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 16.5%) have attended the family craft workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .008$

#### New or longer term Hub users

A larger proportion of longer term Hub users (i.e., joined the Hub prior to March 2024; 24.3%) than new users (i.e., joined the Hub in March, April, or May 2024; 8.1%) have attended the family craft workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .023$

#### Gender

A larger proportion of women (24.8%) than men (6.1%) have attended the family craft workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .012$

#### Hub users with children living at home

A larger proportion of Hub users with children (under the age of 18) living at home (30.1%) than Hub users without children living at home (8.7%) have attended the family craft workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Hub users aged 34 or younger

A lower proportion of Hub users aged 34 or younger (4.5%) than Hub users aged 35 or older (23.6%) have attended the family craft workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .030$

#### Swapping and discussion of green options

##### Volunteers vs non-volunteers

A larger proportion of Hub volunteers (21.3%) than non-volunteers (6.7%) have attended the swapping and discussion of green options workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .011$

#### Climate café

There were no statistically significant differences between sub-groups of the sample (in some cases due 'low expected cell count').

### Carbon literacy

A larger proportion of Hub volunteers (34.0%) than non-volunteers (2.9%) have attended the carbon literacy workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

### Frequent or infrequent Hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 32.5%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 6.2%) have attended the carbon literacy workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

### Clothes swap

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (38.3%) than non-volunteers (4.8%) have attended the clothes swap workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Frequent or infrequent Hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 35.0%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 9.3%) have attended the clothes swap workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### New or longer term Hub users

A larger proportion of longer term Hub users (i.e., joined the Hub prior to March 2024; 19.1%) than new users (i.e., joined the Hub in March, April, or May 2024; 2.7%) have attended the clothes swap workshop. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .009$

### Christmas fair

#### Volunteers vs non-volunteers

A larger proportion of Hub volunteers (57.4%) than non-volunteers have attended the Christmas Fair (16.2%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Frequent or infrequent Hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 47.5%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 25.8%) have attended the Christmas Fair. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .012$

#### New or longer term Hub users

A larger proportion of longer term Hub users (i.e., joined the Hub prior to March 2024; 35.7%) than new users (i.e., joined the Hub in March, April, or May 2024; 8.1%) have attended the Christmas Fair. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Gender

A larger proportion of women (33.3%) than men (15.2%) have attended the Christmas Fair. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .031$

#### Hub users aged 34 or younger

A smaller proportion of people aged 34 or younger (6.5%) than Hub users aged 35 or older (33.1%) have attended the Christmas Fair. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .016$

#### Other Greener and Cleaner workshops

There were insufficient sample sizes to conduct between-group statistical analysis for the other Greener and Cleaner workshops.

## 5.10 - Variation in Hub users' use of Greener and Cleaner online resources

Following on from Section 3.2.3, this appendix presents additional statistically significant findings on the use of Greener and Cleaner online resources.

### Use of the Greener and Cleaner website

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (80.9%) have used the Greener and Cleaner website than non-volunteers (42.9%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Frequent or infrequent Hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 77.5%) have used the Greener and Cleaner website than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 52.6%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .005$

#### Hub users in high-income households

A smaller proportion of Hub users in high-income households (i.e., a combined annual household income, before tax deductions, of £64,000 or more; 44.8%) have used the Greener and Cleaner website than Hub users in lower income households (i.e., a combined annual household income, before tax deductions, of £63,999 or less; 66.2%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .014$

### Use of the Greener and Cleaner Facebook group

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (78.7%) have used the Greener and Cleaner Facebook group than non-volunteers (49.5%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Gender

A larger proportion of women (66.7%) have used the Greener and Cleaner Facebook group than men (33.3%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Hub users with children living at home

A larger proportion of Hub users with children (under the age of 18) living at home (67.6%) have used the Greener and Cleaner Facebook group than Hub users without children living at

home (47.8%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .011$

#### New or longer term Hub user

A larger proportion of longer term Hub users (i.e., joined the Hub prior to March 2024; 65.2%) have used the Greener and Cleaner Facebook group than new Hub users (i.e., joined the Hub in March, April, or May 2024; 37.8%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .003$

#### Hub users aged 55 or older

A smaller proportion of Hub users aged 55 or older (42.2%) have used the Greener and Cleaner Facebook group than Hub users aged 54 or younger (67.3%). A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .004$

#### Use of the Greener and Cleaner Instagram platform

There were no statistically significant differences between any of the sub-groups of the survey sample for their use of the Greener and Cleaner Instagram platform.

#### Use of other Greener and Cleaner online platforms

The sample sizes for the remaining Greener and Cleaner platforms were too small to conduct between-group statistical analysis.

## 5.11 - Variation in Hub users' motivations for engaging with Greener and Cleaner

Following on from Section 3.2.4, this appendix presents additional statistically significant findings on Hub users' motivations for engaging with Greener and Cleaner.

### Summary

Hub volunteers reported stronger motivation than non-volunteers for 'concern about the environment', 'involvement in local community action' and the 'opportunity to make social connections'. 'Making social connections' and 'improving health and wellbeing' is especially important for frequent Hub users and those in low-income households. The 'variety of workshops' and the 'opportunity to learn new skills' are strong motivations for frequent Hub users and women.

### Concern about the environment and/or biodiversity loss

Volunteers or non-volunteers

A Mann-Whitney U test revealed 'concern about the environment and/or biodiversity loss' was a statistically significantly stronger motivation for Hub volunteers (mean rank = 88.90) than for non-volunteers (mean rank = 70.17) for engaging with Greener and Cleaner,  $U = 1837.500$ ,  $z = -2.640$ ,  $p = .008$ . The median response for Hub volunteers = extremely motivated, whereas the median response for non-volunteers = very motivated.

### To learn how to reduce my carbon footprint

There were no statistically significant differences in motivation for 'learn how to reduce my carbon footprint' between the sub-groups of the survey sample.

### To improve personal health and wellbeing

Frequent or infrequent Hub users

A Mann-Whitney U test revealed 'to improve personal health and wellbeing' was a statistically significantly stronger motivation for frequent Hub users (i.e., visit the Hub at least once a fortnight; mean rank = 85.36) than for infrequent Hub users (i.e., visit the Hub less than once a fortnight; mean rank = 61.72) for engaging with Greener and Cleaner,  $U = 1234.000$ ,  $z = -3.271$ ,  $p = .001$ . The median response for frequent Hub users = very motivated, whereas the median response for infrequent Hub users = moderately motivated.

Hub users in low-income households

A Mann-Whitney U test revealed 'to improve personal health and wellbeing' was a statistically significantly stronger motivation for Hub users in low-income households (i.e., a combined household income, before tax deductions, of £25,999 or less; mean rank = 83.22) than for Hub

users in higher income households (i.e., a combined household income, before tax deductions, of £26,000 or more; mean rank = 58.36) for engaging with Greener and Cleaner,  $U = 563.000$ ,  $z = -2.827$ ,  $p = .005$ . The median response for Hub users in low-income households = very motivated, whereas the median response for Hub users in higher income households = moderately motivated.

