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<th>Section</th>
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</table>
Introduction - What we did
Purpose of this project

Background

Hampshire County Council, along with many other local authorities, has declared a Climate Emergency and is working with its partners to develop a strategy and action plan to achieve carbon reduction targets. This includes measures to encourage and enable changes in behaviour across the community, with policy and interventions based on robust evidence and behavioural insight. The County Council’s Insight and Engagement Unit was tasked with delivering initial research to inform the approach to behaviour change.

The research was designed to support local authorities to work with their partners to reduce carbon consumption through changed behaviours by addressing two key questions:

1. Where do the most significant opportunities lie to reduce carbon consumption through citizen behaviour change?

The research identified the key opportunities for, and barriers to, achieving desired behaviour changes among citizens by exploring people’s capacity, opportunity and motivation to change behaviour - and by assessing how much change might be possible, where, with whom (including demographic and Mosaic profiles) and when. An assessment of the carbon impact of desired behaviour changes, together with potential health benefits, was also undertaken.

2. How can behaviours be most effectively influenced to reduce carbon?

The research assessed the evidence of the most effective ways of communicating and ultimately achieving behaviour change.
Citizen actions that were considered in this project

In total we focused on 23 actions related to climate change and resilience:

<table>
<thead>
<tr>
<th>Sustainable Energy and Water Use</th>
<th>Sustainable Diet</th>
<th>Sustainable Purchasing and Consumption</th>
<th>Resilience to Climate Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use water saving devices</td>
<td>• Reduce meat consumption</td>
<td>• Use reusable alternatives wherever possible</td>
<td>• Modify my home to be more resilient to heat and drought</td>
</tr>
<tr>
<td>• Avoid unnecessary water usage</td>
<td>• Reduce dairy consumption</td>
<td>• Correctly recycle materials</td>
<td>• Modify my house to be more resilient to storms and flooding</td>
</tr>
<tr>
<td>• Install insulation</td>
<td>• Buy local produce to reduce food miles</td>
<td>• Reduce use of plastics</td>
<td></td>
</tr>
<tr>
<td>• Choose energy efficient appliances when purchasing or replacing</td>
<td>• Reduce food waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Install renewable energy devices in your home</td>
<td>• Make ethical food choices (e.g. buy Fairtrade, don't buy palm oil etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Change to a green energy tariff*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sustainable Travel

- Reduce car/taxi use by using active forms of transport
- Reduce car/taxi use by using public transport
- Buy/lease an electric car
- Avoid short haul flights by taking the train instead
- Avoid long haul flights by choosing not to travel internationally
- Avoid flights by working from home/conference/video calls
- Avoid local travel by working from home/conference/video calls

* - By Green energy tariff we mean one that is supplied directly by renewable energy not via certificate (REGO)
### What we did - methodology

<table>
<thead>
<tr>
<th>Desk Research</th>
<th>Carbon Calculator</th>
<th>Qualitative focus groups</th>
<th>Online survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVIEW of existing national and local evidence on:</td>
<td>ASSESMENT of the carbon impact of a range of specific behavioural changes</td>
<td>UNDERSTANDING of how best to target behaviour change, barriers and motivations in a qualitative setting</td>
<td>QUANTIFY who is willing to take different climate actions, quantify barriers and motivations and understand who it is best to target to change behaviour</td>
</tr>
<tr>
<td>• behavioural factors (capacity, opportunity, and motivation) relating to the specific areas of focus</td>
<td>Conducted by the University of Southampton</td>
<td></td>
<td>Analysis conducted by Insight and Engagement Unit.</td>
</tr>
<tr>
<td>• effective practice in behavioural interventions to reduce carbon. This related to general approaches and specific areas of focus</td>
<td></td>
<td></td>
<td>Statistical analysis conducted by the University of Southampton</td>
</tr>
</tbody>
</table>

| CONDUCTED in March 2020 | CREATED in April 2020 | CONDUCTED in February and March 2020 | CONDUCTED in April 2020 |

<table>
<thead>
<tr>
<th>What does this tell us?</th>
<th>What does this tell us?</th>
<th>What does this tell us?</th>
<th>What does this tell us?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What behaviour change evidence already exists</td>
<td>How much carbon (CO₂ equivalent) can each climate change action save</td>
<td>What is the best way to communicate to people about climate behaviours</td>
<td>How many people are willing to take each climate action</td>
</tr>
</tbody>
</table>
The impact of actions on reducing carbon (the carbon calculation) was conducted by Aleksandra Nazarzaj, PhD Candidate at the Department of Economics, University of Southampton and overseen by Yaryna Basystyuk, Senior Policy & Communications Officer at Public Policy|Southampton. Calculation units are kgCO$_2$ equivalent for individual actions.

Findings came from reputable sources, namely:
- Government national statistical surveys
- Industry body estimates
- Sales data and prevalence of behaviours

Example of output:

kgCO$_2$ emissions per km of using a petrol, diesel car, plug in and battery electric car.

Example of output:

Buy/lease an electric car

Research was carried out into current use of petrol vs diesel and plug-in vs battery electric. Research was carried out to find out the average annual distance travelled per person per year by car.

The difference in kgCO$_2$e emissions per year for petrol/diesel cars and plug-in/battery electric cars was calculated.

Link to full findings: [Carbon emission from individual actions](#)  
Link to full findings: [CO$_2$e impact of actions](#)
What we discovered – Executive Summary
## Overall summary

### Climate Change
#### Behavioural Action Plan

<table>
<thead>
<tr>
<th>Action</th>
<th>Opportunity Size (millions of kg CO2 annually)</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Install renewable energy</td>
<td>1690</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>2. Change to a green energy tariff</td>
<td>1303</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>3. Buy/lease an electric car</td>
<td>637</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>4. Avoid flights by working from home</td>
<td>373</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>5. Install insulation</td>
<td>321</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>6. Avoid flights by taking the train</td>
<td>152</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>7. Reduce food waste</td>
<td>136</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>8. Avoid international flights</td>
<td>101</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>9. Reduce meat consumption</td>
<td>84</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>10. Use water saving devices</td>
<td>80</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>11. Reduce dairy consumption</td>
<td>76</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>12. Avoid local travel by working from home</td>
<td>70</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>13. Public Transport</td>
<td>45</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>14. Choose energy efficient appliances</td>
<td>31</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>15. Buy locally produced food</td>
<td>17</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>16. Active Transport</td>
<td>4</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>17. Use less water</td>
<td>4</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>18. Correctly recycle materials</td>
<td>3</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>19. Make ethical food choices</td>
<td>2</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>20. Reduce use of plastics</td>
<td>2</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>21. Modify my home to be more resilient to heat and drought</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>22. Modify my house to be more resilient to storms and flooding</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>23. Use reusable alternatives</td>
<td>2</td>
<td>High</td>
<td>Medium</td>
</tr>
</tbody>
</table>
Executive summary – headline findings 1/2

- Home energy and travel dominate the opportunities for citizen action to save carbon.
- Installing renewable energy devices (solar, heat pumps) is both the biggest opportunity for citizen carbon saving and the single most impactful individual action to take.
- Willingness to take carbon reducing activities clusters in three broad areas – home, travel and food, and resources. Willingness to take one action in these areas often means willingness to take another.
- Leading with an environmental message is rarely the best way to communicate climate change actions but it should be used as a secondary tactic. Money and ease are stronger primary messages.
- COVID-19 has provided a potentially short window to help address issues related to travel (particularly working from home) and food (particularly food waste).
People are willing to change and know it is the right thing to do, but they must overcome a number of 
internal and external barriers. Approaches to addressing climate change must work past these barriers 

Barriers that limit individual action are lack of:
- Physical or psychological capacity e.g. financial, time or knowledge constraints
- Motivation e.g. unhelpful habits or conflicting motivations
- Opportunity in individual environments e.g. possibility to do action or conflicting social norms

The following approaches can help overcome these barriers:
- An additive approach e.g. ‘every little helps’ could work for climate change;
- Encourage reflection through point of action communications;
- Show consistent, visible leadership;
- Make doing the right thing more visible – it’s not easy to see the people who didn’t use carbon;
- Make it clear how much each action contributes;
- Create clear shared goals – people will change a lot if they agree.

Information is needed to overcome lack of knowledge of carbon impacts for some actions, notably dairy and 
meat consumption
Summary of findings – Headline insights
Installing renewable energy devices is the largest CO₂ saving opportunity

Below is a representation of the carbon opportunity size (% of the Hampshire population willing to take an action multiplied by the amount of carbon saved for doing the action) in millions of kg of CO₂ equivalent annually.

**Key takeout** - Home energy (renewable energy devices and green energy tariffs) is the largest opportunities to save carbon.

<table>
<thead>
<tr>
<th>Action</th>
<th>Opportunity Size (millions of kg CO₂ annually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install renewable energy devices in your home (e.g. heat pump, solar etc.)</td>
<td>1,690.5</td>
</tr>
<tr>
<td>Change to a green energy tariff for your gas and electric*</td>
<td>1,303.1</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>636.6</td>
</tr>
<tr>
<td>Avoid flights by working from home/conference/video calls</td>
<td>372.8</td>
</tr>
<tr>
<td>Install insulation (e.g. loft, cavity wall insulation etc.)</td>
<td>321.2</td>
</tr>
<tr>
<td>Avoid short haul flights by taking the train instead</td>
<td>151.7</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>135.7</td>
</tr>
<tr>
<td>Avoid long haul flights by choosing not to travel internationally</td>
<td>101.3</td>
</tr>
<tr>
<td>Reduce meat consumption</td>
<td>84.5</td>
</tr>
<tr>
<td>Use water saving devices (e.g. shower timer, rainwater barrel, toilet water tank limiter...)</td>
<td>80.3</td>
</tr>
<tr>
<td>Reduce dairy consumption</td>
<td>76.4</td>
</tr>
<tr>
<td>Avoid local travel by working from home/conference/video calls</td>
<td>70.3</td>
</tr>
<tr>
<td>Reduce car/taxi use by using public transport</td>
<td>44.8</td>
</tr>
<tr>
<td>Choose energy efficient appliances when purchasing or replacing (e.g. with an A-rated...)</td>
<td>31.1</td>
</tr>
<tr>
<td>Buy locally produced food</td>
<td>16.5</td>
</tr>
<tr>
<td>Reduce car/taxi use by using active forms of transport (e.g. walking, cycling instead of a...)</td>
<td>15.6</td>
</tr>
<tr>
<td>Use less water (e.g. turn the tap off when brushing your teeth)</td>
<td>4.3</td>
</tr>
<tr>
<td>Correctly recycle materials</td>
<td>2.6</td>
</tr>
</tbody>
</table>

* - By Green energy tariff we mean one that is supplied directly by renewable energy not via certificate (REGO)

Base size: 3,024 South East residents scaled to represent Hampshire
People are most willing to save on carbon through in-home energy saving measures and changing travel behaviour.

Below is a representation of the carbon opportunity size of each action and area of actions (% of the Hampshire population willing to take an action multiplied by the amount of carbon saved for doing the action). Each panel represents the opportunity size of the action.

Key takeout – The largest carbon opportunities lie in home energy and travel – these areas will be key to any climate change strategy.
## Not all actions are carbon equal

<table>
<thead>
<tr>
<th>Action</th>
<th>Number of people needed to take the action for the same carbon reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install renewable energy devices in your home (e.g. heat pump, solar etc.)</td>
<td>1</td>
</tr>
<tr>
<td>Change to a green energy tariff for your gas and electric</td>
<td>1</td>
</tr>
<tr>
<td>Avoid flights by working from home/conference/video calls</td>
<td>2</td>
</tr>
<tr>
<td>Install insulation (e.g. loft, cavity wall insulation etc.)</td>
<td>3</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>5</td>
</tr>
<tr>
<td>Avoid short haul flights by taking the train instead</td>
<td>9</td>
</tr>
<tr>
<td>Avoid long haul flights by choosing not to travel internationally</td>
<td>10</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>12</td>
</tr>
<tr>
<td>Reduce meat consumption</td>
<td>16</td>
</tr>
<tr>
<td>Reduce dairy consumption</td>
<td>17</td>
</tr>
<tr>
<td>Avoid local travel by working from home/conference/video calls</td>
<td>27</td>
</tr>
<tr>
<td>Use water saving devices (e.g. shower timer, rainwater barrel, toilet water tank limiter (hippo, brick)</td>
<td>31</td>
</tr>
<tr>
<td>Choose energy efficient appliances when purchasing or replacing (e.g. with an A-rated energy label)</td>
<td>34</td>
</tr>
<tr>
<td>Reduce car/taxi use by using public transport</td>
<td>68</td>
</tr>
<tr>
<td>Reduce car/taxi use by using active forms of transport (e.g. walking, cycling instead of a vehicle)</td>
<td>96</td>
</tr>
<tr>
<td>Buy locally produced food</td>
<td>122</td>
</tr>
<tr>
<td>Correctly recycle materials</td>
<td>174</td>
</tr>
<tr>
<td>Use less water (e.g. turn the tap off when brushing your teeth)</td>
<td>229</td>
</tr>
</tbody>
</table>

**Key takeaway** – Changing behaviours should be measured against relative carbon impact e.g. if an initiative gets 229 times more people to use less water than a similar initiative gets people to install renewable energy- then that is the same value.
Climate action willingness links together in clusters

There are three larger clusters of actions (Home, Food and Travel) where being willing to take one makes a person more likely to be willing to do another.

Key takeout – Targeting people who have taken one action, or are willing to take it, may be a good way to target them for another related action.
Each climate action has a closely related action

Many people who are willing to take one action are likely to be willing to take another, similar action. Duplicate combinations are not shown.

<table>
<thead>
<tr>
<th>Action</th>
<th>Willingness to do action(1=completely related 0 = not at all related)</th>
<th>Action it is most associated with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid flights by working from home/conference/video calls</td>
<td>0.48</td>
<td>Avoid local travel by working from home/conference/video calls</td>
</tr>
<tr>
<td>Modify my home to be more resilient to storms and flooding</td>
<td>0.46</td>
<td>Modify my home to be more resilient to heat and drought</td>
</tr>
<tr>
<td>Modify my home to be more resilient to heat and drought</td>
<td>0.45</td>
<td>Install renewable energy devices in your home</td>
</tr>
<tr>
<td>Modify my home to be more resilient to storms and flooding</td>
<td>0.42</td>
<td>Install insulation</td>
</tr>
<tr>
<td>Install insulation</td>
<td>0.37</td>
<td>Use water saving devices</td>
</tr>
<tr>
<td>Reduce car/taxi use by using active forms of transport</td>
<td>0.36</td>
<td>Reduce car/taxi use by using public transport</td>
</tr>
<tr>
<td>Install renewable energy devices in your home</td>
<td>0.33</td>
<td>Buy/lease an electric car</td>
</tr>
<tr>
<td>Reduce use of plastics</td>
<td>0.32</td>
<td>Use reusable alternatives wherever possible</td>
</tr>
<tr>
<td>Use reusable alternatives wherever possible</td>
<td>0.32</td>
<td>Reduce use of plastics</td>
</tr>
<tr>
<td>Install insulation</td>
<td>0.31</td>
<td>Change to a green energy tariff for your gas and electric</td>
</tr>
<tr>
<td>Reduce use of plastics</td>
<td>0.31</td>
<td>Reduce food waste</td>
</tr>
<tr>
<td>Reduce meat consumption</td>
<td>0.29</td>
<td>Reduce dairy consumption</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>0.28</td>
<td>Correctly recycle materials</td>
</tr>
<tr>
<td>Make ethical food choices</td>
<td>0.28</td>
<td>Buy locally produced food</td>
</tr>
<tr>
<td>Buy locally produced food</td>
<td>0.28</td>
<td>Make ethical food choices</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>0.27</td>
<td>Use less water</td>
</tr>
<tr>
<td>Avoid short haul flights by taking the train instead</td>
<td>0.26</td>
<td>Avoid long haul flights by choosing not to travel internationally</td>
</tr>
<tr>
<td>Reduce use of plastics</td>
<td>0.21</td>
<td>Choose energy efficient appliances when purchasing or replacing</td>
</tr>
</tbody>
</table>

Base size: 3,024 South East residents

Key takeout – Identifying people willing to take certain climate change actions means you can reasonably assume they would be willing to take related ones e.g. buyers of electric cars would be interested in installing home renewable energy.
Finance, and making actions easier, were the dominant ways to gain attention

From our focus groups (26 participants), those who were willing to undertake an action were asked to quickly (and with little time for reflection) place each action into a bucket with labels reflecting the best way to communicate this issue to them e.g. by addressing the health benefits, money or the environment.

<table>
<thead>
<tr>
<th>Action</th>
<th>Best approach/es to communicating action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Energy tariff</td>
<td>Finance</td>
</tr>
<tr>
<td>Renewable energy</td>
<td>Finance</td>
</tr>
<tr>
<td>Water saving devices</td>
<td>Make it easier</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>Finance</td>
</tr>
<tr>
<td>Make it easier</td>
<td></td>
</tr>
<tr>
<td>Ethical food choices</td>
<td>Finance</td>
</tr>
<tr>
<td>Make it easier</td>
<td></td>
</tr>
<tr>
<td>Adapt home for hot weather</td>
<td>Finance</td>
</tr>
<tr>
<td>Energy efficient appliances</td>
<td>Environment</td>
</tr>
<tr>
<td>Make it easier</td>
<td></td>
</tr>
<tr>
<td>Eat local</td>
<td>Environment</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
</tr>
<tr>
<td>Avoid flying by taking the train</td>
<td>Make it easier</td>
</tr>
<tr>
<td>Taking public transport</td>
<td>Environment</td>
</tr>
<tr>
<td>Reduce meat and dairy</td>
<td>Make it easier</td>
</tr>
<tr>
<td>Source: Focus Groups</td>
<td></td>
</tr>
</tbody>
</table>
COVID-19 is making 1 in 3 people think and act differently on climate change

The open-ended question was as follows:

*Thinking generally about the answers you provided in this survey. In which, if any, ways would you say the current public health situation (i.e. the outbreak of Covid-19 (Coronavirus)) causes you to think differently about any of the answers you provided?*

- 67% COVID-19 has not made me think differently about my actions
- 25% COVID-19 has encouraged me to undertake more environmentally friendly behaviours
- 9% COVID-19 has encouraged me to undertake more environmentally unfriendly behaviours

As we are interested in understanding what behaviours are particularly relevant and salient at this time, we will be looking into more detail at **34% who have reported that Coronavirus has changed their behaviour**

Base size: 3,024 South East residents
People were most likely to think differently about travel behaviour due to COVID-19.

People had mentioned many positives involving travel and diet whereas resources and their willingness and ability to modify their home were more mixed.

Key takeout – Behaviour has changed in a number of areas, particularly travel and diet – this presents a potential opportunity to encourage or reinforce behaviours that are positive for climate action.
People are willing to change and know it is the right thing to do

But they must overcome a number of internal and external barriers:

- Limits to taking actions
- Other motivations overriding climate change
- National and local government support
- Lack of knowledge / wrong information

Approaches to addressing climate change through citizen action must understand and work past these barriers.
### Overcoming barriers is about framing the challenge in the right way 1/2

<table>
<thead>
<tr>
<th>An additive approach e.g. 'every little helps' could work for climate change</th>
<th>Encourage reflection through point of action communications</th>
<th>Show consistent, visible leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Addresses which barriers?</strong></td>
<td><strong>Addresses which barriers?</strong></td>
<td><strong>Addresses which barriers?</strong></td>
</tr>
<tr>
<td>- People using one good act to justify a bad one</td>
<td>- Environmental issues are not clear cut and citizens don’t know what to do</td>
<td>- Someone else can change</td>
</tr>
<tr>
<td>- People don’t know the carbon impacts of their actions</td>
<td>- Some people are interested in the issues and have tried to research but are still not clear</td>
<td>- Governments should be investing</td>
</tr>
<tr>
<td>- They should be nudging me to make the right choice</td>
<td>- Consequences of consumption are hard to see at point of use</td>
<td></td>
</tr>
<tr>
<td>- Focus on achievable steps</td>
<td>- They should be nudging me to make the right choice</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where has this principle been used?</th>
<th>Where has this principle been used?</th>
<th>Where has this principle been used?</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Relay for Life" /></td>
<td><img src="image2.png" alt="Energy Efficiency Rating" /></td>
<td><img src="image3.png" alt="Show consistent, visible leadership" /></td>
</tr>
<tr>
<td><img src="image4.png" alt="Cancer Research UK" /></td>
<td><img src="image5.png" alt="Fixed rate contract" /></td>
<td><img src="image6.png" alt="Tesco Every little helps" /></td>
</tr>
</tbody>
</table>
Overcoming barriers is about framing the challenge in the right way 2/2

<table>
<thead>
<tr>
<th>Make ‘doing the right thing’ more visible – it’s not easy to see the people who didn’t drive/fly</th>
<th>Make it clear how much each action contributes</th>
<th>Create clear shared goals – people will change a lot if they agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Addresses which barriers?</strong></td>
<td><strong>Addresses which barriers?</strong></td>
<td><strong>Addresses which barriers?</strong></td>
</tr>
<tr>
<td>• People justify a self-serving conclusion</td>
<td>• People justify a self-serving conclusion</td>
<td>• Environmental issues are not clear cut and citizens don’t know what to do</td>
</tr>
<tr>
<td>• They should be nudging me to make the right choice</td>
<td>• Consequences of consumption are hard to see at point of use</td>
<td>• An ability to discuss, agree goals and commit to change could lead to more behaviour change</td>
</tr>
<tr>
<td>• Focus not on what we are losing by using low carbon alternatives but what we gain</td>
<td>• They should be nudging me to make the right choice</td>
<td></td>
</tr>
<tr>
<td>• Focus on achievable steps</td>
<td>• Environmental issues are not clear cut and citizens don’t know what to do</td>
<td></td>
</tr>
</tbody>
</table>

**Where has this principle been used?**

<table>
<thead>
<tr>
<th>Flight shame/Train pride campaign in Sweden</th>
<th>Points system showing how one action contributes to a target or limit</th>
<th>Juries – people aim to seriously assess evidence and come to a conclusion with high stakes for the people involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showing how many people participate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Information is needed to overcome lack of knowledge of carbon impacts

Looking at all actions we could see differences of those saying they would not do the action and then giving the reasons they do not believe it would make a difference – we listed these to show which actions are most in need of information to change these views.

<table>
<thead>
<tr>
<th>Action</th>
<th>% people unwilling &amp; saying they do not believe action will make a difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce dairy consumption</td>
<td>19%</td>
</tr>
<tr>
<td>Reduce meat consumption</td>
<td>16%</td>
</tr>
<tr>
<td>Avoid flights by working from home/conference/video calls</td>
<td>9%</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>9%</td>
</tr>
<tr>
<td>Avoid long haul flights by choosing not to travel internationally</td>
<td>7%</td>
</tr>
<tr>
<td>Avoid local travel by working from home/conference/video calls</td>
<td>6%</td>
</tr>
<tr>
<td>Avoid short haul flights by taking the train instead</td>
<td>6%</td>
</tr>
<tr>
<td>Change to a green energy tariff for your gas and electric</td>
<td>6%</td>
</tr>
<tr>
<td>Make ethical food choices (e.g. buy Fairtrade, don't buy palm oil etc.)</td>
<td>5%</td>
</tr>
<tr>
<td>Reduce car/taxi use by using public transport</td>
<td>5%</td>
</tr>
<tr>
<td>Use water saving devices</td>
<td>5%</td>
</tr>
<tr>
<td>Install renewable energy devices in your home</td>
<td>3%</td>
</tr>
<tr>
<td>Reduce car/taxi use by using active forms of transport</td>
<td>3%</td>
</tr>
<tr>
<td>Buy locally produced food</td>
<td>2%</td>
</tr>
<tr>
<td>Install insulation</td>
<td>2%</td>
</tr>
<tr>
<td>Reduce use of plastics</td>
<td>2%</td>
</tr>
<tr>
<td>Use less water</td>
<td>2%</td>
</tr>
<tr>
<td>Choose energy efficient appliances when purchasing or replacing</td>
<td>1%</td>
</tr>
<tr>
<td>Correctly recycle materials</td>
<td>1%</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>1%</td>
</tr>
<tr>
<td>Use reusable alternatives wherever possible</td>
<td>1%</td>
</tr>
</tbody>
</table>

Key takeout – There is a significant proportion of people who may act differently if they become convinced of the carbon impact of meat and dairy and even electric cars. At the least this should not be a defense not to take action.
Younger, higher social grade people are the biggest opportunity targets

Profiling those who are willing to save the most carbon

Top 200 respondents by willingness to save carbon are more likely to be male, 25-44, ABC1 social grade* (using standard demographic groups based on occupation) and in Mosaic group G - Domestic Success

Base size: 3,024 South East residents

*Social grade explanation: http://www.nrs.co.uk/nrs-print/lifestyle-and-classification-data/social-grade/

Key takeout – Successful large-scale carbon reduction must take in those who are willing to do the most
Recommendations 1/2

Many different actions could result from the findings of this research. We have submitted the below as a shortlist of actions that are supported by the evidence in this report.

- **Short term - COVID-19** has opened up two distinct areas of opportunity – increased working from home and improved food waste behaviours – existing budgets and even new investment for these priorities should be prioritised in setting new, better behaviours before lockdown fully ends and habits revert to old ways, or to a new normal that is not as positive as it could be.

- An overarching ‘points’ system that encourages people to take a step up the ladder of carbon saving could encourage people to understand and stretch themselves when saving carbon. This approach may work best with the willing but underinformed.

- Creating communal agreement on climate goals will make people more receptive to communications – this would be hard to establish but could make people and communities easier to mobilise. COVID-19 has demonstrated that people will take extraordinary actions if they believe it is necessary.

- Largest opportunity – any climate change strategy that does not address home energy (insulation/Green energy tariff or renewable energy devices) will not capture the biggest opportunity. The size of opportunity justifies harder work, or more budget, to find the best possible route to get people to reduce their home energy use.
Many different actions could result from the findings of this research. We have submitted the below as a shortlist of actions that are supported by the evidence in this report.

In the longer term, soften resistance on actions that save larger amounts of carbon but are not perceived to do so by consistent information messaging. This applies most strongly to reducing meat and dairy consumption, business meeting flights and (to a lesser extent as the car industry is likely to assist) electric cars.

Finance is a key way in to gain interest but environment is a motivator. One possible strategy would be to encourage/nudge/subsidise home insulation in return for a promise to use the savings to take out green tariffs. The customer pays no money but makes a double CO\textsuperscript{2} saving – lower energy use and greener supply.

This report contains targeting information including demographic groups more likely to be willing to take an action, as well as actions that are closely linked. We recommend deploying this information and testing it to make sure that budgets are maximised by connecting with those willing to act.
<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of actions each citizen is willing to take</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Range of willingness from top action (eat local food 78%) to the bottom</td>
<td>78% - 20%</td>
<td>(correctly recycle materials (20%)</td>
</tr>
<tr>
<td>Number of people that would have to carry out the least effective carbon</td>
<td>229</td>
<td>reducing activity (use less water) to equal 1 person carrying out the</td>
</tr>
<tr>
<td>reducing activity (use less water) to equal 1 person carrying out the most</td>
<td></td>
<td>carbon effective action (install renewable energy at home)</td>
</tr>
<tr>
<td>carbon saving action that would make the biggest difference for a citizen</td>
<td></td>
<td>Action that the highest number of people expect to take in the next 12</td>
</tr>
<tr>
<td>action</td>
<td></td>
<td>months</td>
</tr>
<tr>
<td>Amount of carbon saving the average citizen is willing to consider each</td>
<td>3359 kg CO$^2$ equivalent</td>
<td></td>
</tr>
<tr>
<td>year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
We hope the findings in this report are useful and they should be meaningful for many different local areas or authorities. It is possible to closely adapt findings to smaller areas (Cities or local authorities) to make it more representative. We anticipate partners using this research in a number of ways:

- Use the general findings to create communications and marketing strategies
- Adapt the data to for you locality – the data is a rich source of information and could be weighted (transformed) to match your population – please get in touch if this is of interest
- We recommend testing and confirming that the approaches described are effective – we would welcome any collaboration or results of activities so that best practice can be established

For more information please contact insight@hants.gov.uk
Behaviour change theory and Climate Change – a brief guide
Behaviour change occurs as a result of interaction between three necessary determinants: capabilities, opportunities and motivation.

**How does this relate to individual action on climate change?**

- **Physical capability to engage in an activity**
  - e.g. affordability of vegetarian alternatives

- **Psychological capability to engage in an activity, including knowledge and skills**
  - e.g. knowledge of relationship between meat eating and climate change, knowledge and skills to cook vegetarian food

- **Reflective motivation i.e. conscious decision making – their plans, intentions, beliefs, identity**
  - e.g. meal plan to reduce meat consumption, belief that individual meat reduction will make a difference to tackle climate change

- **Automatic motivation i.e. unconscious decision making – their emotions, habits and impulses**
  - e.g. going to the meat section in supermarket is habitual, association of vegetarian cooking with poor nutrition

- **Physical opportunity**
  - e.g. having vegetarian options readily available, prompted in the supermarket about environmental impact of buying meat

- **Social opportunity**
  - e.g. it is the social norm to eat vegetarian if your friends and family do this, famous chefs endorsing vegetarian cooking
Influences of behaviour: COM-B model

The picture is a visual representation of the interaction between capabilities, opportunities and motivations that determine behaviour and thereby affect outcomes.

**Capability:** the psychological capacity of our brain and the physical capacity of our body to conduct a behaviour

**Motivation:** the factors affecting our automatic/conscious and reflective/unconscious decisions

**Opportunity:** presented by our external physical and social surroundings

**Changed Determinants**

**Changed behaviour:** e.g. eating less meat

**Changed Outcomes:** e.g. improved health, reduced carbon footprint
1. Many choices in human consumption are unconscious

- Human cognition has two parallel processes
  - Automatic: Decisions are made rapidly and driven by intuitive processes (e.g. habit, social influence, emotion, rules of thumb)
  - Reflective: Decisions are considered and rational
- Most of our decisions are (necessarily) made automatically, and this can be difficult to change

2. Behaviour is distinct from attitudes, values and intentions

- While individuals generally say they are concerned about the environment, their good intentions do not always translate into pro-environmental behaviours. This is known as the **value-action gap**. Attitudes can lead us to adopt the easiest behaviours (such as recycling), but it is another matter to significantly compromise our convenience, enjoyment, or profit. People tend to do just enough to avoid guilt and rationalise unsustainable actions through psychological defences, such as:
  - Moral licensing: using one good act to justify the bad e.g. I can take a flight to Spain if I recycle this year
  - Motivated reasoning: reasoning towards a self-serving conclusion e.g. My actions are not significant, I will not be personally impacted by climate change
  - Avoidance: simply not thinking about the issue

3. The consequences of consumption can be hard to see especially at point of decision

- Energy and water are invisible resources. Even if you do receive information, this is difficult to conceptualise e.g. what does a kWh measure?
- If an individual uses more water or energy today there is no immediate feedback or cost. To exacerbate this issue, individuals disproportionately focus on immediate costs and excessively discount future impacts, a phenomenon known as **present bias**
4. Climate change does not seem personally relevant

- Many individuals believe climate change is a problem for people in other countries thus climate change is an abstract idea from which we are physically distant i.e. **judgmental discounting**.
- People have low **perceived behavioural control**; they don’t believe that individual action will change anything – people feel helpless and skeptical.

5. Our social context

- **Social cues** act as a benchmark for individual consumption – this effect is greater than we intuitively realise. Therefore, it can be difficult for us to go against the perceived norm e.g. refusing a plastic straw at a restaurant, taking the bus to work in a community where owning a car is considered a key signifier of success.
- Perceived inequality i.e. why should I change if others are not willing?

6. It can be hard to follow through on actions due to physical context

- **Choice architecture** steers consumers to non-sustainable choices e.g. energy consumers are often automatically assigned to conventional, rather than renewable energy suppliers, or cost is often the default order presenting energy options.
- **Hassle factors** can explain why even when individuals do clearly prefer the sustainable option, small tasks can prove to be disproportionate barriers to follow-through. Whether they are real (“programming a thermostat is hard”) or just perceived (“programming a thermostat seems hard”) they can prevent actions from happening, even when the benefits are large or intentions are good.

References

*Consuming differently, consuming sustainably: behavioural insights for policymaking*, 2017

*Gifford, The Dragons of Inaction: Psychological Barriers That Limit Climate Change Mitigation and Adaptation*, 2011
Action summaries - Introduction
Key top line findings

1. The opportunity size reflects millions of kg of CO₂ saved annually if all willing individuals in Hampshire changed their behaviour accordingly.

2. Summary of willingness to take action

3. Kg of CO₂ saved per person by taking this action

4. Top 3 barriers identified by individuals willing to undertake this action i.e. what is stopping them from making the change

5. Top 3 motivators identified by individuals willing to undertake this action i.e. what is encouraging them to make the change

6. Summary of behaviour change findings. See ‘Guide on how to interpret the desk research (2)’

Action dashboard – Install insulation

1. Opportunity size is large (5/18 actions)
2. Willingness is low (37%) and carbon saving is high
3. Home ownership and lack of upfront money are key barriers
4. Finance is a good route in to encourage behaviour change
5. Key barriers (Base: 1104)
- I don’t know enough money for the upfront costs of doing this: 25%
- I do not own my own home: 21%
- I have to spend money on other priorities: 15%
6. Key motivations (Base: 1104)
- Makes my home warmer/more efficient: 48%
- Saving money: 44%
- I want to help the environment: 38%
7. Behaviour change evidence
- Impact of behaviour change campaign: Low
- Existing evidence: High
- Level of influence: Medium
8. Best marketing approach
- Financial
- Easier
9. Most linked action
- Install insulation

How individuals believe this behaviour would be best promoted to them.

If an individual does this action, what other action will they be likely to take?
Guide on how to interpret the desk research (1)

- **Desired behavioural outcome**
- **Methods that have effectively promoted behaviour change**
- **Best evidence is presented in a dark blue box. This includes control trials and meta analyses, so findings are likely to be reliable due to high sample sizes**
- **Case study evidence is presented in the light blue box. Evidence presented in these boxes includes:**
  - Studies with a small sample size/ no control group
  - Resources that use behaviour change principles
- **Evidence may be useful to see creative ideas but yet to be tested in a control trial**
- **Pictures are included on some slides to demonstrate what materials have been used to promote behaviour change**

**Install loft and wall insulation and plug gaps to stop drafts**

- What is the most effective practise?
  - Remove barriers to insulating home e.g. hassle factors
  - Make information on energy saving tangible and personalised
  - Provide education alongside insulation to promote higher energy saving

**Best evidence – Control trial**

- Different leaflets for loft insulation were sent out across 3 boroughs
  - Borough 1: Loft insulation and no loft clearance: £179 (Control)
  - Borough 2: Loft insulation & Loft clearance: £369 – cost price (No hassle factor)
  - Borough 2: Loft insulation & Loft clearance: £480 retail price (No hassle factor)

While there is some indication that reducing the hassle factor and the price increases the uptake of loft conversions, due to low uptake on the trial, the numbers were too small to provide firm conclusions (UK, 2013)

**Case studies**

- Education programmes provided at the same time as the adoption of new technology and one-off modifications can act as a stimulus for changing habitual behaviours. A well-designed study looking at those insulating and draft-proofing their properties showed that significant increases in energy savings were attainable by providing education at such moments of change (16% average gas saving with insulating alone vs. 26% with education included) (USA, 2008)
- When people were given information on how many cracks there were in their home 20% of people weather stripped their windows. But when information was made tangible (i.e. the gap in your house is the size of a basketball) 60% weather stripped. (Unknown, 2013)

**References**

- Department of Energy and Climate Change, *Removing the hassle factor associated with loft insulation: Results of a behavioural trial*, September 2013

**Note:** Best evidence is not necessarily the best thing to do

**Note:** Studies in this report have measured **behavioural change** in response to interventions (rather than measuring changes in intentions as a response to interventions). This focus is due to the significance of the ‘value-action gap’.