#### The variety of programmes offered, or a specific workshop of interest

Frequent or infrequent Hub users

A Mann-Whitney U test revealed 'the variety of programmes offered, or a specific workshop of interest' was a statistically significantly stronger motivation for frequent Hub users (i.e., visit the Hub at least once a fortnight; mean rank = 79.44) than for infrequent Hub users (i.e., visit the Hub less than once a fortnight; mean rank = 64.70) for engaging with Greener and Cleaner,  $U = 1522.500$ ,  $z = -2.100$ ,  $p = .036$ . The median response for frequent and infrequent Hub users = very motivated.

Gender

A Mann-Whitney U test revealed 'the variety of programmes offered, or a specific workshop of interest' was a statistically significantly stronger motivation for women (mean rank = 79.15) than for men (mean rank = 62.55) for engaging with Greener and Cleaner,  $U = 1503.000$ ,  $z = -2.054$ ,  $p = .040$ . The median response for women = very motivated, whereas the median response for men = moderately motivated.

#### To learn new skills (e.g., mending things)

Frequent or infrequent Hub users

A Mann-Whitney U test revealed 'to learn new skills (e.g., mending things)' was a statistically significantly stronger motivation for frequent Hub users (i.e., visit the Hub at least once a fortnight; mean rank = 85.03) than for infrequent Hub users (i.e., visit the Hub less than once a fortnight; mean rank = 61.86) for engaging with Greener and Cleaner,  $U = 1247.000$ ,  $z = -3.265$ ,  $p = .001$ . The median response for frequent and infrequent Hub users = very motivated.

Gender

A Mann-Whitney U test revealed 'to learn new skills (e.g., mending things)' was a statistically significantly stronger motivation for women (mean rank = 80.91) than for men (mean rank = 54.23) for engaging with Greener and Cleaner,  $U = 1228.500$ ,  $z = -3.308$ ,  $p = .001$ . The median response for women = very motivated, whereas the median response for men = moderately motivated.

### To be involved in local community action

#### Volunteers or non-volunteers

A Mann-Whitney U test revealed 'to be involved in local community action' was a statistically significantly stronger motivation for Hub volunteers (mean rank = 99.17) than non-volunteers (mean rank = 64.70) for engaging with Greener and Cleaner,  $U = 1308.000$ ,  $z = -4.748$ ,  $p = .001$ . The median response for Hub volunteers and non-volunteers = very motivated.

#### Frequent or infrequent Hub users

A Mann-Whitney U test revealed 'to be involved in local community action' was a statistically significantly stronger motivation for frequent Hub users (i.e., visit the Hub at least once a fortnight; mean rank = 79.88) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; mean rank = 63.17) for engaging with Greener and Cleaner,  $U = 1480.500$ ,  $z = -2.373$ ,  $p = .018$ . The median response for frequent and infrequent Hub users = very motivated.

### Curiosity about the organisation

#### Education level

A Mann-Whitney U test revealed 'curiosity about the organisation' was a statistically significantly stronger motivation for Hub users without an undergraduate or postgraduate degree (mean rank = 87.92) than Hub users with a degree (mean rank = 70.28) for engaging with Greener and Cleaner,  $U = 2229.500$ ,  $z = 2.141$ ,  $p = .032$ . The median response for Hub users without an undergraduate or postgraduate degree = very motivated, whereas the median response for those with a degree = moderately motivated.

### To meet people and make social connections

#### Volunteers or non-volunteers

A Mann-Whitney U test revealed 'to meet people and make social connections' was a statistically significantly stronger motivation for Hub volunteers (mean rank = 87.93) than non-volunteers (mean rank = 71.39) for engaging with Greener and Cleaner,  $U = 1930.500$ ,  $z = -2.210$ ,  $p = .027$ . The median response for Hub volunteers = very motivated, whereas the median response for non-volunteers = moderately motivated.

#### Frequent or infrequent Hub users

A Mann-Whitney U test revealed 'to meet people and make social connections' was a statistically significantly stronger motivation for frequent Hub users (i.e., visit the Hub at least once a fortnight; mean rank = 85.85) than for infrequent Hub users (i.e., visit the Hub less than once a fortnight; mean rank = 62.05) for engaging with Greener and Cleaner,  $U = 1266.000$ ,  $z =$



-3.294,  $p = .001$ . The median response for frequent Hub users = very motivated, whereas the median response for infrequent Hub users = moderately motivated.

#### Hub users in low-income households

A Mann-Whitney U test revealed 'to meet people and make social connections' was a statistically significantly stronger motivation for Hub users in low-income households (i.e., a combined household income, before tax deductions, of £25,999 or less; mean rank = 80.58) than Hub users in higher income households (i.e., a combined household income, before tax deductions, of £26,000 or more; mean rank = 58.81) for engaging with Greener and Cleaner,  $U = 610.500$ ,  $z = -2.471$ ,  $p = .013$ . The median response for Hub users in low-income households = very motivated, whereas the median response for Hub users in higher income households = moderately motivated.

#### Recommendation(s) from friends, family or colleagues

##### Volunteers or non-volunteers

A Mann-Whitney U test revealed 'recommendation(s) from friends, family or colleagues' was a statistically significantly stronger motivation for non-volunteers (mean rank = 80.80) than Hub volunteers (mean rank = 63.89) for engaging with Greener and Cleaner,  $U = 2966.000$ ,  $z = 2.282$ ,  $p = .023$ . The median response for Hub volunteers and no-volunteers = moderately motivated.

##### Education level

A Mann-Whitney U test revealed 'recommendation(s) from friends, family or colleagues' was a statistically significantly stronger motivation for Hub users without an undergraduate or postgraduate degree (mean rank = 93.19) than Hub users with a degree (mean rank = 68.87) for engaging with Greener and Cleaner,  $U = 2392.000$ ,  $z = 2.918$ ,  $p = .004$ . The median response Hub users without a degree = very motivated, whereas the median response for Hub users with a degree = moderately motivated.

#### To use the Library of Things

##### Health condition

A Mann-Whitney U test revealed 'to use the Library of Things' was a statistically significantly stronger motivation for Hub users without a long-term health condition (mean rank = 76.95) than Hub users with a long-term health condition (mean rank = 45.50) for engaging with Greener and Cleaner,  $U = 1488.000$ ,  $z = 2.889$ ,  $p = .004$ . The median response for Hub users without a long-term health condition = very motivated, whereas the median response for Hub users with a long-term health condition = slightly motivated.

## 5.12 - Variation in Hub users' adoption of green practices

Following on from Section 3.4, this appendix presents statistically significant differences in the sub-groups' adoption of green practices since engaging with Greener and Cleaner.

### Buying less stuff overall

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (78.3%) than non-volunteers (58.7%) buy less stuff overall since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .021$

#### Gender

A larger proportion of women (71.4%) than men (47.6%) buy less stuff overall since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .034$

### Buying second-hand items more frequently

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (78.3%) than non-volunteers (52.0%) buy second hand items more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .003$

#### Frequent or infrequent Hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 75.7%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 56.4%) buy second hand items more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .035$

#### Gender

A larger proportion of women (66.3%) than men (42.9%) buy second hand items more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .040$

#### Education level

A larger proportion of Hub users without an undergraduate or postgraduate degree (88.3%) than those with a degree (57.4%) buy second hand items more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .015$

### Mending/repairing items, where possible

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (73.9%) than non-volunteers (57.3%) mend/repair items where possible since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .049$

#### Gender

A larger proportion of women (70.4%) than men (33.3%) mend/repair items where possible since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .002$

### Buying items that are more sustainable

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (60.9%) than non-volunteers (42.7%) buy items that are more sustainable since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .039$

### Recycling more consistently

#### Education level

A larger proportion of Hub users without an undergraduate or postgraduate degree (75.0%) than those with a degree (42.6%) recycle more consistently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .004$

### Reducing energy consumption in your home

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (58.7%) than non-volunteers (38.7%) reduce energy consumption in their home since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .025$

#### Frequent or infrequent hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 64.9%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 39.7%) reduce energy consumption in their home since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .010$

### Education level

A larger proportion of Hub users without an undergraduate or postgraduate degree (62.5%) than those with a degree (40.4%) reduce energy consumption in their home since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .044$

### Reducing water usage in your home or garden

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (43.5%) than non-volunteers (24.0%) reduce water consumption in their home or garden since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .021$

#### Frequent or infrequent Hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 48.5%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 25.6%) reduce water consumption in their home or garden since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .013$

#### Hub users in high-income households

A smaller proportion of Hub users in high-income households (i.e., a combined annual household income, before tax deductions, of £64,000 or more; 14.3%) than Hub users in lower income households (i.e., a combined annual household income, before tax deductions, of £63,999 or less; 46.0%) reduce water consumption in their home or garden since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

### Using public transport more frequently

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (60.9%) than non-volunteers (30.7%) use public transport more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Hub users in low-income households

A larger proportion of Hub users in low-income households (i.e., a combined annual household income, before tax deductions, of £25,999 or less; 76.9%) than Hub users in higher income households (i.e., a combined annual household income, before tax deductions, of £26,000 or

more; 38.4%) use public transport more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .010$

### Using active travel more frequently

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (56.5%) than non-volunteers (22.7%) use active travel more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .001$

#### Frequent hub users or infrequent hub users

A larger proportion of frequent Hub users (i.e., visit the Hub at least once a fortnight; 51.4%) than infrequent Hub users (i.e., visit the Hub less than once a fortnight; 29.2%) active travel more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .028$

#### Education level

A larger proportion of Hub users without an undergraduate or postgraduate degree (54.2%) than those with a degree (30.9%) use active travel more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .031$

#### Hub users in high-income households

A smaller proportion of Hub users in high-income households (i.e., a combined annual household income, before tax deductions, of £64,000 or more; 26.5%) than Hub users in lower income households (i.e., a combined annual household income, before tax deductions, of £63,999 or less; 46.0%) use active travel more frequently since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .035$

### Reducing meat consumption

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (47.8%) than non-volunteers (30.7%) reduce meat consumption since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .045$

### Reducing food waste

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (56.5%) than non-volunteers (36.0%) reduce food waste since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .022$

### Advocating for environmental issues

#### Volunteers or non-volunteers

A larger proportion of Hub volunteers (56.5%) than non-volunteers (32.0%) advocate for environmental issues since engaging with Greener and Cleaner. A Fisher's exact test revealed this difference in proportions is statistically significant,  $p = .007$

### 5.13 - Additional feedback on Greener and Cleaner workshops

This appendix presents additional feedback from Survey 2 (n=27) and the interviews (n=20). There is some overlap with themes presented in previous sections of this report, which is why these findings are presented here, rather than in the main text.

Table 33 indicates which workshops were attended by Survey 2 participants during the study period.<sup>102</sup>

*Table 33, Greener and Cleaner workshops attended by participants, May – June 2024 (survey)*

Workshop	Frequency (n=27)	Valid %
Mending clinic	9	33.3
Other workshop/event (please specify)	9	33.3
Knitting and crochet	8	29.6
Family craft workshop	7	25.9
Swapping and discussion of green options	6	22.2
Clothes swap	5	18.5
Climate café	4	14.8
People planet pastry	2	7.4
Book club	2	7.4
Community garden	1	3.7
Carbon literacy	0	0.0
Climate Fresk	0	0.0

Survey participants were asked which aspects of the workshops or activities they found particularly valuable; the facilitators' knowledge and expertise was the highest ranked aspect (Figure 27).

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<sup>102</sup> Figure 6 (see section 3.2.3) provides a clearer indication of which workshops and events the Hub users have attended previously (i.e., not only during May – June 2024, but at any time), with a larger sample size (n=152).

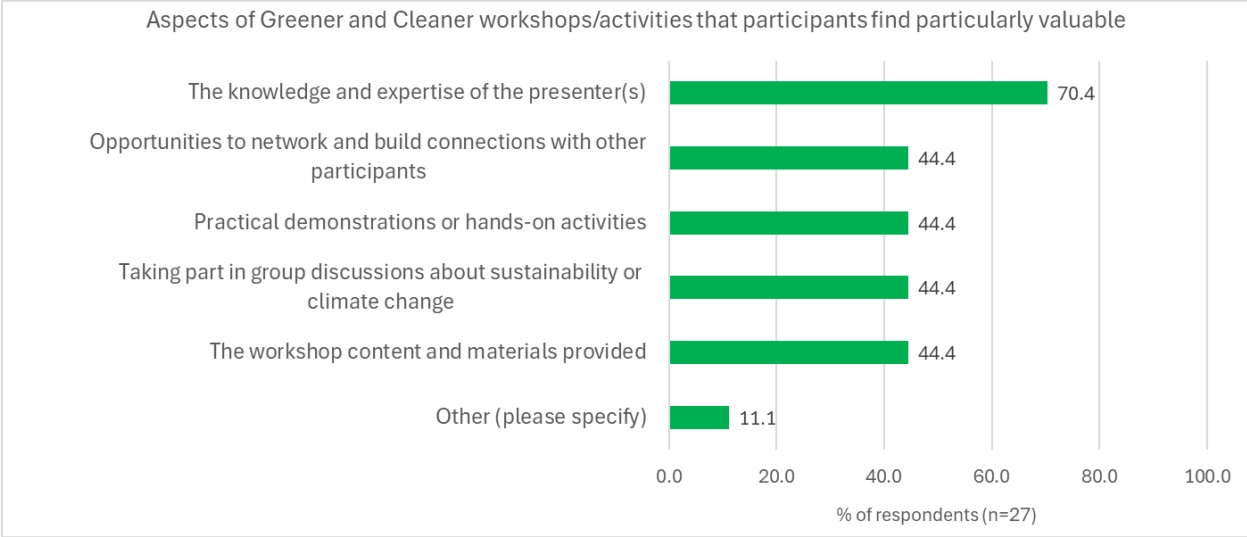


Figure 27, Aspects of Greener and Cleaner workshops that the participants found most valuable (survey)

Interview participants were asked if there were any aspects of Hub workshops and events that had been especially impactful (Table 34).