For areas where there is a lack of research, we have looked at intentions and included a purple warning sign.
Guide on how to interpret the desk research (2)

Impact of behaviour change campaign:
- High: Intervention will lead to EITHER lots of individuals changing their behaviour slightly OR smaller number of individuals changing their behaviour significantly
- Medium: Intervention will lead to EITHER some of individuals changing their behaviour slightly OR smaller number of individuals changing their behaviour slightly
- Low: Behaviour is hard to change

Evidence
- High: Meta-analyse or systematic review has been conducted
- Medium: Control trials have been conducted
- Low: Some case study evidence

Level of influence:
Here we are looking at the influence Hampshire County Council has on imposing suggested interventions – whether those be
- Government (i.e. national, local)
- Industry (i.e. businesses)
- Civil society (i.e. campaigners, educators, members of the public)

- High: Hampshire County Council can directly influence this behaviour
- Medium: Hampshire County Council has influence on bodies that can directly influence behaviour
- Low: Hampshire County Council has no influence

Existing evidence: High
Level of influence: Medium

Impact of behaviour change campaign: Low
Action summaries – Sustainable energy and water use
Area summary: Sustainable energy and water use

Install renewable energy
Opportunity Size (millions of kg CO2 annually)
1690
Willingness to take action 58%
Ease of Behaviour change Low
Level of influence Medium
What evidence suggests you should do...
Financial incentives.

Change to a Green energy tariff
Opportunity Size (millions of kg CO2 annually)
1303
Willingness to take action 59%
Ease of Behaviour change High
Level of influence Medium
What evidence suggests you should do...
Letters to residents from a trusted source. Default green energy tariffs. Encourage social sign up. Make comparison of different energy tariffs easy.

Install isolation
Opportunity Size (millions of kg CO2 annually)
321
Willingness to take action 37%
Ease of Behaviour change Low
Level of influence Medium
What evidence suggests you should do...
Remove barriers i.e. hassle factors. Make information saving tangible and personalised. Provide education alongside insulation to promote higher energy saving.

Use water saving devices
Opportunity Size (millions of kg CO2 annually)
80
Willingness to take action 61%
Ease of Behaviour change Medium
Level of influence Medium
What evidence suggests you should do...
Real-time feedback with tailored messages. Use social norms, message framing, and choice architecture as secondary tactics.

Choose energy efficient appliances
Opportunity Size (millions of kg CO2 annually)
31
Willingness to take action 48%
Ease of Behaviour change High
Level of influence Medium
What evidence suggests you should do...
Point of sale displays. Financial subsidies.

Use less water
Opportunity Size (millions of kg CO2 annually)
4
Willingness to take action 24%
Ease of Behaviour change High
Level of influence Medium
What evidence suggests you should do...
Incentivise water saving through giving away free devices.
Action dashboard – Install renewable energy devices (e.g. heat pump, solar etc.)

Opportunity size is the largest (1/18 actions)

Size of opportunity
(outer line reflects largest opportunity)

Willingness is high (58%) and carbon saving is high

A focus on the upfront costs is a barrier – long term saving a motivator

Finance is a good route in to encourage behaviour change

Willingness (Base: 3024)

Done it/ always do it 5%
Willing 58%
Not willing/ can't not do it 37%

Carbon saving for one person taking the action: 1979.5 kgCO\(^2\) equivalent annually

Key barriers (Base: 1759)

- I don't have enough money for the upfront costs of doing this 35%
- There is no/not enough government help to do this 20%
- I have to spend money on other priorities 17%

Key motivations (Base: 1759)

- I want to help the environment 50%
- Saving money 44%
- Receiving money/ a grant to do it 39%

Behaviour change evidence

Impact of behaviour change campaign: Low
Existing evidence: Medium
Level of influence: Medium

Best marketing approach

Financial

Most linked action

Buy/lease an electric car
Install renewable energy devices in your home (e.g. heat pump, solar etc.)

### Willingness (Base: 3024)

<table>
<thead>
<tr>
<th></th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can't</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>58%</td>
<td>37%</td>
</tr>
</tbody>
</table>

### Key motivations (Base: 1759, 154, multi-choice)

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Willing</th>
<th>Done it/ always do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want to help the environment</td>
<td>50%</td>
<td>51%</td>
</tr>
<tr>
<td>Saving money</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Receiving money/a grant to do it</td>
<td>39%</td>
<td>39%</td>
</tr>
<tr>
<td>Helping to reduce carbon</td>
<td>36%</td>
<td>39%</td>
</tr>
<tr>
<td>Makes my home warmer/more efficient</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>Making my life more comfortable/easy</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>I would enjoy making the change</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>I want to set an example to friends/family</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Preventing harm to wildlife</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Don't know</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Saving time</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Not applicable - nothing in particular would motivate me</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>My friends/family do it</td>
<td>3%</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Key barriers (Base: 665, 1759, multi-choice)

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Not willing/can't</th>
<th>Willing</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't have enough money for the upfront costs of doing this</td>
<td>42%</td>
<td>38%</td>
</tr>
<tr>
<td>There is no/not enough government help to do this</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>I have to spend money on other priorities</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>I do not own my own home</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>I don't have enough money to pay for the ongoing costs of doing this</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>None of these</td>
<td>14%</td>
<td>86%</td>
</tr>
<tr>
<td>I would not know how to do this</td>
<td>9%</td>
<td>91%</td>
</tr>
<tr>
<td>Don't know</td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>This is not possible where I live</td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>I believe it will make a difference but have chosen to do something else to reduce climate change</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>I do not have time to do this</td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>The people I live with do not want to do this</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>My friends/family do not want to do this</td>
<td>3%</td>
<td>97%</td>
</tr>
<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>2%</td>
<td>98%</td>
</tr>
<tr>
<td>Nobody else in my community does this</td>
<td>4%</td>
<td>96%</td>
</tr>
</tbody>
</table>

### Summary/key points

- Saving money is a strong motivator, yet the upfront costs are the biggest barrier.
Install renewable energy devices in your home

What is the most effective practise?
• Financial incentives

Best evidence – systematic review
• Financial incentives are an important method to increase citizen investment in renewables. Individuals do not always behave in a ‘economically rational’ way, therefore considering behavioural, social, institutional and regulatory barriers is essential.
  • Feed in tariff and quotas, grants and tax incentives can be successful in mobilising greater levels of investment from local citizens, but that soft loans tend to be less effective as a stand-alone instrument
  • There may often be a requirement to include specific design features into Feed in Tariffs, quotas, grants, and tax incentives, that will cater to the specific needs of communities
  • Complementary measures are important in addressing non-financial barriers, such as lack of familiarity with the technology, technology immaturity, or low awareness of the incentive programme itself
  • Policy review of seven countries leading in photovoltaic generation. The leading nations set out flexible financing, feed in tariffs, incentives, tax exemptions subsidies and active promotion for citizens.

Case study:
• Policy review of seven countries leading in photovoltaic generation. The leading nations set out flexible financing, feed in tariffs, incentives, tax exemptions subsidies and active promotion for citizens.

Opportunity size is in the top 5 (2/18 actions)

Willingness is high (59%) and carbon saving is high

Finance and home ownership are the key barriers

Evidence of behaviour change is strong. Finance is the best route in

Size of opportunity (outer line reflects largest opportunity)

1303 million kgCO₂e

Willingness (Base: 3024)

<table>
<thead>
<tr>
<th></th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can't</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22%</td>
<td>59%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Carbon saving for one person taking the action: 1500 kgCO₂ equivalent annually

Key barriers (Base: 1775)

- I don't have enough money to pay for the ongoing costs of doing this: 11%
- I do not own my own home: 9%
- There is no/not enough government help to do this: 9%

Key motivations (Base: 1775)

- I want to help the environment: 50%
- Helping to reduce carbon: 34%
- Saving money: 34%

Impact of behaviour change campaign: High

Existing evidence: High
Level of influence: Medium

Best marketing approach
Financial

Most linked action
Install insulation
Change to a green energy tariff for your gas and electric

Willingness (Base: 3024)

- Done it/ always do it: 22%
- Willing: 59%
- Not willing/ can't: 19%

Key motivations (Base: 1775, 660, multi-choice)

- I want to help the environment: 50%
- Saving money: 34%
- Helping to reduce carbon: 34%
- Receiving money/a grant to do it: 18%
- Makes my home warmer/more efficient: 14%
- Preventing harm to wildlife: 13%
- I want to set an example to friends/family: 11%
- I would enjoy making the change: 9%
- Don't know: 8%
- Making my life more comfortable/easy: 6%
- Not applicable - nothing in particular would motivate me: 4%
- Other: 4%
- My friends/family do it: 4%
- Saving time: 2%
- Other: 1%

Key barriers (Base: 403, 1775, multi-choice)

- None of these: 16%
- I don't have enough money to pay for the ongoing costs of doing this: 14%
- Don't know: 10%
- I do not own my own home: 9%
- There is no/not enough government help to do this: 9%
- I would not know how to do this: 9%
- I have to spend money on other priorities: 8%
- I don't have enough money for the upfront costs of doing this: 8%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 6%
- I do not believe this will make a difference to climate change: 6%
- The people I live with do not want to do this: 5%
- I do not have time to do this: 4%
- This is not possible where I live: 4%
- My friends/family do not want to do this: 3%
- Nobody else in my community does this: 4%

Summary/key points

- Focusing efforts on the willing with environmental concerns could unlock more switches to green tariffs (especially competitively priced ones)
- Focusing on simple, actionable steps to make the change easy
Change to a green energy tariff for your gas and electric

What is the most effective practise?
• Letters to residents promoting energy switching from a trusted source
• Default green energy tariffs
• Encourage social sign up to green energy tariffs
• Make comparison of different energy tariffs easy

Best evidence – Control trial
• Trial 1) Supplier branded letters showing personalised cheaper deals from rival suppliers promoted switching energy tariff more effectively than Ofgem branded letters due to trusted relationships and the clear lack of ulterior motive in one supplier promoting its competitors.
• Trial 2) An Ofgem-branded letter showing personalised cheaper deals were more effective at promoting switching to a new energy tariff than up to six marketing letters from rival suppliers (UK, 2018)

References
The Behavioural Insights Team, One letter that triples energy switching, February 2018

Case studies
• Found when renewable energy was presented to consumers as the default option (i.e. opt-out), consumers choose this option 68% of the time but when the conventional supplier was presented as the default option, consumer choose the renewable option 41% of the time. This was despite higher costs for renewables (Germany, 2008)
• When apartment residents publicly signed up to install an automatic power regulator on their heating and cooling system to reduce energy demand, overall participation rates in the building increased (USA, 2013)
• Price comparison websites and apps serve to simplify decision-making for customers, while simplified metrics like a Tariff Comparison Rate (TCR) on energy tariffs combine multiple dimensions of price into a single figure to help consumers find the best options (UK, 2019)

The Behavioural Insights Team, Conservation for Nature 2019, page 37 and 48
Action dashboard – Install insulation (e.g. loft, cavity wall insulation etc.)

Opportunity size is large (5/18 actions)

Willingness is low (37%) and carbon saving is high

Home ownership and lack of upfront money are key barriers

Finance is a good route in to encourage behaviour change

Size of opportunity (outer line reflects largest opportunity)

321.18 million kgCO$_2$e

Willingness (Base: 3024)

Done it/ always do it  40%

Willing  37%

Not willing/ can't  23%

Willingness is low (37%) and carbon saving is high

Key barriers (Base: 1104)

I don't have enough money for the upfront costs of doing this  25%

I do not own my own home  21%

I have to spend money on other priorities  15%

Impact of behaviour change campaign: Low

Existing evidence: High
Level of influence: Medium

Key motivations (Base: 1104)

Makes my home warmer/ more efficient  48%

Saving money  44%

I want to help the environment  38%

Carbon saving for one person taking the action: 589.54 kgCO$_2$ equivalent annually

Best marketing approach

Financial
Easier

Most linked action
Install insulation
Install insulation (e.g. loft, cavity wall insulation etc.)

Willingness (Base: 3024)

- Done it/ always do it: 40%
- Willing: 37%
- Not willing/ can't: 23%

Key motivations (Base: 1104, 1216, multi-choice)

- Makes my home warmer/more efficient: 48%
- Saving money: 44%
- I want to help the environment: 28%
- Receiving money/a grant to do it: 10%
- Helping to reduce carbon: 26%
- Making my life more comfortable/easy: 18%
- I want to set an example to friends/family: 16%
- Preventing harm to wildlife: 12%
- I would enjoy making the change: 11%
- Don't know: 10%
- Not applicable - nothing in particular would motivate me: 5%

Key barriers (Base: 188, 1104, multi-choice)

- I don't have enough money for the upfront costs of doing this: 24%
- None of these: 25%
- I do not own my own home: 18%
- I have to spend money on other priorities: 16%
- There is no/not enough government help to do this: 10%
- Don't know: 13%
- I don't have enough money to pay for the ongoing costs of doing this: 10%
- I would not know how to do this: 7%
- I do not have time to do this: 7%
- This is not possible where I live: 7%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 4%
- I do not believe this will make a difference to climate change: 4%
- The people I live with do not want to do this: 3%
- My friends/family do not want to do this: 3%
- Nobody else in my community does this: 1%

Summary/key points

- Finance is key – Saving money and receiving a grant/money are strong motivations for the willing
- Money and home ownership are the biggest barriers
Install insulation

What is the most effective practise?
- Remove barriers to insulting home e.g. hassle factors
- Make information on energy saving tangible and personalised
- Provide education alongside insulation to promote higher energy saving

Best evidence – Control trial
- Different leaflets for loft insulation were sent out across three boroughs
  - Borough 1: Loft insulation and no loft clearance: £179 (Control)
  - Borough 2: Loft insulation & Loft clearance: £369 – cost price (No hassle factor)
  - Borough 2: Loft insulation & Loft clearance: £450 retail price (No hassle factor)
While there is some indication that reducing the hassle factor and the price increases the uptake of loft conversions, due to low uptake on the trial, the numbers were too small to provide firm conclusions (UK, 2013)

Case studies
- Education programmes provided at the same time as the adoption of new technology and one-off modifications can act as a stimulus for changing habitual behaviours. A well-designed study looking at those insulating and draft-proofing their properties showed that significant increases in energy savings were attainable by providing education at such moments of change (16% average gas saving with insulating alone vs. 26% with education included) (USA, 2008)
- When people were given information on how many cracks there were in their home 20% of people weather stripped their windows. But when information was made tangible (i.e. the gap in your house is the size of a basketball) 60% weather stripped. (Unknown, 2013)

References
Department of Energy and Climate Change, Removing the hassle factor associated with loft insulation: Results of a behavioural trial, September 2013
TED Talks, Three Myths of Behavior Change - What You Think You Know That You Don't: Jeni Cross, March 2013
Opportunity size is moderate (10/18 actions)

Willingness is high (61%) and carbon saving is low

Saving money as well as the environment are key motivators

Finance is a good route in and installation is a well linked action

Size of opportunity (outer line reflects largest opportunity)

80.31 million kgCO₂e

Willingness (Base: 3024)

Done it/ always do it 17%
Willing 61%
Not willing/ can't 22%

Carbon saving for one person taking the action: 89.42 kgCO₂ equivalent annually

Key barriers (Base: 1844)

I do not own my own home 13%
I would not know how to do this 12%
I don't have enough money for the upfront costs of doing this 11%

Key motivations (Base: 1844)

I want to help the environment 50%
Saving money 42%
Receiving money/a grant to do it 20%

Best marketing approach

Financial
Easier

Most linked action
Install insulation

Impact of behaviour change campaign: Medium
Existing evidence: Low
Level of influence: Medium
Use water saving devices (e.g. shower timer, rainwater barrel, etc.)