Table 34, Aspects of Hub workshops and events that were especially impactful (interviews)

Impactful aspects of Hub workshops	Frequency
Conversations with others (non-specific)	2
Repurposing old clothing (T-shirt Painting, Mending Clinic)	2
Emotionally moved (One Man Play by Paul Reddy)	2
Staff/Volunteer speakers	2
Passing on old clothing (Clothes Swap)	1
Engaging with others (non-specific)	1
Inspired to do at home (T-shirt Painting)	1
Awareness of impact of paper use (Gift Bag Making)	1
Acceptance of sustainable behaviour change by others (Gift Bag Making)	1
Motivated use of active transport	1
Skill of fabric gift wrapper (Christmas Fair)	1
Rediscovered old craft skills (Bunting Workshop)	1
Encouraged by public interest in the Hub (Christmas Fair)	1
Inspiring ideas for wedding planning (Green Wedding Fair)	1
Seeing workshop participants 'get it'	1
Great event planning (Summer Fair)	1



Impactful aspects of Hub workshops	Frequency
Clear explanation by facilitator (Clothing Repair Workshop)	1
Hub display of upcycled clothing/bags (Clothing Repair Workshop)	1
Verbal prompts highlighting events	1
Learning facts and figures (Carbon Literacy)	1
Provision of information	1
Increased awareness of waste (Gift Bag Workshop)	1
Gratified by interest in heritage skills	1
Realising I could do it (Knitting & Crochet Workshop)	1
Watching daughter use a sewing machine (Knitting & Crochet Workshop)	1

Survey participants were asked 'To what extent have you been able to apply what you learned in the workshop/activity/event(s) in your daily life?' (Figure 28).

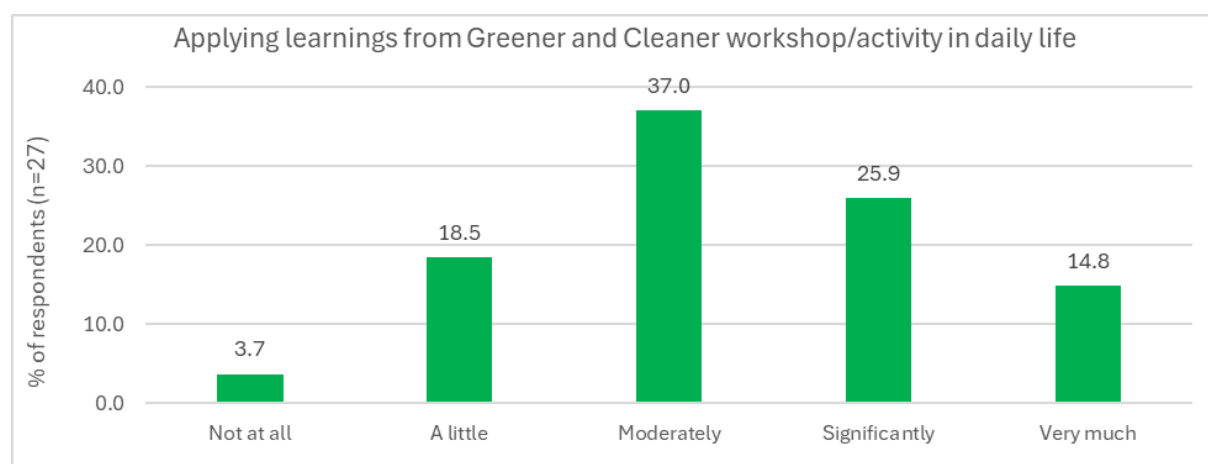


Figure 28, Applying learnings from Greener and Cleaner workshop(s) in daily life (survey)

Survey participants were asked 'To what extent did attending the workshop/activity/event(s) contribute to your understanding of environmental issues?' (Figure 29).

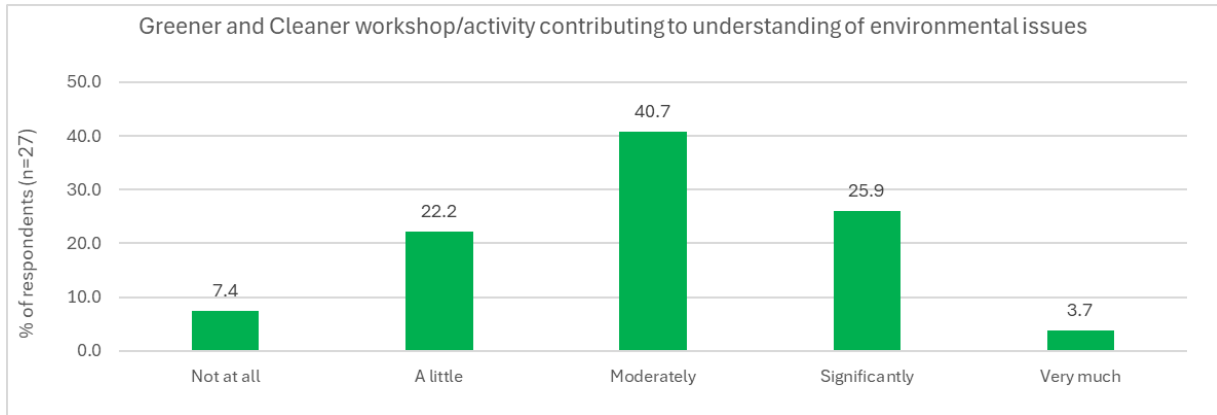


Figure 29, Contribution of Greener and Cleaner workshop(s) to understanding of environmental issues (survey)

Survey participants were asked 'Which of the following green practices have you adopted since attending the workshop/activity/event(s)?' (Figure 30).

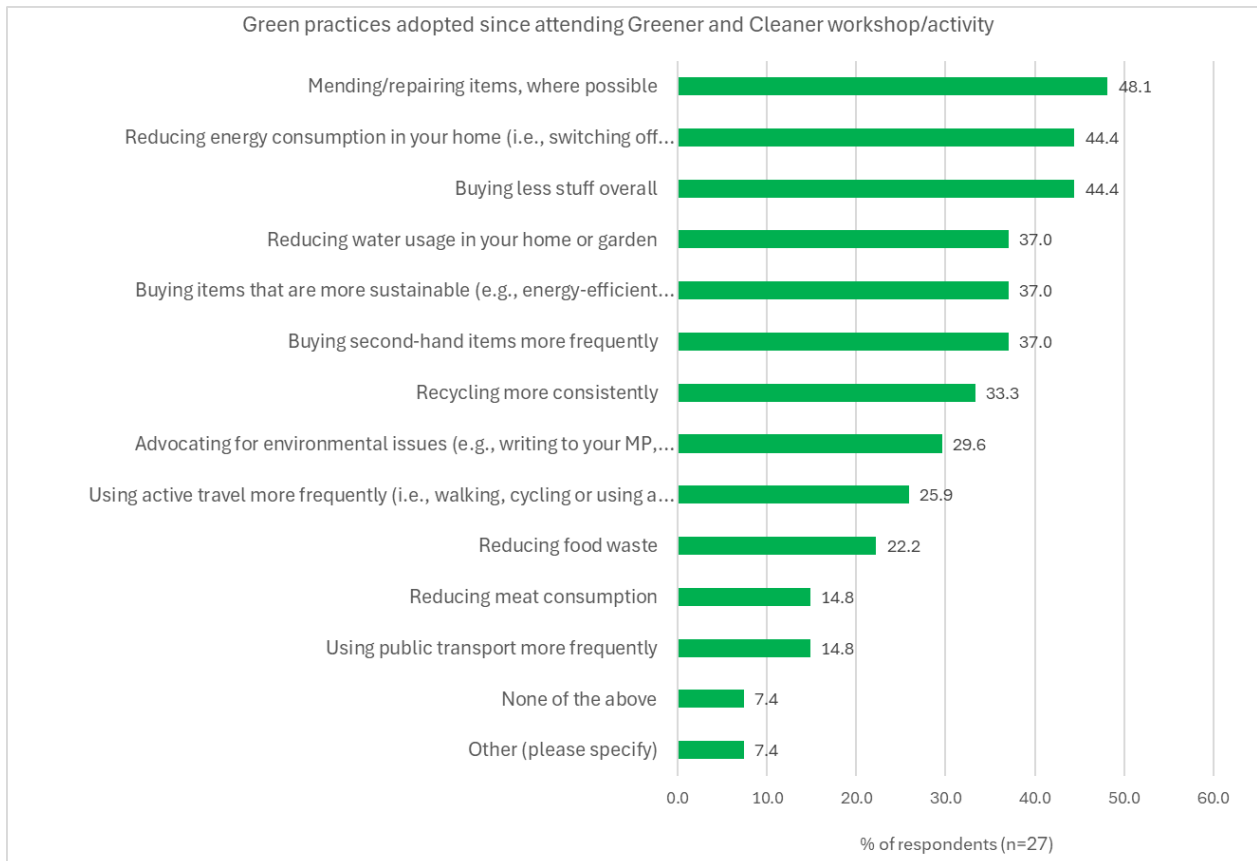


Figure 30, Green practices adopted since attending Greener and Cleaner workshop(s) (survey)

Survey participants were asked 'How motivated do you feel to engage in green behaviours since attending the workshop/activity/event(s)?' (Figure 31).

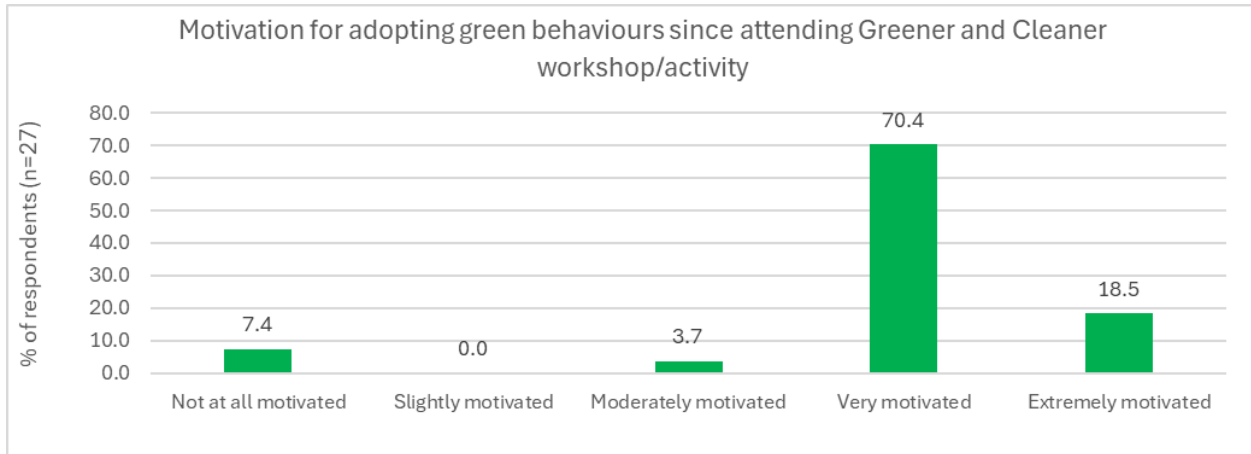


Figure 31, Motivation for adopting green behaviours since attending Greener and Cleaner workshop(s) (survey)

Survey participants were asked 'How often do you discuss sustainability or green behaviours with friends, family, or colleagues since attending the workshop/activity/event(s)?' (Figure 32).

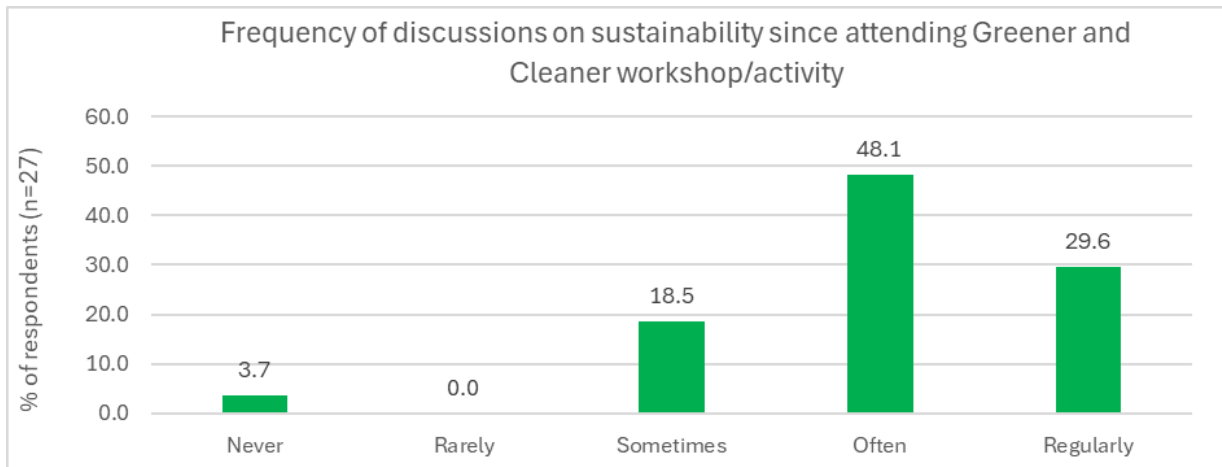


Figure 32, Frequency of discussions on sustainability since attended Greener and Cleaner workshop(s) (survey)

Survey participants were asked 'What barriers, if any, have you faced in trying to adopt more green behaviours since attending the workshop/activity/event(s)?' (Figure 33).