**Willingness (Base: 3024)**

<table>
<thead>
<tr>
<th></th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can't</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed</td>
<td>17%</td>
<td>61%</td>
<td>22%</td>
</tr>
</tbody>
</table>

**Key motivations (Base: 1844, 530, multi-choice)**

- I want to help the environment: 49%, 35%
- Saving money: 55%, 42%
- Receiving money/a grant to do it: 49%, 20%
- Makes my home warmer/more efficient: 19%, 13%
- Helping to reduce carbon: 19%, 15%
- I want to set an example to friends/family: 12%, 10%
- Preventing harm to wildlife: 12%, 11%
- I would enjoy making the change: 12%, 10%
- Don't know: 7%, 8%
- Making my life more comfortable/easy: 7%, 7%
- Not applicable - nothing in particular would motivate me: 6%, 5%
- Saving time: 4%, 4%
- My friends/family do it: 4%, 4%
- Other: 6%, 6%

**Key barriers (Base: 443, 1844, multi-choice)**

- None of these: 32%
- I do not own my own home: 17%
- I would not know how to do this: 16%
- I don't have enough money for the upfront costs of doing this: 12%
- Don't know: 11%
- I have to spend money on other priorities: 10%
- There is no/not enough government help to do this: 9%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 8%
- I don't have enough money to pay for the ongoing costs of doing this: 5%
- I do not believe this will make a difference to climate change: 4%
- The people I live with do not want to do this: 4%
- I do not have time to do this: 3%
- This is not possible where I live: 3%
- My friends/family do not want to do this: 3%
- Nobody else in my community does this: 3%

**Summary/key points**

- Connecting water to carbon is an issue among the unwilling
- Uncertainty on what this behaviour entails and some misunderstanding that there are high upfront costs, or you need to own your own home
Use water saving devices

What is the most effective practise?
• Incentivise water saving through giving away free devices

Case studies
• Interviews were conducted with 42 families. One of the areas covered was would water saving devices promote water saving?
  • Overall, individuals felt it was a relevant incentive and would promote water savings
  • However skepticism around whether interest in saving water would last once all water saving devices were collected (UK, 2013)

Research into saving water - the experiences and perceptions of customers and their households (2013). Consumer council for water.
Opportunity size is small (14/18 actions)

Willingness is moderate (48%) and carbon saving is high

A focus on the upfront costs is a barrier – long term saving a motivator

Finance is a good route in to encourage behaviour change

Size of opportunity (outer line reflects largest opportunity)

31.13 million kgCO₂e

Willingness (Base: 3024)

Done it/ always do it | 43%
Willing | 48%
Not willing/ can't | 9%

Carbon saving for one person taking the action: 44.04 kgCO₂ equivalent annually

Willingness is moderate (48%) and carbon saving is high

Key barriers (Base: 1443)

I don't have enough money for the upfront costs of doing this | 19%
I have to spend money on other priorities | 15%
I do not own my own home | 9%

Key motivations (Base: 1443)

I want to help the environment | 47%
Saving money | 41%
Helping to reduce carbon | 30%

Impact of behaviour change campaign: High
Existing evidence: High
Level of influence: Medium

Best marketing approach
Not determined

Most linked action
Reduce use of plastics

Action dashboard – Choose energy efficient appliances when purchasing or replacing
Choose energy efficient appliances when purchasing or replacing

Willingness (Base: 3024)

- Done it/ always do it: 43%
- Willing: 48%
- Not willing/ can't: 9%

Key motivations (Base: 1443, 2757, multi-choice)

- I want to help the environment: 47%
- Saving money: 41%
- Helping to reduce carbon: 39%
- Makes my home warmer/more efficient: 33%
- Receiving money/a grant to do it: 17%
- I want to set an example to friends/family: 17%
- I would enjoy making the change: 17%
- Making my life more comfortable/easy: 16%
- Preventing harm to wildlife: 16%
- Don't know: 11%
- Not applicable - nothing in particular would motivate me: 9%
- My friends/family do it: 8%
- Other: 3%
- Saving time: 3%

Summary/key points

- Convincing the willing that they will save money will promote this action. The environmental impact should be promoted secondarily.

Key barriers (Base: 157, 1443, multi-choice)

- None of these: 26%
- I don't have enough money for the upfront costs of doing this: 20%
- I have to spend money on other priorities: 19%
- Don't know: 15%
- I do not own my own home: 14%
- There is no/not enough government help to do this: 13%
- I don't have enough money to pay for the ongoing costs of doing this: 13%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 11%
- I would not know how to do this: 11%
- I do not believe this will make a difference to climate change: 6%
- I do not have time to do this: 6%
- The people I live with do not want to do this: 5%
- My friends/family do not want to do this: 5%
- Nobody else in my community does this: 4%
- This is not possible where I live: 4%
- Not willing/can't: 3%
Choose energy-efficient products when purchasing or replacing

What is the most effective practise?
- Point of sale displays
- Financial subsides

Best evidence – Control trial
- Lifetime running costs of white goods included at point of sale promoted consumers to purchase low energy appliance (see example label). This proved more effective than EU energy labelling with kWh per year. This strategy addresses information barriers in a salient form at point of sale (UK, 2014)

Case study
- Purchase of energy efficient stoves in Uganda increased from 5% to 45% with the following interventions: no upfront costs, paying in instalments and the option to drop out at anytime (Uganda, 2012)

References
Department of Energy and Climate Change, Evaluation of the DECC/John Lewis energy labelling trial, September 2014
Opportunity size is in the bottom 2 (17/18 actions)

Willingness is low (34%) and carbon saving is low

Belief it does not make a difference is a key barrier

Evidence of behaviour change is moderate. Finance is the best route

Size of opportunity (outer line reflects largest opportunity)

4.33 million kgCO₂e

Willingness (Base: 3024)

- Done it/ always do it: 61%
- Willing: 34%
- Not willing/ can't: 6%

Carbon saving for one person taking the action: 8.64 kgCO₂ equivalent annually

Key barriers (Base: 1775)

- I do not believe this will make a difference to climate change: 10%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 5%
- The people I live with do not want to do this: 4%

Key motivations (Base: 1775)

- I want to help the environment: 48%
- Saving money: 38%
- I want to set an example to friends/family: 15%

Impact of behaviour change campaign: High
Existing evidence: High
Level of influence: Medium

Best marketing approach
- Financial
- Easier

Most linked action
- Reduce food waste

Action dashboard – Use less water (e.g. turn the tap off when brushing your teeth)
Use less water (e.g. turn the tap off when brushing your teeth)

Willingness (Base: 3024)

- Done it/ always do it: 61%
- Willing: 34%
- Not willing/ can't: 6%

Key motivations (Base: 1019, 2912, multi-choice)

- I want to help the environment: 48%
- Saving money: 38%
- I want to set an example to friends/family: 15%
- Helping to reduce carbon: 11%
- Don't know: 10%
- Preventing harm to wildlife: 9%
- I would enjoy making the change: 8%
- Not applicable - nothing in particular would motivate me: 9%
- Makes my home warmer/more efficient: 8%
- Receiving money/a grant to do it: 6%
- Other: 5%
- My friends/family do it: 5%
- Making my life more comfortable/easy: 4%
- Saving time: 3%

Key barriers (Base: 148, 1019, multi-choice)

- None of these: 32%
- I do not believe this will make a difference to climate change: 10%
- I do not have time to do this: 8%
- I would not know how to do this: 9%
- I do not own my own home: 8%
- I have to spend money on other priorities: 7%
- There is no/not enough government help to do this: 7%
- I don't have enough money to pay for the upfront costs of doing this: 7%
- I don't have enough money to pay for the ongoing costs of doing this: 7%
- This is not possible where I live: 7%
- Nobody else in my community does this: 5%
- The people I live with do not want to do this: 5%

Summary/key points

- Helping the environment is the top motivation to save water, with money second most important
- Belief this is not important in reducing climate impact
Use less water (1)

What is the most effective practise?
- Real-time feedback with tailored messages
- Use social norms, message framing and choice architecture as secondary tactic

Best evidence – Control trial
- Effectiveness of providing different types of information to reduce water use with households in Australia
  - Intervention 1: Advice, including simple tips on how to save water
  - Intervention 2: Social Norms, guidance on how to reduce water usage based on what other households have done
  - Intervention 3: Specific Use, water-saving tips along with specific information of where water was being used in their household
  - Control, received no information.

All interventions reduced water usage. While interventions 1 and 2 showed faster initial decline, intervention 3 showed a more sustained decline in the long run (Australia, 2011)

References

Best evidence – Control trial
- Attunement labels were given to participants to be installed around their home and garden, e.g. dishwashers, outdoor taps. The labels are designed to show residents the environmental impact of the behaviour and suggest actions to reduce the impact. Shower label was fitted with a digital clock to enable residents to monitor time spent showering. The programme led to a 23% reduction in water consumption, particularly for using less water in the garden and reducing shower time (Australia, 2005)

Use less water (2)

Best evidence – Review
- Information is only meaningful when people know how they can change their behaviour and consider this feasible
- Real-time water use feedback provided through smart meters results in long-term savings only when such tailored feedback is reinforced by repetition, social norms, and message framing incentives
  - Framing refers to emphasizing aspects of a message – this could be direct impacts of behaviour or intrinsic motivation
- The water conservation impact of social norms or message framing appear to be short-lived if not supported by tailored feedback or information on the importance of saving water
- The use of emotions, primes and choice architecture prompt momentary water-saving responses

References

Case studies
- Letter based interventions to reduce water use in Costa Rica
  - Intervention 1: Social comparison across neighborhood on water bill with ‘injunctive’ norm
  - Intervention 2: Social comparison across city on water bill with ‘injunctive’ norm
  - Intervention 3: Postcards with water prompting people to make concrete plans to reduce water consumption
Neighbourhood social comparison reduced water consumption between 2.7% and 5.6%
Postcard intervention reduced water usage by 3.6% and 5.6% (Costa Rica, 2014)

Use less water (3)

Best evidence – Meta-analysis

- Provision of Home Energy Reports, which present both comparative consumption information and energy efficiency advice, lead people to change their energy-using behavior in the order of 1% to 3% per household.
- Households with more scope to reduce energy use (i.e., those with higher baseline energy consumption) experience larger savings in energy use within interventions.
- Team-based approaches, which use peer support (and pressure) as a way to encourage changes in behavior, have led to energy savings of the order of 8–10%. However, wide scale implementation of such programmes may be limited by the requirement for highly tailored instructions and coaching to each household or team.
- Home energy reports and team-based interventions produce sustained energy reductions whereas competitions can raise awareness and lead to large short-term changes (UK, 2012).

References
Best evidence: Control trial (from meta-analysis)
- Home Energy Reports included two main elements:
  - Social comparison (see picture): Electrical consumption compared to neighbours and the ‘injunctive norm’ by categorising the household as great, good or below average
  - Action steps: providing tips for saving energy, ranked by level of effort, investment and potential monetary savings. The tips provided are targeted to the household through an analysis of the household’s historical energy use patterns and demographic characteristics
  
  Average energy use fell to 2% per household
  - Those who had the highest level of energy consumption pre-intervention decreased usage by 6.3% and only 0.3% for those with low usage (USA, 2011)

Best evidence: Control trial (from meta-analysis)
- The EcoTeams programme: four to ten neighbours and friends to engage in facilitated discussions about environmental behaviour in the household, covering topics relating to energy and water consumption as well as waste management and transport. They met once a month for eight months. The group setting enables members to discuss personal experiences and receive feedback and advice. Participants weigh their rubbish and recycling and monitor their energy use over the course of the programme. Electricity use fell by 7% as a result of the programme (UK, 2008)

References
Use less water (5)

Related: Monitoring energy use

Best evidence – Control trial
- NEST Learning thermostat: Uses sensors and machine-learning to understand the thermal properties of your building and your occupancy habits and tweaks the heating accordingly. Savings were achieved of around 6-7% of the heating system’s gas use, or 4.5-5% of total household gas consumption, compared to the ‘modern suite’ of controls (a programmable timer, room thermostat, and radiator valves) (UK, 2017)

Case studies
- Impacts of energy use often seems irrelevant and distant. To tackle this, this study provided households with real-time tailored information about their electricity use that either communicated cost savings information or the health impacts (including pollution, childhood asthma, and cancer) associated with electricity consumption. The group receiving the health messages reduced energy consumption by 8%, compared to those that received monetary savings information. This information was dramatically more effective with parents, who reduced their consumption by 19% (USA, 2015)

References
Action summaries – Sustainable travel
Area summary: Sustainable travel

**Buy/lease an electric car**

<table>
<thead>
<tr>
<th>Opportunity Size</th>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>637 (millions of kg CO2 annually)</td>
<td>52%</td>
<td>Low</td>
<td>Medium</td>
</tr>
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</table>

What evidence suggests you should do...
Invest in infrastructure. Financial incentives that give immediate rewards. Promote collective and community action.

**Avoid flights by working from home**

<table>
<thead>
<tr>
<th>Opportunity Size</th>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>373 (millions of kg CO2 annually)</td>
<td>24%</td>
<td>Low</td>
<td>Medium</td>
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</table>

What evidence suggests you should do...
Make it easy to see the impact of flying. Identify the most effective communications to tackle known barriers to action.

**Avoid flights by taking the train**

<table>
<thead>
<tr>
<th>Opportunity Size</th>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>152 (millions of kg CO2 annually)</td>
<td>35%</td>
<td>Low</td>
<td>Medium</td>
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</table>

What evidence suggests you should do...
Make it easy to see the impact of flying. Identify the most effective communications to tackle known barriers to action.

**Avoid international flights**

<table>
<thead>
<tr>
<th>Opportunity Size</th>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 (millions of kg CO2 annually)</td>
<td>26%</td>
<td>Low</td>
<td>Medium</td>
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</table>

What evidence suggests you should do...
Make it easy to see the impact of flying. Identify the most effective communications to tackle known barriers to action.

**Avoid local travel by working from home**

<table>
<thead>
<tr>
<th>Opportunity Size</th>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 (millions of kg CO2 annually)</td>
<td>47%</td>
<td>High</td>
<td>High</td>
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</table>

What evidence suggests you should do...
Gain quick wins through low-cost interventions e.g. letters and emails with call to actions, testimonials, easy steps to participation and incentives. Use moments of change to ensure intervention is timely.

**Public Transport**

<table>
<thead>
<tr>
<th>Opportunity Size</th>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 (millions of kg CO2 annually)</td>
<td>41%</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

What evidence suggests you should do...
Gain quick wins through low-cost interventions e.g. letters and emails with call to actions, testimonials, easy steps to participation and incentives. Use moments of change to ensure intervention is timely.

**Active Transport**

<table>
<thead>
<tr>
<th>Opportunity Size</th>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 (millions of kg CO2 annually)</td>
<td>48%</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

What evidence suggests you should do...
Gain quick wins through low-cost interventions e.g. letters and emails with call to actions, testimonials, easy steps to participation and incentives. Use moments of change to ensure intervention is timely.
Action dashboard – Buy/ lease an electric car

- **Opportunity size is in the top 5 (3/18 actions)**
- **Willingness is moderate (52%) and carbon saving is high**
- **Upfront costs are the key barriers and only a change in costs will encourage**
- **Finance is the communication angle to use**

**Size of opportunity (outer line reflects largest opportunity)**
- 636.64 million kgCO₂e

**Willingness (Base: 3024)**
- Done it/ always do it: 2%
- Willing: 52%
- Not willing/ can't: 46%

**Carbon saving for one person taking the action:** 831.5 kgCO₂ equivalent annually

**Key barriers (Base: 1567)**
- I don't have enough money for the upfront costs of doing this: 42%
- There is no/not enough government help to do this: 20%
- I don't have enough money to pay for the ongoing costs of doing this: 19%

**Key motivations (Base: 1567)**
- I want to help the environment: 55%
- Helping to reduce carbon: 44%
- Receiving money/a grant to do it: 39%

**Best marketing approach**
- Financial
- Easier

**Most linked action**
- Install renewable energy devices

**Impact of behaviour change campaign: Low**
- Existing evidence: Low
- Level of influence: Medium
### Willingness (Base: 3024)

- **Done it/ always do it**: 2%
- **Willing**: 52%
- **Not willing/ can’t**: 46%

### Key motivations (Base: 1567, 72, multi-choice)

- I want to help the environment: **Willing** 55%, **Not willing/can’t** 45%
- Helping to reduce carbon: **Willing** 44%, **Not willing/can’t** 56%
- Receiving money/a grant to do it: **Willing** 39%, **Not willing/can’t** 61%
- Saving money: **Willing** 33%, **Not willing/can’t** 67%
- I would enjoy making the change: **Willing** 33%, **Not willing/can’t** 67%
- I want to set an example to friends/family: **Willing** 23%, **Not willing/can’t** 77%
- Preventing harm to wildlife: **Willing** 12%, **Not willing/can’t** 88%
- Making my life more comfortable/easy: **Willing** 25%, **Not willing/can’t** 75%
- Don’t know: **Willing** 12%, **Not willing/can’t** 88%
- Not applicable - nothing in particular would motivate me: **Willing** 9%, **Not willing/can’t** 91%
- Other: **Willing** 9%, **Not willing/can’t** 91%
- My friends/family do it: **Willing** 3%, **Not willing/can’t** 97%
- Saving time: **Willing** 7%, **Not willing/can’t** 93%
- Makes my home warmer/more efficient: **Willing** 3%, **Not willing/can’t** 97%

### Summary/key points

- Enjoying the change and wanting to set an example are key differences among those already owning electric cars.
- Willing are more motivated by the environment but held back by costs.
Buy/lease an electric car

What is the most effective practise?