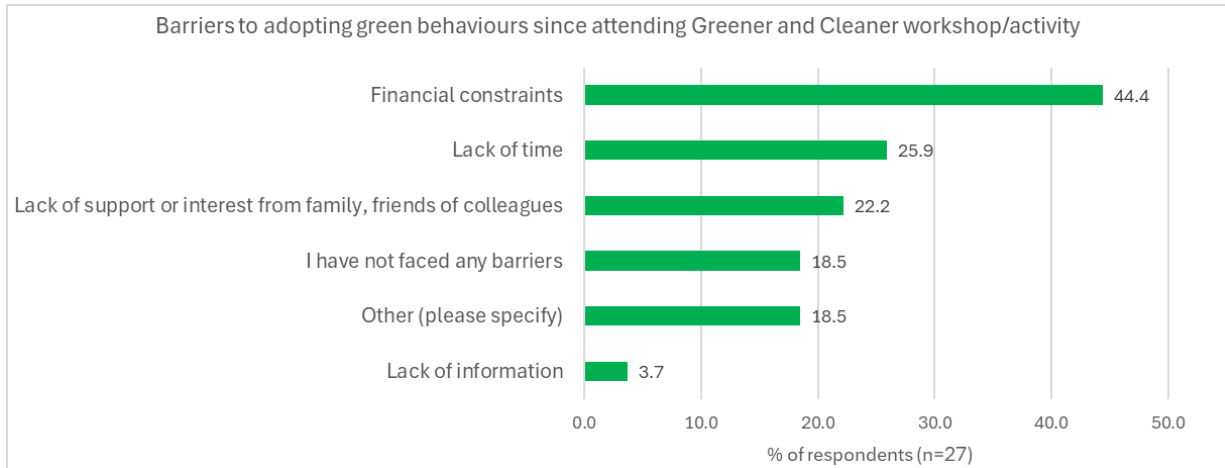


Figure 33, Barriers to adopting green behaviours since attending Greener and Cleaner workshop(s) (survey)

Survey participants were asked 'What additional support or resources would help you to continue applying what you learned in the workshop/activity/event(s)?' (Figure 34).

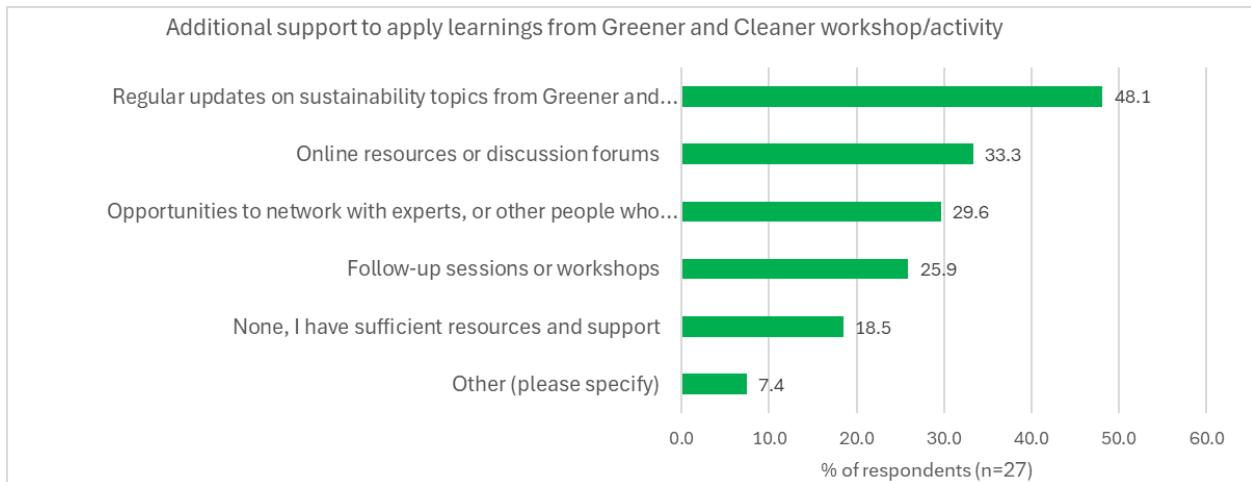


Figure 34, Additional support to apply learnings from Greener and Cleaner workshop(s) (survey)

#### 5.14 - Survey open feedback (qualitative)

In Survey 1 & 2, participants were asked, 'Is there anything else you would like to say about your experience of using the Greener and Cleaner Hub or attending the workshops?'. In total, 92 participants provided qualitative feedback. Their responses were anonymised and aggregated from the two surveys.

ID	Open feedback
1	It's a beautiful and inspiring space with caring volunteers. I am looking forward to returning. Really hope it continues and as many community members benefit from it as possible. A great community space which I hope remains open for a very long time. Thanks.
3	I was a bit nervous about attending the workshop the first time. But everyone was so welcoming, kind and inclusive. Such a wonderful bunch of people doing amazing things!
4	The Greener & Cleaner Hub is a tremendous resource for our community!
5	It's an amazing way to spread the word about sustainability
6	Really impressed with the concept, set up and facilities/workshops on offer. Would definitely participate if I lived in the area and will take some great ideas back to my community in Derbyshire. Thank you for the inspiration!
7	Great initiative, brings life back into the shopping centre. Always looks interesting, I just haven't got round to attending anything yet as I have a young child
8	It was absolutely amazing and the staff were extremely helpful and friendly you could also use your own creativity to its full extent
9	The workshops are great - I wish more of the craft groups were out of working hours but I appreciate this is down to volunteer availability.
10	It's had a huge impact on my personal life . As I have a voice problem it's helped me overcome it thank you Hub !!
11	All volunteers are very friendly and helpful. Really appreciate their effort
12	I had such great experience every time I visited! I wish they had more weekend activities. I would really love to participate to more mending/knitting/ crochet workshop but they don't work with my office schedule
13	I volunteered at the clothes swapping event and this was an amazing experience. I already gave qualitative feedback about that.
14	It is a really valuable resource. I used to attend very often when they had heavily subsidised workshops. The repair hub is very good. They need help getting the message out that they are there, I often tell people about the Hub and they are surprised, they