• Invest in infrastructure
• Financial incentives that give immediate rewards
• Collective action
• Social norms

Case study

• Study into the adoption rates of electric cars in 400 US states with local incentives
  • Financial incentives closer to the point of sale are more attractive to potential customers than rewards that arrived later (i.e. a rebate raised sales by 4.8% compared to tax credit only raising sales by 2.3%);
  • Presence of public charging infrastructure has a strong influence on vehicle purchases decisions;
  • Promoting environmental awareness (USA, 2018)
• The use of electric vehicles can be incentivised by building on the belief that a group is capable of affecting change, include targeting communications at communities or framing individual electrical vehicles use as part of a collective endeavour
• Social norms can also be used to increase the uptake of electric vehicles through programmes that get people to experience electric vehicles, which have the benefit that people are then more likely to recommend them to others

Reference
Narassimhan & Johnson, Driving modal shift from car to bus, 2018
Barth, M. et al. (2016) Still undetected – Social norms and collective efficacy predict the acceptance of electric vehicles in Germany. Transportation Research Part F: Traffic Psychology and Behaviour, 37, pp. 64–77
Action dashboard – Avoid flights by working from home/ conference/ video calls

Opportunity size is high (4/18 actions)

Willingness is low (24%) and carbon saving is moderate

People choose other climate actions over avoiding flights

Making it easier is key to changing behaviour

Size of opportunity (outer line reflects largest opportunity)

Willingness (Base: 3024)

Done it/ always do it | 14%
Willing | 24%
Not willing/ can't | 61%

Key motivations (Base: 443)

- I want to help the environment | 40%
- Helping to reduce carbon | 35%
- Saving time | 27%

I believe it will make a difference but have chosen to do something else to...
- 7%
There is no/not enough government help to do this
- 5%
This is not possible where I live
- 5%

Impact of behaviour change campaign: Low
Existing evidence: Low
Level of influence: Medium

Best marketing approach
Easier

Most linked action
Avoid local travel – home/ conference/ video call

Carbon saving for one person taking the action:
1055.07 kg CO₂ equivalent annually
Avoid flights by working from home/conference/video calls

Willingness (Base: 1819)

<table>
<thead>
<tr>
<th></th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can't</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14%</td>
<td>24%</td>
<td>61%</td>
</tr>
</tbody>
</table>

Key motivations (Base: 443, 721, multi-choice)

- I want to help the environment: 40%
- Helping to reduce carbon: 35%
- Saving time: 27%
- Saving money: 26%
- Making my life more comfortable/easy: 22%
- I would enjoy making the change: 19%
- Not applicable - nothing in particular would motivate me: 13%
- Don’t know: 13%
- I want to set an example to friends/family: 10%
- Other: 10%
- Preventing harm to wildlife: 9%
- Receiving money/a grant to do it: 10%
- My friends/family do it: 8%
- Makes my home warmer/more efficient: 8%

Key barriers (Base: 145, 443, multi-choice)

- None of these: 42%
- Don’t know: 13%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 7%
- There is no/not enough government help to do this: 5%
- This is not possible where I live: 5%
- I do not believe this will make a difference to climate change: 4%
- Nobody else in my community does this: 4%
- I do not have time to do this: 4%
- I would not know how to do this: 4%
- I don’t have enough money to pay for the ongoing costs of doing this: 4%
- My friends/family do not want to do this: 4%
- I don’t have enough money for the upfront costs of doing this: 3%
- The people I live with do not want to do this: 3%
- I have to spend money on other priorities: 2%
- I do not own my own home: 1%

Summary/key points

- Individuals are choosing other ways to reduce climate change due to lack of incentive to do otherwise
Avoid flights by working from home/conference/video calls

What is the most effective practise?
• Make it easy to see the impact of flying
• Identify the most effective communications to tackle known barriers to action

Case studies to reduce flights
• ‘Flygskam’ - flight shame and ‘Tagskryt’ - train brag is a campaign originating from Sweden to encourage reduction in air travel due to environmental impact. The impact of this campaign on social media through the hashtag #jagstannarpåmarken - #stayontheground is thought to be one of the reasons behind a 3% fall in domestic passenger numbers in 2018 (Sweden, 2019)
• Websites have made it easy to see the impact of flying on climate change by comparing to arctic ice melt and actions that can be done to mitigate effect

References
BBC, Why ‘flight shame’ is making people swap planes for trains, 2019
https://shameplane.com

Case studies to encourage offsetting flights
• Negative attitudes about carbon offsetting act as a barrier to purchasing. The most effective messages to boost voluntary carbon offsetting that were identified in this study were:
  • Effectiveness message: successful projects which have been implemented with funding raised through voluntary carbon offsets
  • Transparency message: percentage of passengers' contribution on each project was determined
  • Choice message: four projects with pictures and descriptions that the individual could choose to donate to (Australia, 2017)

Opportunity size is moderate (6/18 actions) | Willingness is low (35%) and carbon saving is high | Time and money and the key restraints to this action | Financially viable alternatives are key

Size of opportunity (outer line reflects largest opportunity)

Willingness (Base: 3024)

Done it/ always do it: 18%
Willing: 35%
Not willing/ can't: 48%

Carbon saving for one person taking the action: 294 kgCO₂ equivalent annually

Key barriers (Base: 1041)

- I do not have time to do this: 15%
- I don't have enough money for the upfront costs of doing this: 11%
- There is no/ not enough government help to do this: 11%

Key motivations (Base: 1041)

- I want to help the environment: 47%
- Helping to reduce carbon: 39%
- Saving money: 23%

Impact of behaviour change campaign: Low
Existing evidence: Low
Level of influence: Medium

Best marketing approach: Financial

Most linked action: Avoid long haul flights by not travelling internationally
Avoid short haul flights by taking the train instead

Willingness (Base: 3024)

- Done it/ always do it: 18%
- Willing: 35%
- Not willing/ can't: 48%

Key motivations (Base: 1041, 1490, multi-choice)

- I want to help the environment: 47%
- Helping to reduce carbon: 39%
- Saving money: 39%
- I would enjoy making the change: 23%
- Not applicable - nothing in particular would motivate me: 12%
- I want to set an example to friends/family: 12%
- Preventing harm to wildlife: 11%
- Making my life more comfortable/easy: 9%
- Don't know: 9%
- Other: 6%
- Saving time: 5%
- Receiving money/a grant to do it: 4%
- My friends/family do it: 4%
- Makes my home warmer/more efficient: 4%
- Don't know: 3%

Key barriers (Base: 502, 1041, multi-choice)

- None of these: 33%
- I do not have time to do this: 21%
- I don't have enough money for the upfront costs of doing this: 19%
- There is no/not enough government help to do this: 15%
- I don't have enough money to pay for the ongoing costs of doing this: 14%
- I have to spend money on other priorities: 10%
- Don't know: 10%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 11%
- This is not possible where I live: 7%
- My friends/family do not want to do this: 7%
- The people I live with do not want to do this: 4%
- I do not believe this will make a difference to climate change: 3%
- I would not know how to do this: 3%
- I do not own my own home: 2%
- Nobody else in my community does this: 1%

Summary/key points

- Motivations to avoid short haul flights are clearly environmental
- Time, cost and lack of incentive are the most important barriers for the willing
Avoid short haul flights by taking the train

What is the most effective practise?
- Make it easy to see the impact of flying
- Identify the most effective communications to tackle known barriers to action

Case studies to reduce flights
- ‘Flygskam’ - flight shame and ‘Tagskryt’ - train brag is a campaign originating from Sweden to encourage reduction in air travel due to environmental impact. The impact of this campaign on social media through the hashtag #jagstannarpåmarken - #stayontheground is thought to be one of the reasons behind a 3% fall in domestic passenger numbers in 2018 (Sweden, 2019)
- Websites have made it easy to see the impact of flying on climate change by comparing to arctic ice melt and actions that can be done to mitigate effect

References
BBC, Why ‘flight shame’ is making people swap planes for trains, 2019
https://shameplane.com

Case studies to encourage offsetting flights
- Negative attitudes about carbon offsetting act as a barrier to purchasing. The most effective messages to boost voluntary carbon offsetting that were identified in this study were:
  - Effectiveness message: successful projects which have been implemented with funding raised through voluntary carbon offsets
  - Transparency message: percentage of passengers' contribution on each project was determined
  - Choice message: four projects with pictures and descriptions that the individual could choose to donate to (Australia, 2017)


Impact of behaviour change campaign: Low
Existing evidence: Low
Level of influence: Medium
Opportunity size is moderate (8/18 actions)

Willingness is low (26%) and carbon saving is high

Choice is the key element of behaviour change – it often needs unanimity

Financially viable alternatives are key

Action dashboard – Avoid long haul flights by choosing not to travel internationally

Willingness (Base: 3024)

- Done it/ always do it: 12%
- Willing: 26%
- Not willing/ can't: 62%

Size of opportunity (outer line reflects largest opportunity)

- 101.54 million kgCO₂e

Key barriers (Base: 785)

- I believe it will make a difference but have chosen to do something else to...: 12%
- My friends/family do not want to do this: 10%
- The people I live with do not want to do this: 7%

Key motivations (Base: 785)

- I want to help the environment: 48%
- Helping to reduce carbon: 39%
- Saving money: 21%

Carbon saving for one person taking the action:
265 kgCO₂ equivalent annually

Impact of behaviour change campaign: Low

Existing evidence: Low

Level of influence: Medium

Best marketing approach

Financial

Most linked action

Avoid short haul flights by taking the train instead
Avoid long haul flights by choosing not to travel internationally

**Willingness (Base: 3024)**

- Done it/ always do it: 12%
- Willing: 26%
- Not willing/ can't: 62%

**Key motivations (Base: 785, 1409, multi-choice)**

- I want to help the environment: 48%
- Helping to reduce carbon: 39%
- Saving money: 21%
- Not applicable - nothing in particular would motivate me: 10%
- Preventing harm to wildlife: 14%
- Don't know: 9%
- I want to set an example to friends/family: 12%
- Other: 8%
- I would enjoy making the change: 8%
- Saving time: 6%
- Making my life more comfortable/easy: 5%
- Receiving money/a grant to do it: 4%
- My friends/family do it: 3%
- Makes my home warmer/more efficient: 3%

**Key barriers (Base: 1189, 785, multi-choice)**

- None of these: 35%
- Don't know: 14%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 31%
- My friends/family do not want to do this: 12%
- The people I live with do not want to do this: 10%
- There is no/not enough government help to do this: 7%
- I don't have enough money for the upfront costs of doing this: 4%
- I have to spend money on other priorities: 4%
- I do not have time to do this: 4%
- I don't have enough money to pay for the ongoing costs of doing this: 3%
- Nobody else in my community does this: 2%
- I do not own my own home: 2%
- I do not believe this will make a difference to climate change: 2%
- I would not know how to do this: 2%
- This is not possible where I live: 2%
- My friends/family do not want to do this: 11%
- My friends/family do not want to do this: 2%
- My friends/family do not want to do this: 1%

**Summary/key points**

- Choosing alternatives (potentially less impactful) is a key barrier among the unwilling
- Social norms stand as a clear barrier
Avoid international flights by choosing not to travel internationally

What is the most effective practise?
• Make it easy to see the impact of flying
• Identify the most effective communications to tackle known barriers to action

Case studies to reduce flights
• ‘Flygskam’ - flight shame and ‘Tagskryt’ - train brag is a campaign originating from Sweden to encourage reduction in air travel due to environmental impact. The impact of this campaign on social media through the hashtag #jagstannarpåmarken - #stayontheground is thought to be one of the reasons behind a 3% fall in domestic passenger numbers in 2018 (Sweden, 2019)
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• Negative attitudes about carbon offsetting act as a barrier to purchasing. The most effective messages to boost voluntary carbon offsetting that were identified in this study were:
  • Effectiveness message: successful projects which have been implemented with funding raised through voluntary carbon offsets
  • Transparency message: percentage of passengers' contribution on each project was determined
  • Choice message: four projects with pictures and descriptions that the individual could choose to donate to (Australia, 2017)

Opportunity size is moderate (12/18 actions)

Willingness is moderate (47%), CO₂ saving moderate

Motivations are around saving money, time and the environment

Evidence is weak on the best approach to take

Size of opportunity (outer line reflects largest opportunity)

70.59 million kgCO₂e

Willingness (Base: 3024)

Done it/ always do it: 11%
Willing: 47%
Not willing/ can't: 42%

Carbon saving for one person taking the action: 102 kgCO₂ equivalent annually

Key barriers (Base: 850)

- This is not possible where I live: 11%
- There is no/not enough government help to do this: 7%
- I do not believe this will make a difference to climate change: 5%

Key motivations (Base: 850)

- I want to help the environment: 37%
- Saving money: 31%
- Saving time: 31%

Best marketing approach

Not determined

Most linked action

Avoid flights by working at home / conference/ video calls

Impact of behaviour change campaign: Low

Existing evidence: Low
Level of influence: Medium
Avoid local travel by working from home/conference/video calls

Willingness (Base: 1819)

<table>
<thead>
<tr>
<th></th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can’t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11%</td>
<td>47%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Key motivations (Base: 850, 1003, multi-choice)

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>I want to help the environment</td>
<td>37%</td>
</tr>
<tr>
<td>Saving money</td>
<td>31%</td>
</tr>
<tr>
<td>Saving time</td>
<td>27%</td>
</tr>
<tr>
<td>Making my life more comfortable/easy</td>
<td>31%</td>
</tr>
<tr>
<td>Helping to reduce carbon</td>
<td>27%</td>
</tr>
<tr>
<td>I would enjoy making the change</td>
<td>30%</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>12%</td>
</tr>
<tr>
<td>I want to set an example to friends/family</td>
<td>10%</td>
</tr>
<tr>
<td>Not applicable - nothing in particular would motivate me</td>
<td>6%</td>
</tr>
<tr>
<td>Preventing harm to wildlife</td>
<td>9%</td>
</tr>
<tr>
<td>Receiving money/a grant to do it</td>
<td>6%</td>
</tr>
<tr>
<td>My friends/family do it</td>
<td>5%</td>
</tr>
<tr>
<td>Makes my home warmer/more efficient</td>
<td>4%</td>
</tr>
</tbody>
</table>

Key barriers (Base: 194, 850, multi-choice)

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of these</td>
<td>45%</td>
</tr>
<tr>
<td>This is not possible where I live</td>
<td>8%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>11%</td>
</tr>
<tr>
<td>There is no/not enough government help to do this</td>
<td>8%</td>
</tr>
<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>9%</td>
</tr>
<tr>
<td>Nobody else in my community does this</td>
<td>9%</td>
</tr>
<tr>
<td>I believe it will make a difference but have chosen to do something else to reduce climate change</td>
<td>10%</td>
</tr>
<tr>
<td>I would not know how to do this</td>
<td>3%</td>
</tr>
<tr>
<td>I do not have time to do this</td>
<td>3%</td>
</tr>
<tr>
<td>I don’t have enough money to pay for the ongoing costs of doing this</td>
<td>6%</td>
</tr>
<tr>
<td>I have to spend money on other priorities</td>
<td>3%</td>
</tr>
<tr>
<td>The people I live with do not want to do this</td>
<td>2%</td>
</tr>
<tr>
<td>My friends/family do not want to do this</td>
<td>2%</td>
</tr>
<tr>
<td>I do not own my own home</td>
<td>2%</td>
</tr>
<tr>
<td>I don’t have enough money for the upfront costs of doing this</td>
<td>2%</td>
</tr>
</tbody>
</table>

Summary/key points

- There are many strong motivations to avoid travel by working from home
- (From verbatim analysis) resistance via lack of technology or permission are key barriers. COVID-19 is reducing those barriers
Avoid local travel by working from home/conference/video calls (1)

What is the most effective practice?
• Gain quick wins through low-cost interventions e.g. letters and emails with call to actions, testimonials, easy steps to participation and incentives
• Use moments of change to ensure intervention is timely – e.g. use road closures as an opportunity to suggest more sustainable forms of transport

Best evidence – Control trial
• Encouraging use of sustainable transport (car sharing, public transport and cycling) for employees at Heathrow. Interventions used:
  • Letters/emails with call to actions, testimonials, opportunity cost made salient, easy steps to participation, matching to other co-workers (car sharing only), free tickets (public transport only) and follow up/reminders
  • Personalised commuter plan
  • ‘Try a bike on us’ scheme
There was no significant effect of the interventions in the scheme however this could be due to:
• Informal interventions already being conducted in setting, so they were unable to gain ‘quick wins’
• Lack of timely interventions (see below)
• Lack of pairing behaviour change with more direct measures such as improvements to infrastructure, incentives and regulation (UK, 2017)

References
An Evaluation of Low Cost Workplace-Based Interventions to Encourage Use of Sustainable Transport, 2017, Behavioural Insights Team
Avoid local travel by working from home/conference/video calls (2)

Case study for making information easy to understand

- By displaying fuel efficiency in terms of litres of fuel saved per 100 miles of driving (rather than as an increase in the number of miles per litre of fuel) individuals were able to conceptualise the efficiency of different vehicles and the cost of alternative travel choices more accurately (UK, 2008)

References

Case study: Greener Journeys

- Targeted various groups to reduce driving and promote public transport use:
  - Car drivers
    - targeted ‘moments of pain’ e.g. parking, petrol stations;
    - targeted those with good bus routes;
    - gave out free vouchers to car drivers. Redeemers of free bus vouchers were 21% more likely to use the bus again in the next few months.
  - Encourage young people to delay driving
    - created a new tool called ‘how much does it cost to drive’. Good engagement on social media with 21% agreeing the could do better things with their money after using the tool

Driving modal shift from car to bus, 2013

Case study for using role models

- High profile individuals acting in ways that help to tackle climate change can help to normalise such behaviour. For example, in London the Mayor’s vision is for cycling in London to “be a normal part of everyday life, something people hardly think about and feel comfortable doing in ordinary clothes.”

https://www.london.gov.uk/what-we-do/transport/cycling-and-walking/mayors-vision-cycling

Impact of behaviour change campaign: High
Avoid local travel by working from home/conference/video calls (3)

Case studies for timely interventions

- Route choices made by London commuters before and after tube strikes in February 2014 were investigated. More than 5% of commuters changed travel route permanently once normal service resumed (UK, 2014)
- After a major ride to work day event people were more likely to continue riding to work. More than one in four (27%) of those who rode to work for the first time as part of the event were still riding to work five months after the event (Australia, 2007)
- Frequent drivers who changed to public transport during a 8-day freeway closure continued to use public transport more frequently one year after the closure than did those drivers who did not change to public transport during the closure (Japan, 2003)

References
Rose & Marfurt, Travel behaviour change impacts of a major ride to work day event, 2007
Fujii & Garling, Development of script-based travel mode choice after forced change, 2003

Case studies for incentivising travel in off-peak times

- Stanford University offers commuters who arrive at its notoriously congested campus in off-peak times a chance to win cash prizes in a daily lottery (USA, 2015)
- In Bangalore commute times for those leaving after 7:30am are about 1.5-2 times longer than the average commute for those who leave before that time. An incentive scheme called INSTANT rewarded commuters with entries into a weekly raffle according to their arrival time, with less congested arrival times receiving more credits. 14,000 commuters took part and with the number of participants traveling before the peak shifting from 21% to 34% (India, 2009)

Zhu et al., Reducing road congestion through incentives: a case study, 2015
Consuming differently, consuming sustainably: behavioural insights for policymaking, 2017, page 33
Opportunity size is moderate (13/18 actions)

Willingness is moderate (41%) and carbon saving is low

Having time and being able to do it in the local area are the key barriers

Making it easier or obvious is the best angle to use

Size of opportunity (outer line reflects largest opportunity)

- 44.67 million kgCO\textsubscript{2}e

Willingness (Base: 3024)

- Done it/ always do it: 19%
- Willing: 41%
- Not willing/ can't: 40%

Key motivations (Base: 1233)

- I want to help the environment: 47%
- Helping to reduce carbon: 36%
- Saving money: 26%

Key barriers (Base: 1233)

- This is not possible where I live: 24%
- I do not have time to do this: 15%
- There is no/not enough government help to do this: 11%

Impact of behaviour change campaign: High

Existing evidence: High

Level of influence: High

Best marketing approach

- Easier

Most linked action

- Reduce use by using active transport
Reduce car/taxi use by using public transport

Willingness (Base: 3024)

<table>
<thead>
<tr>
<th>Done it/ always do it</th>
<th>19%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willing</td>
<td>41%</td>
</tr>
<tr>
<td>Not willing/ can't</td>
<td>40%</td>
</tr>
</tbody>
</table>

Key motivations (Base: 1233, 2146, multi-choice)

- I want to help the environment: 40%
- Helping to reduce carbon: 28%
- Saving money: 27%
- I want to set an example to friends/family: 12%
- Not applicable - nothing in particular would motivate me: 13%
- I would enjoy making the change: 11%
- Other: 11%
- Preventing harm to wildlife: 9%
- Don't know: 8%
- Saving time: 6%
- Receiving money/a grant to do it: 10%
- Making my life more comfortable/easy: 8%
- My friends/family do it: 4%
- Makes my home warmer/more efficient: 3%

Key barriers (Base: 935, 1233, multi-choice)

- None of these: 20%
- This is not possible where I live: 29%
- I do not have time to do this: 21%
- There is no/not enough government help to do this: 19%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 17%
- I have to spend money on other priorities: 12%
- I don't have enough money for the upfront costs of doing this: 11%
- The people I live with do not want to do this: 7%
- I do not believe this will make a difference to climate change: 7%
- My friends/family do not want to do this: 5%
- I would not know how to do this: 4%
- Nobody else in my community does this: 2%
- I do not own my own home: 1%

Summary/key points

- Unlocking the ability to take public transport in a time efficient way is the most important factor. Keeping costs low is also key.
Reduce car/taxi use by using public transport (1)

What is the most effective practise?
• Gain quick wins through low-cost interventions e.g. letters and emails with call to actions, testimonials, easy steps to participation and incentives
• Use moments of change to ensure intervention is timely – e.g. use road closures as an opportunity to suggest more sustainable forms of transport

Best evidence – Control trial
• Encouraging use of sustainable transport (car sharing, public transport and cycling) for employees at Heathrow. Interventions used:
  • Letters/emails with call to actions, testimonials, opportunity cost made salient, easy steps to participation, matching to other co-workers (car sharing only), free tickets (public transport only) and follow up/reminders
  • Personalised commuter plan
  • ‘Try a bike on us’ scheme
There was no significant effect of the interventions in the scheme however this could be due to:
• Informal interventions already being conducted in setting, so they were unable to gain ‘quick wins’
• Lack of timely interventions (see below)
• Lack of pairing behaviour change with more direct measures such as improvements to infrastructure, incentives and regulation (UK, 2017)

References
An Evaluation of Low Cost Workplace-Based Interventions to Encourage Use of Sustainable Transport, 2017, Behavioural Insights Team

Impact of behaviour change campaign: High
Existing evidence: High
Level of influence: High
Case study: Greener Journeys

- Targeted various groups to reduce driving and promote public transport use:
  - Car drivers
    - targeted ‘moments of pain’ e.g. parking, petrol stations;
    - targeted those with good bus routes;
    - gave out free vouchers to car drivers. Redeemers of free bus vouchers were 21% more likely to use the bus again in the next few months.
  - Encourage young people to delay driving
    - created a new tool called ‘how much does it cost to drive’. Good engagement on social media with 21% agreeing the could do better things with their money after using the tool

Driving modal shift from car to bus, 2013

Case study for using role models

- High profile individuals acting in ways that help to tackle climate change can help to normalise such behaviour. For example, in London the Mayor’s vision is for cycling in London to “be a normal part of everyday life, something people hardly think about and feel comfortable doing in ordinary clothes.”

https://www.london.gov.uk/what-we-do/transport/cycling-and-walking/mayors-vision-cycling

References

Case study for making information easy to understand

- By displaying fuel efficiency in terms of litres of fuel saved per 100 miles of driving (rather than as an increase in the number of miles per litre of fuel) individuals were able to conceptualise the efficiency of different vehicles and the cost of alternative travel choices more accurately (UK, 2008)
Reduce car/taxi use by using public transport (3)

Case studies for timely interventions

- Route choices made by London commuters before and after tube strikes in February 2014 were investigated. More than 5% of commuters changed travel route permanently once normal service resumed (UK, 2014)
- After a major ride to work day event people were more likely to continue riding to work. More than one in four (27%) of those who rode to work for the first time as part of the event were still riding to work five months after the event (Australia, 2007)
- Frequent drivers who changed to public transport during a 8-day freeway closure continued to use public transport more frequently one year after the closure than did those drivers who did not change to public transport during the closure (Japan, 2003)

References
Rose & Marfurt, Travel behaviour change impacts of a major ride to work day event, 2007
Fujii & Garling, Development of script-based travel mode choice after forced change, 2003

Case studies for incentivising travel in off-peak times

- Stanford University offers commuters who arrive at its notoriously congested campus in off-peak times a chance to win cash prizes in a daily lottery (USA, 2015)
- In Bangalore commute times for those leaving after 7:30am are about 1.5-2 times longer than the average commute for those who leave before that time. An incentive scheme called INSTANT rewarded commuters with entries into a weekly raffle according to their arrival time, with less congested arrival times receiving more credits. 14,000 commuters took part and with the number of participants traveling before the peak shifting from 21% to 34% (India, 2009)

Zhu et al., Reducing road congestion through incentives: a case study, 2015
Consuming differently, consuming sustainably: behavioural insights for policymaking, 2017, page 33
Opportunity size is in the bottom 5 (16/18 actions)

Willingness is moderate (48%) and carbon saving is low

Having time and being able to do it in the local area are the key barriers

Making it easier or obvious is the best angle to use

Size of opportunity (outer line reflects largest opportunity)

15.55 million kgCO$_2$e

Willingness (Base: 3024)

Done it/ always do it 21%
Willing 48%
Not willing/ can't 31%

Carbon saving for one person taking the action: 22 kgCO$_2$ equivalent annually

Key barriers (Base: 1461)

I do not have time to do this 22%
This is not possible where I live 19%
There is no/not enough government help to do this 6%

Key motivations (Base: 1461)

I want to help the environment 49%
Helping to reduce carbon 34%
Saving money 32%

Most linked action
Reduce use by using public transport

Best marketing approach
Easier

Impact of behaviour change campaign: High
Existing evidence: High
Level of influence: High
Reduce car/taxi use by using active forms of transport (e.g. walking, cycling)

### Willingness (Base: 3024)

<table>
<thead>
<tr>
<th></th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can't</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21%</td>
<td>48%</td>
<td>31%</td>
</tr>
</tbody>
</table>

### Key motivations (Base: 1461, 2427, multi-choice)

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<thead>
<tr>
<th>Motivation</th>
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<th>Willing (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want to help the environment</td>
<td>11%</td>
<td>39%</td>
</tr>
<tr>
<td>Helping to reduce carbon</td>
<td>12%</td>
<td>34%</td>
</tr>
<tr>
<td>Saving money</td>
<td>30%</td>
<td>27%</td>
</tr>
<tr>
<td>I would enjoy making the change</td>
<td>22%</td>
<td>11%</td>
</tr>
<tr>
<td>I want to set an example to friends/family</td>
<td>4%</td>
<td>22%</td>
</tr>
<tr>
<td>Preventing harm to wildlife</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Not applicable - nothing in particular would motivate me</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Making my life more comfortable/easy</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Don't know</td>
<td>21%</td>
<td>8%</td>
</tr>
<tr>
<td>Receiving money/a grant to do it</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Saving time</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>My friends/family do it</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>Makes my home warmer/more efficient</td>
<td>11%</td>
<td>3%</td>
</tr>
</tbody>
</table>

### Key barriers (Base: 710, 1461, multi-choice)

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Not willing/ can't (%)</th>
<th>Willing (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of these</td>
<td>27%</td>
<td>35%</td>
</tr>
<tr>
<td>I do not have time to do this</td>
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</tr>
<tr>
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<td>27%</td>
<td>19%</td>
</tr>
<tr>
<td>Don't know</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>There is no/not enough government help to do this</td>
<td>4%</td>
<td>13%</td>
</tr>
<tr>
<td>I believe it will make a difference but have chosen to do something else to reduce climate change</td>
<td>6%</td>
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<tr>
<td>I have to spend money on other priorities</td>
<td>4%</td>
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<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>3%</td>
<td>11%</td>
</tr>
<tr>
<td>The people I live with do not want to do this</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>I don't have enough money for the upfront costs of doing this</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
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<td>3%</td>
<td>3%</td>
</tr>
<tr>
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<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>I would not know how to do this</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

### Summary/key points

- Environmental concerns (tempered by time) are key to converting the willing
- Promote local walking and cycling routes with clear timings
Reduce car/taxi use by using active forms of transport (1)

What is the most effective practise?
• Gain quick wins through low-cost interventions e.g. letters and emails with call to actions, testimonials, easy steps to participation and incentives
• Use moments of change to ensure intervention is timely – e.g. use road closures as an opportunity to suggest more sustainable forms of transport

Best evidence – Control trial
• Encouraging use of sustainable transport (car sharing, public transport and cycling) for employees at Heathrow. Interventions used:
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Impact of behaviour change campaign: High
Existing evidence: High
Level of influence: High
Reduce car/taxi use by using active forms of transport (2)

Case study for making information easy to understand
• By displaying fuel efficiency in terms of litres of fuel saved per 100 miles of driving (rather than as an increase in the number of miles per litre of fuel) individuals were able to conceptualise the efficiency of different vehicles and the cost of alternative travel choices more accurately (UK, 2008)

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  • Encourage young people to delay driving
    • created a new tool called ‘how much does it cost to drive’. Good engagement on social media with 21% agreeing the could do better things with their money after using the tool

Driving modal shift from car to bus, 2013

Case study for using role models
• High profile individuals acting in ways that help to tackle climate change can help to normalise such behaviour. For example, in London the Mayor’s vision is for cycling in London to “be a normal part of everyday life, something people hardly think about and feel comfortable doing in ordinary clothes.”

https://www.london.gov.uk/what-we-do/transport/cycling-and-walking/mayors-vision-cycling
Reduce car/taxi use by using active forms of transport (3)

Case studies for timely interventions
- Route choices made by London commuters before and after tube strikes in February 2014 were investigated. More than 5% of commuters changed travel route permanently once normal service resumed (UK, 2014)
- After a major ride to work day event people were more likely to continue riding to work. More than one in four (27%) of those who rode to work for the first time as part of the event were still riding to work five months after the event (Australia, 2007)
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- Stanford University offers commuters who arrive at its notoriously congested campus in off-peak times a chance to win cash prizes in a daily lottery (USA, 2015)
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Consuming differently, consuming sustainably: behavioural insights for policymaking 2017, page 33
Action summaries – Sustainable food
Area summary: Sustainable food

**Reduce food waste**

*Opportunity Size (millions of kg CO2 annually)*

136

- **Willingness to take action**: 40%
- **Ease of Behaviour change**: Medium
- **Level of influence**: Medium

*What evidence suggests you should do...*

Environmental restructuring. Use of social norms. Information provision

**Reduce meat consumption**

*Opportunity Size (millions of kg CO2 annually)*

84

- **Willingness to take action**: 38%
- **Ease of Behaviour change**: High
- **Level of influence**: Medium

*What evidence suggests you should do...*

Environmental restructuring to promote reduced meat/dairy consumption. Promoting self-monitoring and self-regulation.

**Reduce diary consumption**

*Opportunity Size (millions of kg CO2 annually)*

76

- **Willingness to take action**: 38%
- **Ease of Behaviour change**: High
- **Level of influence**: Medium

*What evidence suggests you should do...*

Environmental restructuring to promote reduced meat/dairy consumption. Promoting self-monitoring and self-regulation.

**Buy locally produced food**

*Opportunity Size (millions of kg CO2 annually)*

17

- **Willingness to take action**: 78%
- **Ease of Behaviour change**: Medium
- **Level of influence**: Medium

*What evidence suggests you should do...*

Make 'locally produced' labels salient when food shopping. Make it easy e.g. promoting ‘rules of thumb’. Role models

**Make ethical food choices**

*Opportunity Size (millions of kg CO2 annually)*

- **Willingness to take action**: 66%
- **Ease of Behaviour change**: Medium
- **Level of influence**: Medium

*What evidence suggests you should do...*

Promote knowledge, social norms and availability.
Opportunity size is moderate (7/18 actions)

Willingness is moderate (40%), CO₂ saving is high

Few acknowledged barriers and a desire to help the environment

Research shows overconfidence in how well people reduce waste

**Size of opportunity**
(outer line reflects largest opportunity)

- 135.46 million kgCO₂e

**Willingness (Base: 3024)**
- Done it/ always do it: 56%
- Willing: 40%
- Not willing/ can't: 5%

- Carbon saving for one person taking the action: 230 kgCO₂ equivalent annually

**Key barriers (Base: 1187)**
- There is no/not enough government help to do this: 6%
- The people I live with do not want to do this: 6%
- I do not have time to do this: 5%

**Key motivations (Base: 1187)**
- I want to help the environment: 49%
- Saving money: 40%
- I want to set an example to friends/family: 19%

**Research shows overconfidence in how well people reduce waste**

**Impact of behaviour change campaign: Medium**
- Existing evidence: High
- Level of influence: Medium

**Best marketing approach**
- Not determined

**Most linked action**
- Reduce use of plastics
Reduce food waste

Willingness (Base: 3024)

- Done it/ always do it: 56%
- Willing: 40%
- Not willing/ can't: 5%

Key motivations (Base: 1187, 2930, multi-choice)

- I want to help the environment: 49% Willing, 47% Done it/ always do it
- Saving money: 40% Willing, 41% Done it/ always do it
- I want to set an example to friends/family: 19% Willing, 14% Done it/ always do it
- Helping to reduce carbon: 19% Willing, 13% Done it/ always do it
- I would enjoy making the change: 14% Willing, 14% Done it/ always do it
- Preventing harm to wildlife: 12% Willing, 9% Done it/ always do it
- Don’t know: 8% Willing, 7% Done it/ always do it
- Not applicable - nothing in particular would motivate me: 6% Willing, 3% Done it/ always do it
- Other: 6% Willing, 9% Done it/ always do it
- My friends/family do it: 6% Willing, 6% Done it/ always do it
- Making my life more comfortable/easy: 6% Willing, 5% Done it/ always do it
- Receiving money/a grant to do it: 4% Willing, 5% Done it/ always do it
- Saving time: 4% Willing, 3% Done it/ always do it
- Makes my home warmer/more efficient: 2% Willing, 2% Done it/ always do it

Key barriers (Base: 109, 1187, multi-choice)

- None of these: 29% Willing, 53% Done it/ always do it
- Don’t know: 14% Willing, 12% Done it/ always do it
- There is no/not enough government help to do this: 6% Willing, 6% Done it/ always do it
- The people I live with do not want to do this: 6% Willing, 6% Done it/ always do it
- I do not have time to do this: 5% Willing, 5% Done it/ always do it
- I would not know how to do this: 5% Willing, 5% Done it/ always do it
- I believe it will make a difference but have chosen to do something else to reduce climate change: 13% Willing, 24% Done it/ always do it
- I do not believe this will make a difference to climate change: 4% Willing, 4% Done it/ always do it
- My friends/family do not want to do this: 4% Willing, 4% Done it/ always do it
- I have to spend money on other priorities: 9% Willing, 3% Done it/ always do it
- This is not possible where I live: 4% Willing, 3% Done it/ always do it
- I do not own my own home: 2% Willing, 4% Done it/ always do it
- I don’t have enough money to pay for the ongoing costs of doing this: 2% Willing, 2% Done it/ always do it
- I don’t have enough money for the upfront costs of doing this: 2% Willing, 2% Done it/ always do it
- Nobody else in my community does this: 1% Willing, 2% Done it/ always do it

Summary/key points

- There is a high level of willingness to reduce food waste – the barrier may be detailed knowledge of what food waste is (insight from desk research)
Reduce food waste

What is the most effective practise?
- Environmental restructuring, use of social norms and information

Best evidence – Meta-analysis
- Plate size interventions resulted in up to 57% food waste reduction.
- Changing nutritional guidelines in schools reduced vegetable waste by up to 28%.
- Information campaigns had up to 28% food waste reduction.
- Other intervention types had little or no robust evidence provided.
- A greater number of longitudinal, larger sample size interventions are required (UK, 2019)

Reference
Reynolds et al., Review: Consumption-stage food waste reduction interventions – What works and how to design better interventions, 2019

Best evidence - control trial
- Two simple and nonintrusive ‘nudges’ reduce the amount of food waste in hotel restaurants by around 20%
  - Physical cue: typical buffet plates were replaced by smaller-sized plates.
  - Social cue: Sign hung up: “Welcome back! Again! And again! Visit our buffet many times. That’s better than taking a lot at once.”