	<p>didn't know it existed. Marketing in slightly more varied ways is critical I think. I am very grateful for the Hub. It's a wonderful resource in Bromley who do not offer much in comparison to other boroughs, east and south like GCDA. Having the Hub as a local resource is wonderful cutting down on travel time etc.</p>
15	<p>The staff and volunteers are very polite and knowledgeable. I love going to the hub. The staff are friendly and knowledgeable.</p>
17	<p>It's a great place to meet people and find friends with similar concerns- learning from each other and working together to make our community and planet a healthier and happier place .</p>
19	<p>The Greener and Cleaner hub is a welcoming space for all. I love that it signposts other great community groups in the area too and welcomes school and scouts groups.</p>
20	<p>Great community. Local treasure. Very informative and useful. I enjoy volunteering at their community fairs and love the idea of the clothes swap to reduce clothing wastage. Most of my clothing purchases come from charity shops as well.</p>
23	<p>It's a really lovely space that brings a community feel to the top of the glades (instead of an empty shop front). The way the front opens up is really inviting. I would say if you don't know about it and don't like talking to strangers it can be a little intimidating. I'd recommend having more obvious craft/ second hand browsing/selling area so people have something they can do and look at as a first entry point in. Or maybe a video playing somewhere - just something people can engage with which isn't someone asking them if they need help immediately. Obviously some people do want to talk though so it's a balancing act.</p> <p>Q8.1 (roles) I do all of the above but have done that since before greener &amp; cleaner. I think the charity is great at keeping people motivated / re-engaging people and definitely at helping people who haven't done this stuff before to start. Again, all of the above really but I've done this since before greener &amp; cleaner. The helpful thing about greener &amp; cleaner is that it helps us engage with others locally than previously.</p>
24	<p>I think the online info is helpful in absorbing info and sharing with others such as my church</p>
26	<p>It's a wonderful thing. We are lucky to have this in our community and I am grateful for it. It had raised my awareness of individual actions I can take, even if small they are not insignificant</p>
27	<p>Feeling part of a community has made me feel more connected, active and passionate. I felt quite gloomy about the lack of interest in green issues in my area when we first</p>

	moved in , but meeting G & B changed that dramatically. Just its existence is an encouragement
29	Brilliant!
30	I love coming to the Hub. It is a brilliant, friendly community resource and a fantastic way of achieving real change on environmental issues. The Hub is an approachable, vibrant meeting place that makes you realise we can do something about climate change.
31	They are a great resource to bring the community together
32	They are always informative, welcoming and friendly.
34	The group and the Hub are hugely valuable to the local community and in raising awareness and providing skills to help address environmental issues.
37	The hub is my safe haven!
40	I consider it one of the most exciting community projects I have experienced. I have worked in the Sustainability Sector for 15 years prior to retirement and engaged with several community groups, including the Transition Towns.
42	Lovely and committed staff and really great workshops
44	I love the library of things and am often recommending it to friends and family. I also love the mend clinics and lots of the initiatives the hub does. It's a great place for the local community. Really useful and I always learn something
45	Variety of workshops is really important with continued focus on environmental issues.
46	Gave a really knowledgeable and practical talk to my guide unit which inspired them to do a litter pick.
48	Volunteers are super helpful and having a community that shares information and normalises those discussions is brilliant. I think it takes time to build engagement and the best years are yet to come!
50	It is very nice community and perfect place for people who wants to make changes, to learn new things, to communicate and make this world better place for us.
51	It would be helpful to have wider context of impact on specific theme/activity on waste, carbon emissions and biodiversity
52	I want to be more aware of issues and the Facebook group is helping that but I haven't started to actively participate in anything
54	Great initiative. Charlotte helped me save 2 pairs of pyjama trousers by showing me how to replace the elastic in the waist. Haven't needed to use the Library of Things yet, but it's good to know that it's there.

55	There is nothing else like the Hub. It gives true hope and positivity to so many in the local community and its growing in stature and awareness all the time in the local Community. My child benefits so much by seeing stuff happening at the hub and participating in workshops and realising and believing that we can all make a difference by changing our behaviours etc. It's really important to us as it makes us more hopeful about the future and that we play a part by consciously reviewing all our behaviours and day to day choices. It's a great journey to be on via the information we gain via the hub and their Facebook group. Plus the people at the Hub as and running it are big role models for our family. Great people in the community.
56	Keep going!
57	If I had more free time I would definitely visit the hub more often, I am only restricted by my schedule.
58	Lovely friendly community! Great advice and very accessible. If only more people knew about what's going on! There's room for improvement to go but that comes with growth. They're heading in the right direction and are doing extremely well for how long it's been going! It would be great if there was a way to advertise them more  Q8.1 I'm currently planning a wedding and I'm trying to make the most green choices feasible
59	Keep up the great work!!
60	They are very good however there seems to be a lack of education on how to reduce animal consumption.
62	They're a great resource to the local community and I want to attend more
64	The party sets Facebook group has been instrumental in reducing waste in terms of single use party plates etc for all of our children's parties- most parents at school use it now and it's so great to be able to borrow this from greener and cleaner
65	The party kit was great, I recommend it
70	As a single mum who works full time I just don't have the time to get into Bromley town centre. I'd love to get involved more but I just haven't had the time.
71	It is essential that a unit like this is present in local shopping centres to highlight planetary health and climate resistance to the community. We need to prepare our communities to what changes are happening and education is essential to help people make informed decisions on choices that will impact all of our futures
72	They are doing an amazing job



73	Passionate Parisa is phenomenal and the work she and the volunteers have done for the community ... We are so very blessed to have this on our community to help, share and educate our community. Thanks ever so much ..!! Lots of Love & Gratitude Baker-Girl x
74	Inspiring people who have positively added to my life :)
78	Q9.4 [Workshops are] Inspirational and thought provoking
80	Parisa and her team have done wonderful work for the local community. They raised money for Valley primary school to have new air purifiers which was amazing. They definitely have had an impact in my household regarding our wastage and purchasing new items.
81	It's amazing what is on offer even though I do not have the time to attend. I am always telling people and making them aware of what is available at Greener & Cleaner Hub.
83	Fantastic local community resource.
84	Friendly people
85	Would benefit from a larger space with perhaps a wider variety of equipment, tools and workshops like carpentry for example
86	I am so pleased to host party sets encouraging residents to loan rather than buying party ware, help avoid waste at community events. Integrating party sets loan would be beneficial it's currently a separate FB group
87	The Hub is great. :) However, it could be good to have some different (less traditional female workshops) workshops than mending fabric. Maybe more about fixing things, link with Penge Shed? Maybe more young events? Links with youth groups?
88	A welcoming environment
89	The Hub is a wonderful place and I love spending time there. I do think the front of the Hub should be more of a hand-made and pre-loved shop with a proper till, so that people feel more comfortable to wander in and browse, and then see the workshop space. I also think there should be a regular craft market in the Hub on the weekends, where we could sell a lot of the things in the back room to make more space. The workshops are wonderful and I attend as many as I am able to - either as a volunteer or participant.
94	This is a passionate and motivated team who just want to get positive messages across to our community and share their knowledge and understanding on how we can all contribute to climate change and improve our day to day actions. They have great marketing techniques and know how to get themselves heard but continually need to raise their awareness and therefore continually need to raise funds to keep the awareness and powerful messages and teachings supported. I Am aware of the workshops through media, however, due to timing or content I have not managed to