Reference
Kallbakken & Sælen, ‘Nudging’ hotel guests to reduce food waste as a win–win environmental measure, 2013, Economics Letters
Opportunity size is moderate (9/18 actions)

Willingness is moderate (38%), CO₂ saving moderate

Social pressure and choosing alternative actions are key barriers

Health is a good angle to approach this action – dairy action is linked

Size of opportunity (outer line reflects largest opportunity)

84.46 million kgCO₂e

Willingness (Base: 3024)

Done it/ always do it 18%
Willing 38%
Not willing/ can't 44%

Carbon saving for one person taking the action: 150.95 kgCO₂ equivalent annually

Key barriers (Base: 1150)

The people I live with do not want to do this 17%
My friends/family do not want to do this 14%
I believe it will make a difference but have chosen to do something else to... 10%

Key motivations (Base: 1150)

I want to help the environment 45%
Helping to reduce carbon 27%
Saving money 25%

Impact of behaviour change campaign: High
Existing evidence: High
Level of influence: Medium

Health is a good angle to approach this action – dairy action is linked

Best marketing approach
Health

Most linked action
Reduce dairy consumption
Reduce meat consumption

Willingness (Base: 3024)

Key motivations (Base: 1150, 2116, multi-choice)

Key barriers (Base: 1192, 1150, multi-choice)

<table>
<thead>
<tr>
<th>Key barriers</th>
<th>Willing</th>
<th>Not willing/can't</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of these</td>
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<tr>
<td>Don't know</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td>I believe it will make a difference but have chosen to do something else to reduce climate change</td>
<td>2%</td>
<td>37%</td>
</tr>
<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>There is no/not enough government help to do this</td>
<td>2%</td>
<td>4%</td>
</tr>
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<td>1%</td>
</tr>
<tr>
<td>This is not possible where I live</td>
<td>1%</td>
<td>1%</td>
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</tbody>
</table>

Summary/key points

- Believing it does not make a difference is a key barrier among the unwilling
- Friends and family resisting can be a barrier for the willing
- Choosing to do another action promotes inaction
Reduce meat consumption (1)

What is the most effective practise?
• Environmental restructuring to promote reduced meat consumption
• Promoting self-monitoring and self-regulation

Best evidence – Systematic review of control trials to reduce meat consumption
• It was found that the following interventions reduced meat consumption:
  • reducing meat portion sizes;
  • providing meat-free alternatives with supporting educational material such as, provision of plant-based food and cooking demonstration programme;
  • manipulating the sensory properties of meat or meat alternatives reduced meat demand such as, changing the visual presentation or hedonic value of these products at point of purchase;
  • repositioning meat products to be less prominent at point of purchase were associated with lower meat demand, such as lower down a menu (UK & Germany, 2018)

Best evidence - Systematic review of control trials to change diets and activity levels
• Approaches such as self-monitoring and self-regulation, using techniques like goal-setting, prompting, self-monitoring, feedback on performance and reviewing goals, promoted behavior change. Teaching a different behaviour, recording it, such as by writing a food diary, and having strategies to cope with relapses, can all successfully change behaviour.
• Adding social support to inventions (family based) provided additional effectiveness to interventions (UK, 2011)

References
Bianchi & Garnett, Restructuring physical micro-environments to reduce the demand for meat: a systematic review and qualitative comparative analysis, 2018, The Lancet Planetary Health
Greaves et al., Systematic review of reviews of intervention components associated with increased effectiveness in dietary and physical activity interventions, 2011, BMC Public Health
Case studies

• If you integrate plant-based diets into the menu design rather than placing them in a separate chapter, people are more likely to order vegetarian because they appear as just another item, and the option is normalised rather than segregated as for vegetarians only (UK, 2018)
• When promoting sustainable food replacing labels like ‘vegetarian’ or ‘meat-free’ with language like ‘field-grown’ or more indulgent descriptions made non-vegetarians more likely to order vegetarian dishes (UK, 2018)
• ‘Veganuary’ (a campaign to promote veganism throughout January) uses behavior change principles. Self-monitoring is promoted by goal-setting; the ease of veganism is promoted by online recipes and vegan options in restaurants becoming common-place; social norms are promoted by big brands releasing vegan options e.g. Greggs and the social media presence of Veganuary
  • Veganuary was launched in 2014, with 3,300 people signing up; by 2018 there were 168,000
• In addition to ‘Veganuary’ Meat Free Mondays encourage a day-based approach to plant-based eating (Meat Free Mondays website) whilst Eating Better’s #MeatFreeLunch campaign focuses on a meal occasion.

References

Behavioural Insights Team, Conservation for Nature 2019, page 49 and 26
Rapid Transition Alliance, Climate and Rapid Behaviour Change, 2018, page 20
Case study: Meat Your Match – the Protein Challenge

- Aimed at reducing meat consumption in 18-24-year-old males who currently were high meat consumers
  - How?
    - Aligned incentives with audience interest – health message
    - Set clear goals
    - Easy to fit in with current lifestyle: simple and ready to eat meals e.g. Thai vegetable curry, pulse-based stew, cottage pie and promoted direct swaps e.g. whey protein for pea protein
    - Focus on embracing something new rather than giving something up
    - Trusted sources of gym and dietary information i.e. The Body Coach, BBC Good Food
  - 80% of individuals reduced the proportion of meat in their diet
  - The environment and animal welfare message can help sustain dietary shifts, but the main motivator was health (UK, 2018)

Hubbub, *Meat Your Match impact report*, 2018
Action dashboard – Reduce dairy consumption

Opportunity size is moderate (11/18 actions)

Willingness is moderate (38%), CO2 saving moderate

Social pressure and choosing alternative actions are key barriers

Health is a good angle to approach this action – meat action is linked

Size of opportunity (outer line reflects largest opportunity)

Willingness (Base: 3024)

Done it/ always do it 11%
Willing 38%
Not willing/ can't 51%

Carbon saving for one person taking the action: 136.59 kgCO2 equivalent annually

Key barriers (Base: 1139)

The people I live with do not want to do this 12%
I do not believe this will make a difference to climate change 10%
My friends/family do not want to do this 10%

Key motivations (Base: 1139)

I want to help the environment 41%
Helping to reduce carbon 21%
Preventing harm to wildlife 20%

Behaviour change evidence

Impact of behaviour change campaign: High
Existing evidence: High
Level of influence: Medium

Best marketing approach
Health

Most linked action
Reduce meat consumption
Reduce dairy consumption

Willingness (Base: 3024)

<table>
<thead>
<tr>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can't</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Key motivations (Base: 1139, 1731, multi-choice)

- I want to help the environment: 41%
- Helping to reduce carbon: 36%
- Preventing harm to wildlife: 17%
- Not applicable - nothing in particular would motivate me: 14%
- I would enjoy making the change: 13%
- Other: 8%
- I want to set an example to friends/family: 18%
- Saving money: 11%
- Don’t know: 10%
- My friends/family do it: 6%
- Making my life more comfortable/easy: 5%
- Receiving money/a grant to do it: 5%
- Saving time: 2%
- Makes my home warmer/more efficient: 2%
- Other: 1%

Key barriers (Base: 1479, 1139, multi-choice)

- None of these: 29%
- Don’t know: 13%
- The people I live with do not want to do this: 10%
- I do not believe this will make a difference to climate change: 10%
- My friends/family do not want to do this: 8%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 7%
- I have to spend money on other priorities: 6%
- There is no/not enough government help to do this: 5%
- I don't have enough money for the upfront costs of doing this: 3%
- I don't have enough money to pay for the ongoing costs of doing this: 3%
- I don't have time to do this: 3%
- Nobody else in my community does this: 3%
- I do not own my own home: 2%
- This is not possible where I live: 1%

Summary/key points

- Approx. 1 in 5 people (38% of 51% who are unwilling) do not believe reducing dairy impacts climate change – greater knowledge could drive action
- Social influencers are important in action
Reduce dairy consumption (1)

What is the most effective practise?
• Environmental restructuring to promote reduced dairy consumption
• Promoting self-monitoring and self-regulation

Best evidence – Systematic review of control trials to reduce meat consumption
• It was found that the following interventions reduced meat consumption:
  • reducing meat portion sizes;
  • providing meat-free alternatives with supporting educational material such as, provision of plant-based food and cooking demonstration programme;
  • manipulating the sensory properties of meat or meat alternatives reduced meat demand such as, changing the visual presentation or hedonic value of these products at point of purchase;
  • repositioning meat products to be less prominent at point of purchase were associated with lower meat demand, such as lower down a menu (UK & Germany, 2018)

Best evidence - Systematic review of control trials to change diets and activity levels
• Approaches such as self-monitoring and self-regulation, using techniques like goal-setting, prompting, self-monitoring, feedback on performance and reviewing goals, promoted behavior change. Teaching a different behaviour, recording it, such as by writing a food diary, and having strategies to cope with relapses, can all successfully change behaviour.
• Adding social support to inventions (family based) provided additional effectiveness to interventions (UK, 2011)

References
Bianchi & Garnett, Restructuring physical micro-environments to reduce the demand for meat: a systematic review and qualitative comparative analysis, 2018, The Lancet Planetary Health
Greaves et al., Systematic review of reviews of intervention components associated with increased effectiveness in dietary and physical activity interventions, 2011, BMC Public Health

Impact of behaviour change campaign: 
High
Existing evidence: High
Level of influence: Medium
Case studies

- If you integrate plant-based diets into the menu design rather than placing them in a separate chapter, people are more likely to order vegetarian because they appear as just another item, and the option is normalised rather than segregated as for vegetarians only (UK, 2018)
- When promoting sustainable food replacing labels like ‘vegetarian’ or ‘meat-free’ with language like ‘field-grown’ or more indulgent descriptions made non-vegetarians more likely to order vegetarian dishes (UK, 2018)
- ‘Veganuary’ (a campaign to promote veganism throughout January) uses behavior change principles. Self-monitoring is promoted by goal-setting; the ease of veganism is promoted by online recipes and vegan options in restaurants becoming common-place; social norms are promoted by big brands releasing vegan options e.g. Greggs and the social media presence of Veganuary
  - Veganuary was launched in 2014, with 3,300 people signing up; by 2018 there were 168,000
- In addition to ‘Veganuary’ Meat Free Mondays encourage a day-based approach to plant-based eating (Meat Free Mondays website) whilst Eating Better’s #MeatFreeLunch campaign focuses on a meal occasion.

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# Case study: Meat Your Match – the Protein Challenge

- **Aimed at reducing meat consumption in 18-24-year-old males who currently were high meat consumers**
  - **How?**
    - Aligned incentives with audience interest – health message
    - Set clear goals
    - Easy to fit in with current lifestyle: simple and ready to eat meals e.g. Thai vegetable curry, pulse-based stew, cottage pie and promoted direct swaps e.g. whey protein for pea protein
    - Focus on embracing something new rather than giving something up
    - Trusted sources of gym and dietary information i.e. The Body Coach, BBC Good Food
  - **80% of individuals reduced the proportion of meat in their diet**
    - The environment and animal welfare message can help sustain dietary shifts, but the main motivator was health (UK, 2018)
Action dashboard – Buy locally produced food

Opportunity size is low (15/18 actions)

Willingness is highest (78%), CO\text{2} saving is low

Finance is the key barrier to what would be an enjoyable change

Buying locally is linked to ethical food choices

Size of opportunity (outer line reflects largest opportunity)

16.54 million kgCO\text{2}e

Willingness (Base: 3024)

Done it/ always do it 10%

Willing 78%

Not willing/ can’t 12%

Carbon saving for one person taking the action: 14.4 kgCO\text{2} equivalent annually

Key barriers (Base: 2359)

I don’t have enough money to pay for the ongoing costs of doing this 15%

I have to spend money on other priorities 13%

I do not have time to do this 10%

Key motivations (Base: 2359)

I want to help the environment 44%

Helping to reduce carbon 29%

I would enjoy making the change 25%

Behavior change evidence

Impact of behaviour change campaign: Medium

Existing evidence: Medium

Level of influence: Medium

Best marketing approach

Not determined

Most linked action

Make ethical food choices
Buy locally produced food

Willingness (Base: 3024)

- Done it/ always do it: 10%
- Willing: 78%
- Not willing/ can't: 12%

Key motivations (Base: 2359, 2747, multi-choice)

- I want to help the environment: 44%
- Helping to reduce carbon: 29%
- I would enjoy making the change: 23%
- I want to set an example to friends/family: 22%
- Saving money: 10%
- Other: 11%
- Preventing harm to wildlife: 14%
- Not applicable - nothing in particular would motivate me: 14%
- Don't know: 10%
- Making my life more comfortable/easy: 7%
- My friends/family do it: 6%
- Saving time: 4%
- Receiving money/a grant to do it: 6%
- Makes my home warmer/more efficient: 2%

Key barriers (Base: 336, 2359, multi-choice)

- None of these: 19%
- I don't have enough money to pay for the ongoing costs of doing this: 34%
- I have to spend money on other priorities: 20%
- Don't know: 19%
- I do not have time to do this: 13%
- This is not possible where I live: 12%
- I don't have enough money for the upfront costs of doing this: 11%
- I would not know how to do this: 11%
- There is no/not enough government help to do this: 10%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 8%
- I do not believe this will make a difference to climate change: 7%
- The people I live with do not want to do this: 6%
- My friends/family do not want to do this: 5%
- I do not own my own home: 4%
- Nobody else in my community does this: 4%

Summary/key points

- A large majority of people are willing to buy local and believe it will help the environment and reduce carbon – greater knowledge could nudge action towards more effective priorities.
Buy locally produced food

What is the most effective practise?
- Make ‘locally produced’ labels salient when food shopping
- Make it easy e.g. rule of thumb to use so you know what vegetables are locally sourced
- Role models endorsing consumption of local produce

Case studies
- Purchasing decisions are often made rapidly based on one or two product factors for routine purchases – often price and health. By making the distance the food had travelled more salient (using LED fitted carts) 72% of the products purchased by shoppers had lower mean food mileages than those selected by shoppers using the regular cart. Placing shoppers in a social context – comparing different choices on the same product – was also effective (UK, 2012).
- ‘Giki’ makes sustainable shopping easy – you scan your food and can find out if it is UK made, has a low carbon food print, palm oil free, organic etc.
- Campaign called ‘Eat Seasonably’ made it easy for individuals to understand what was in season by presenting a clear and constant picture (see image). The campaign was supported by key food figures such as Gregg Wallace and Hugh Fearnley-Whittingstall (UK, 2009).
- Simple messages or ‘rules of thumb’ are successful ways of creating movement in the right direction. For example, encouraging people in the UK to choose root vegetables and vegetables that can be ‘field grown’, such as carrots and parsnips, is a simple way of increasing the consumption of UK grown veg (UK, 2006).

Reference
Kalnikaite et al., Decision-making in the aisles: informing, overwhelming or nudging supermarket shoppers?, 2012, Personal and Ubiquitous Computing
https://gikibadges.com/
Behaviour Change, Eat Seasonably, 2009
Willingness is high (66%), CO2 is N/A

Size of opportunity
(outer line reflects largest opportunity)

N/A – no carbon score available

Willingness (Base: 3024)

Done it/ always do it  15%
Willing  66%
Not willing/ can’t  19%

Finance is the key barrier to what would be an enjoyable change

Key barriers (Base: 1996)

- I have to spend money on other priorities 17%
- I don’t have enough money to pay for the ongoing costs of doing this 16%
- I don’t have enough money for the upfront costs of doing this 9%

Preventing harm to the environment and wildlife are key motivations

Behaviour change evidence

Impact of behaviour change campaign: Medium
Existing evidence: Low
Level of influence: Medium

Best marketing approach

Most linked action

Not determined

Buy locally produced food

I want to help the environment  51%
Preventing harm to wildlife  32%
I want to set an example to friends/family  19%
Make ethical food choices (e.g. buy Fairtrade, don't buy palm oil etc.)

**Willingness (Base: 3024)**

<table>
<thead>
<tr>
<th></th>
<th>Not willing/ can't</th>
<th>Willing</th>
<th>Done it/ always do it</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19%</td>
<td>66%</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Key motivations (Base: 1996, 2626, multi-choice)**

<table>
<thead>
<tr>
<th>Reason for willingness</th>
<th>Base</th>
<th>Willing</th>
<th>Done it/ always do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want to help the environment</td>
<td>54%</td>
<td>60%</td>
<td>45%</td>
</tr>
<tr>
<td>Preventing harm to wildlife</td>
<td>32%</td>
<td>34%</td>
<td>26%</td>
</tr>
<tr>
<td>Helping to reduce carbon</td>
<td>19%</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>I want to set an example to friends/family</td>
<td>19%</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>I would enjoy making the change</td>
<td>16%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Saving money</td>
<td>14%</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Don't know</td>
<td>11%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Not applicable - nothing in particular would motivate me</td>
<td>6%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>My friends/family do it</td>
<td>9%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Receiving money/a grant to do it</td>
<td>9%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Making my life more comfortable/easy</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Saving time</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Makes my home warmer/more efficient</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Key barriers (Base: 532, 1996, multi-choice)**

<table>
<thead>
<tr>
<th>Reason for not willing/can't</th>
<th>Base</th>
<th>Not willing/can't</th>
<th>Willing</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of these</td>
<td>18%</td>
<td>18%</td>
<td>35%</td>
</tr>
<tr>
<td>I have to spend money on other priorities</td>
<td>17%</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td>I don't have enough money to pay for the ongoing costs of doing this</td>
<td>16%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Don't know</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>I don't have enough money for the upfront costs of doing this</td>
<td>8%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>There is no/not enough government help to do this</td>
<td>6%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>I believe it will make a difference but have chosen to do something else to reduce climate change</td>
<td>10%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>7%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>I do not have time to do this</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>I would not know how to do this</td>
<td>4%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>The people I live with do not want to do this</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>This is not possible where I live</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>My friends/family do not want to do this</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Nobody else in my community does this</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>I do not own my own home</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Summary/key points**

- Ethical choices are motivated by the environment and wildlife.
- Cost is a key barrier to action.
Make ethical food choices (e.g. buy Fairtrade, don't buy palm oil etc.)