	attend. Visibility of the Hub is excellent, however may wish to think about making a presence external to the Glades during the warmer months.
95	Helpful and useful advice on improving our impact on the environment love the Facebook topics and replies when I'm looking for info on improving my own impact and to highlight to less aware people. Great promotion of reuse recycle not buying new and library of things
96	I suppose I feel like it is a niche interest in the Bromley community. There is a lot of inertia in the general population that climate change isn't really happening, or that individuals can't make alterations that make an impact. I don't know how to change people's minds. So I don't engage personally with volunteering or advising at the Hub as I feel like it's fighting a losing battle.
98	I love the friendliness and willingness to share skills/knowledge , I've made great friends and it has such a community feel. I love that preloved /handmade is encouraged and revered
102	It's a wonderful resource to have in our local community. It's a great resource, offering a wide variety of free services and activities. It's also a social hum for users.
106	I love the workshops that the team run. However a lot of the sewing and mending ones I am interested in are in the evening. I have no child care to get put in the evenings. There is nothing for mums in the daytime.
108	Parisa and Conrad were amazing I will bring friends and family next time
112	Fantastic work - thank you for everything you do.
115	The staff and volunteers are very dedicated.
116	They are to be applauded as they meet an obvious need in the community on so many levels. Many thanks.
118	Feel very lucky we have the first sustainable hub here in Bromley. Wish I had more time to use it more often. Luckily we have a hub in Bromley, every town needs one of these
120	It's awesome
122	Thanks for showing excellent leadership and providing inspiration through a wealth of creativity. Keep up the amazing work.
124	I think ground up community sustainability action is incredibly important
125	Fantastic place. It's a very welcoming environment, super high quality. It makes sustainability actionable and concrete.
126	Very impressed with the enthusiasm and commitment of the staff and volunteers that I met.

127	The hub is truly transformational and should serve as a model to be rolled out across communities nationwide - the clear co-benefits touch on so many areas and sectors, almost anyone can find a way in which to get involved.
133	Infectious and irresistible faith hope energy and enthusiasm. An antidote to the cynicism passivity and fatalism of the 21st century
134	The Greener and Cleaner Hub is a huge asset to the community and I am very glad that we have a place like this, given that there are very few community hubs or services that provide this kind of resource, training and support, in Bromley
137	Educate more people to understand about Recycling, food waste, energy saving
138	It's a great asset to Bromley & should get more advertising
139	Well run.
140	The Sustainability Hub by Greener and Cleaner is an amazing platform to understand the impact of climate change at a community level and address the same via behavioural change.
141	I have been vegan for 8 years and I regularly buy clothes in charity shops. I also buy and sell on Vinted. Since attending the crochet workshops at Greener and Cleaner, I have always looked to recycle clothes and mend items, I have been influenced by the passion for change at the hub. In addition I really enjoy the friendly, co-operative atmosphere at the Hub, which is very supportive. It is a wonderful place.
142	I have learnt a lot to in improving my knitting and sewing skills
146	Very interesting space! Would be better if there are more clothes and items swapping activities daily where people can bring things to come in to swap! That will help reduce waste and recycle and create a vibrant community! A free corner for people to donate unwanted items and others to take them to use freely. The hub interior placement is quite messy. You have a big table in the middle where all volunteers are crowded together and chit chatting when people walk pass the shop. It can be quite confusing to know what the shop is about. Then there are white boards with information and racks of overpriced handmade stuff for sale. Things are all over the place and a better decoration would be more pleasing and attractive to passersby. Space is not fully utilised. There could be a parent and child play corner, a swap shop corner, an information and discussion corner, a DIY mending corner, a for sale corner, a rental corner, an event activity corner. With a better flow and decoration, it would definitely improve customer engagement with the hub.
147	very good
148	I am planning to work with you.

151	The staff at the Greener and Cleaner Hub in the Glades Bromley are always courteous and friendly. And very knowledgeable and proactive.
153	I wish more people knew the hub existed. It is such an invaluable community resource. It is clearly a jewel in our local community. Immensely valuable for young people and families.
155	I enjoy attending the hub and passing on and sharing my knowledge on knitting, crocheting and recycling clothing. I would be devastated if Greener and Cleaner hub closed because it has earned me the nickname magic Marge.

### 5.15 - Limitations of the study

Three limitations of this study are acknowledged, and the potential impact on the data is described below.

First, there is a small sample size for the surveys, particularly for Survey 2 (n=59), and this limits the likelihood of producing statistically significant findings in quantitative data analysis. The Hub volunteers were very proactive in their recruitment efforts and so this small sample size is attributed to a) the inclusion criteria of 'active users' of the physical Hub (i.e., have visited the Hub at least once), and b) the high drop-out rate for the second survey (61.2%), which is a common problem when conducting longitudinal studies. The inclusion criterion was intentional as 'active users' are a more relevant respondent group for conducting a study measuring the impacts of Hub engagement (as opposed to people who engage with the Facebook group but not the Hub). The main impact on the data is a very small sample size (n=27) for the questions which evaluated the workshops (see Section 3.8 and Appendix 5.13). This small sample is not considered to have affected the repeated measurement of survey block 5 - whether the programme of Greener and Cleaner workshops run during the study period had made a tangible difference in encouraging green behaviours. This is because the reported differences in pro-environmental behaviours were very small between time Survey 1 and Survey 2.

Second, the survey sample included 15 participants who had never visited the Hub and so would fail the inclusion criteria of being 'active users' (i.e., have visited the Hub at least once). This was due to the survey recruitment channels including Greener and Cleaner mailing lists. There was a trade-off between ensuring a sufficiently large sample size for statistical analysis and accepting the risk of recruiting inactive users. These individuals may have recently joined the Hub but had not yet had an opportunity to visit it. Their willingness to participate in the study would suggest an underlying interest in the Hub's aims and activities. For this reason, and because of the overall small sample size, these participants were retained in the data set.

Third, the composition of the interview participants only partially matched our pre-defined quota. The interview sample did not cover the full range of workshops offered by Greener and Cleaner, due to the unavailability of participants who had attended specific workshops. This is not considered to be a significant limitation, as the interview sample was ultimately diverse in terms of sociodemographic characteristics and included staff/volunteers and non-volunteers (i.e., the other two selection criteria). There is a slight overrepresentation of Hub staff and volunteers (n=11) relative to non-volunteers (n=9). Volunteering at the Hub is a key form of involvement and enables the peer-to-peer learning model, and so this overrepresentation is also not considered to be a significant limitation.