What is the most effective practise?
- Promote knowledge, social norms and availability

Case studies
- Survey was conducted investigating attitude and intention to buy sustainable dairy. Ethical purchasing can be promoted by
  - Raising involvement (i.e. understanding and knowledge of issues involved);
  - Raising perceived consumer effectiveness (i.e. consumer ability to contribute to protecting the environment and improving producer’s welfare);
  - Promoting certainty and trust in ethical claims;
  - Social norms or peer pressure;
  - High perceived availability.

Reference
Action summaries – Sustainable resources
Area summary: Sustainable resources

Correctly recycle materials

Opportunity Size
(millions of kg CO2 annually)

<table>
<thead>
<tr>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>Medium</td>
<td>Medium</td>
</tr>
</tbody>
</table>

What evidence suggests you should do...
Make it easy, fun and visual

Use reusable alternatives

<table>
<thead>
<tr>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>34%</td>
<td>High</td>
<td>Medium</td>
</tr>
</tbody>
</table>

What evidence suggests you should do...
Combine financial incentives with environmental restructuring

Reduce use of plastics

<table>
<thead>
<tr>
<th>Willingness to take action</th>
<th>Ease of Behaviour change</th>
<th>Level of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>High</td>
<td>Medium</td>
</tr>
</tbody>
</table>

What evidence suggests you should do...
Combine financial incentives with environmental restructuring
Opportunity size is the lowest (18/18 actions)

Willingness is low (20%), CO² saving is the lowest

Additional ability to do it or making it easier will increase recycling

Buying locally is linked to ethical food choices

Size of opportunity (outer line reflects largest opportunity)

- 2.63 million kgCO²e

Willingness (Base: 3024)

- Done it/ always do it: 75%
- Willing: 20%
- Not willing/ can’t: 4%

Carbon saving for one person taking the action: 8.92 kgCO² equivalent annually

Key barriers (Base: 614)

- There is no/not enough government help to do this: 14%
- I do not have time to do this: 11%
- This is not possible where I live: 10%

Key motivations (Base: 614)

- I want to help the environment: 55%
- Preventing harm to wildlife: 23%
- Helping to reduce carbon: 22%

Behaviour change evidence

- Impact of behaviour change campaign: Medium
- Existing evidence: High
- Level of influence: Medium

Best marketing approach

- Not determined

Most linked action

- Reduce food waste
Correctly recycle materials

**Willingness (Base: 3024)**

- Done it/ always do it: 75%
- Willing: 20%
- Not willing/ can't: 4%

**Key motivations (Base: 614, 2968, multi-choice)**

- I want to help the environment: 55%-66%
- Preventing harm to wildlife: 23%-21%
- Helping to reduce carbon: 22%-17%
- I want to set an example to friends/family: 16%-13%
- I would enjoy making the change: 17%-13%
- Saving money: 12%-11%
- Don’t know: 6%-9%
- Receiving money/a grant to do it: 8%-9%
- My friends/family do it: 9%-8%
- Not applicable - nothing in particular would motivate me: 8%-6%
- Other: 6%-5%
- Making my life more comfortable/easy: 4%
- Saving time: 4%
- Makes my home warmer/more efficient: 1%

**Key barriers (Base: 103, 614, multi-choice)**

- None of these: 22%-39%
- There is no/not enough government help to do this: 11%-14%
- Don’t know: 14%-13%
- I do not have time to do this: 19%-11%
- This is not possible where I live: 10%-7%
- I would not know how to do this: 6%-9%
- The people I live with do not want to do this: 13%-6%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 31%-3%
- I do not believe this will make a difference to climate change: 8%-2%
- My friends/family do not want to do this: 6%-3%
- I have to spend money on other priorities: 8%-2%
- I do not own my own home: 7%-2%
- Nobody else in my community does this: 5%-2%
- I don’t have enough money for the upfront costs of doing this: 6%-1%
- I don’t have enough money to pay for the ongoing costs of doing this: 1%-1%

**Summary/key points**

- Willing recyclers are less motivated by the environment but more motivated by money and see barriers that need government help to overcome
Correctly recycle materials

What is the most effective practise?
• Make recycling easy

Case study: Recycle on the go and #LeedsByExample
• The number of people recycling in Leeds City Centre has almost tripled from 17% to 49%. What was effective?
  • Make recycling fun and visual – playful messaging and bright bins
  • Quality of recycling can vary – when placing bins in busy areas ensure recycling bins are visible and in locations where people are less in a rush. Ensure there is a general waste bin directly beside the recycling bin to reduce contamination.
  • Collect cups as they are a major contaminant in recycle bins. Managed spaces collecting cups yield highest quality recycling. Retailers and commuter routes collect the highest volume of cups (UK, 2019)

Reference
Recycle on the go and #LeedsByExample, 2019, Hubbub
Willingness is low (34%), CO\textsubscript{2} is N/A

Size of opportunity (outer line reflects largest opportunity)

N/A – no carbon score available

Willingness (Base: 3024)

Done it/ always do it

\begin{itemize}
  \item 62%
\end{itemize}

Willing

\begin{itemize}
  \item 34%
\end{itemize}

Not willing/ can’t

\begin{itemize}
  \item 4%
\end{itemize}

Key motivation is to help the environment

Key barriers (Base: 1022)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no/not enough government help to do this</td>
<td>7%</td>
</tr>
<tr>
<td>I do not have time to do this</td>
<td>6%</td>
</tr>
<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>4%</td>
</tr>
</tbody>
</table>

Behaviour change evidence

Impact of behaviour change campaign: High

Existing evidence: High

Level of influence: Medium

Best marketing approach

Not determined

Most linked action

Reduce use of plastics

Action is linked to reducing use of plastics

Key motivations (Base: 1022)

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want to help the environment</td>
<td>57%</td>
</tr>
<tr>
<td>Preventing harm to wildlife</td>
<td>29%</td>
</tr>
<tr>
<td>Saving money</td>
<td>29%</td>
</tr>
</tbody>
</table>
Use reusable alternatives (e.g. shopping bags, containers etc.)

**Willingness (Base: 3024)**

- Done it/ always do it: 62%
- Willing: 34%
- Not willing/can't: 4%

**Key motivations (Base: 1022, 2961, multi-choice)**

- I want to help the environment: 57%
- Saving money: 29%
- Preventing harm to wildlife: 29%
- Helping to reduce carbon: 24%
- I want to set an example to friends/family: 19%
- I would enjoy making the change: 15%
- Making my life more comfortable/easy: 11%
- My friends/family do it: 8%
- Not applicable - nothing in particular would motivate me: 6%
- Don't know: 6%
- Other: 5%
- Saving time: 4%
- Receiving money/a grant to do it: 8%
- Makes my home warmer/more efficient: 3%

**Key barriers (Base: 104, 1022, multi-choice)**

- None of these: 26%
- Don't know: 13%
- There is no/not enough government help to do this: 14%
- I do not have time to do this: 13%
- I do not believe this will make a difference to climate change: 6%
- I have to spend money on other priorities: 4%
- I believe it will make a difference but have chosen to do something else to reduce climate change: 4%
- I would not know how to do this: 3%
- I don't have enough money for the upfront costs of doing this: 3%
- This is not possible where I live: 2%
- The people I live with do not want to do this: 2%
- I don't have enough money to pay for the ongoing costs of doing this: 2%
- My friends/family do not want to do this: 2%
- I do not own my own home: 1%
- Nobody else in my community does this: 1%

**Summary/key points**

- Key motivations are environment, money and wildlife harm prevention.
- Key barrier is lack of government support. The automatic nature of the behaviour reflects the low scores amongst many barriers for the willing.
Use reusable alternatives

What is the best practise?
• Combine financial incentives with environmental restructuring

Best evidence – Control trial
• Field experiment conducted at twelve university and business sites to examine whether the use of reusable cups can be promoted through easily implementable measures. The interventions were:
  • Provision of alternatives (reusable cups for sale or given out for free)
  • Financial incentive (charged for a single use cup or given a discount for using a reusable cup)
  • Environmental messaging – shown across all cafes, including control group (see image)
Study suggests provision of a free reusable cup and financial discount is particularly effective. Discounting for use of a reusable cup is effective as people are more susceptible to losses than gain and its communicates the social norm.
• Three cafes continued with the charge after the experiment had finished and distributed more reusable cups for free among their students. This boosted the use of reusable cups up to 33.7% across three cafés (UK, 2018).

Reference
Poortinga & Whitaker, Promoting the Use of Reusable Coffee Cups through Environmental Messaging, the Provision of Alternatives and Financial Incentives, 2018, Sustainability
Willingness is high (63%), \( \text{CO}^2 \) is N/A

Size of opportunity
(outer line reflects largest opportunity)

Willingness (Base: 3024)

Done it/ always do it 30%
Willing 63%
Not willing/ can’t 7%

N/A – no carbon score available

Additional practical help or restraints on options could increase the action

Key barriers (Base: 1895)

- There is no/not enough government help to do this: 17%
- I would not know how to do this: 9%
- I do not have time to do this: 6%

Making it easier to make the right choice is key

Behaviour change evidence

- Impact of behaviour change campaign: High
- Existing evidence: High
- Level of influence: Medium

Key motivations (Base: 1895)

- I want to help the environment: 66%
- Preventing harm to wildlife: 38%
- Helping to reduce carbon: 28%

N/A – no carbon score available

Best marketing approach

Easier

Most linked action

Choose energy efficient appliances
Reduce use of plastics

Willingness (Base: 3024)

<table>
<thead>
<tr>
<th></th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can’t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30%</td>
<td>63%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Key motivations (Base: 1895, 2874, multi-choice)

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Willing</th>
<th>Done it/ always do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want to help the environment</td>
<td>56%</td>
<td>89%</td>
</tr>
<tr>
<td>Preventing harm to wildlife</td>
<td>38%</td>
<td>89%</td>
</tr>
<tr>
<td>Helping to reduce carbon</td>
<td>28%</td>
<td>73%</td>
</tr>
<tr>
<td>I want to set an example to friends/family</td>
<td>18%</td>
<td>28%</td>
</tr>
<tr>
<td>I would enjoy making the change</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>Saving money</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>My friends/family do it</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Not applicable - nothing in particular would</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>motivate me</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Receiving money/a grant to do it</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Making my life more comfortable/easy</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Saving time</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Makes my home warmer/more efficient</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Key barriers (Base: 200, 1895, multi-choice)

<table>
<thead>
<tr>
<th></th>
<th>Not willing/can’t</th>
<th>Willing</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of these</td>
<td>27%</td>
<td>46%</td>
</tr>
<tr>
<td>There is no/not enough government help to do this</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>I would not know how to do this</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>I do not have time to do this</td>
<td>9%</td>
<td>13%</td>
</tr>
<tr>
<td>I have to spend money on other priorities</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>This is not possible where I live</td>
<td>4%</td>
<td>16%</td>
</tr>
<tr>
<td>I believe it will make a difference but have chosen to do something else to reduce climate change</td>
<td>4%</td>
<td>22%</td>
</tr>
<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>I don’t have enough money to pay for the ongoing costs of doing this</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>The people I live with do not want to do this</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>I don’t have enough money for the upfront costs of doing this</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>My friends/family do not want to do this</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Nobody else in my community does this</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>I do not own my own home</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Summary/key points

- Preventing harm to wildlife stands out as a motivation among the willing
- Key barrier to action is lack of control individual’s have over this
Reduce use of plastics

What is the best practise?
• Combine financial incentives with environmental restructuring

Best evidence – Control trial
• Field experiment conducted at twelve university and business sites to examine whether the use of reusable cups can be promoted through easily implementable measures. The interventions were:
  • Provision of alternatives (reusable cups for sale or given out for free)
  • Financial incentive (charged for a single use cup or given a discount for using a reusable cup)
  • Environmental messaging – shown across all cafes, including control group (see image)
Study suggests provision of a free reusable cup and financial discount is particularly effective. Discounting for use of a reusable cup is effective as people are more susceptible to losses than gain and it communicates the social norm.
• Three cafes continued with the charge after the experiment had finished and distributed more reusable cups for free among their students. This boosted the use of reusable cups up to 33.7% across three cafés (UK, 2018).

Reference
Poortinga & Whitaker, *Promoting the Use of Reusable Coffee Cups through Environmental Messaging, the Provision of Alternatives and Financial Incentives*, 2018, Sustainability
Action summaries – Resilience to climate change
Area summary: Resilience to climate change

Modify home to be more resilient to heat and drought
- Willingness to take action: 60%
- Ease of behaviour change: Low
- Level of influence: Medium

What evidence suggests you should do...
Make salience of extreme weather conditions less abstract i.e. relevant to individuals

Modify home to be more resilient to storms and flooding
- Willingness to take action: 41%
- Ease of behaviour change: Low
- Level of influence: Medium

What evidence suggests you should do...
Make salience of extreme weather conditions less abstract i.e. relevant to individuals
Action dashboard – Modify my home to be more resilient to heat and drought

Willingness is high (60%), CO\textsuperscript{2} is N/A

**Size of opportunity**
(outer line reflects largest opportunity)

| N/A – no carbon score available |

**Willingness (Base: 3024)**

<table>
<thead>
<tr>
<th>Done it/ always do it</th>
<th>11%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willing</td>
<td>60%</td>
</tr>
<tr>
<td>Not willing/ can’t</td>
<td>29%</td>
</tr>
</tbody>
</table>

**Money restraints and home ownership are key barriers**

<table>
<thead>
<tr>
<th>Key barriers (Base: 1822)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t have enough money for the upfront costs of doing this</td>
</tr>
<tr>
<td>I do not own my own home</td>
</tr>
<tr>
<td>I have to spend money on other priorities</td>
</tr>
</tbody>
</table>

**Action is linked to renewable energy devices**

**Behaviour change evidence**

- Impact of behaviour change campaign: Low
- Existing evidence: Low
- Level of influence: Medium

**Key motivations (Base: 1822)**

| N/A – no carbon score available |

| Makes my home warmer/more efficient | 38% |
| I want to help the environment | 36% |
| Saving money | 33% |

**Best marketing approach**

| Not determined |

**Most linked action**

| Install renewable energy devices |
Modify my home to be more resilient to heat and drought

### Willingness (Base: 3024)

<table>
<thead>
<tr>
<th>Action</th>
<th>Willing</th>
<th>Not willing/can't</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done it/ always do it</td>
<td>11%</td>
<td>60%</td>
</tr>
<tr>
<td>Willing</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Not willing/ can't</td>
<td>29%</td>
<td></td>
</tr>
</tbody>
</table>

### Key motivations (Base: 1822, 328, multi-choice)

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Willing</th>
<th>Not willing/can't</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makes my home warmer/more efficient</td>
<td>36%</td>
<td>33%</td>
</tr>
<tr>
<td>I want to help the environment</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td>Saving money</td>
<td>32%</td>
<td>31%</td>
</tr>
<tr>
<td>Receiving money/a grant to do it</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>Making my life more comfortable/easy</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Helping to reduce carbon</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>I would enjoy making the change</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Preventing harm to wildlife</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>I want to set an example to friends/family</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Don't know</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Not applicable - nothing in particular would motivate me</td>
<td>6%</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>My friends/family do it</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Saving time</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

### Key barriers (Base: 419, 1822, multi-choice)

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Willing</th>
<th>Not willing/can't</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't have enough money for the upfront costs of doing this</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td>None of these</td>
<td>14%</td>
<td>19%</td>
</tr>
<tr>
<td>I do not own my own home</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>I have to spend money on other priorities</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>There is no/not enough government help to do this</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>I would not know how to do this</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>I don't have enough money to pay for the ongoing costs of doing this</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Don't know</td>
<td>8%</td>
<td>28%</td>
</tr>
<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>I believe it will make a difference but have chosen to do something else to reduce climate change</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>I do not have time to do this</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>This is not possible where I live</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>The people I live with do not want to do this</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Nobody else in my community does this</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>My friends/family do not want to do this</td>
<td>2%</td>
<td>4%</td>
</tr>
</tbody>
</table>
| Summary/key points

- Willing are motivated to do this but want to be paid/assisted to do so
- Promoting efficiencies savings with resilience measures is motivating
Modify home to be more resilient to heat and drought

What is the most effective practise?
• Make salience of extreme weather conditions less abstract i.e. relevant to individuals

See ‘Install loft and wall insulation and plug gaps to stop drafts’ and ‘Avoid unnecessary water usage’

Case study – timely interventions
• Personal experience with an extreme weather event increases willingness to pay higher taxes to support mitigation and adaption (USA, 2019)

Impact of behaviour change campaign: Low
Existing evidence: Low
Level of influence: Medium

Reference
Bergquist et al., Experiencing a Severe Weather Event Increases Concern About Climate Change, 2019
Action dashboard – Modify my home to be more resilient to storms and flooding

Willingness is moderate (41%), CO\textsubscript{2} is N/A

Size of opportunity
(outer line reflects largest opportunity)

N/A – no carbon score available

Willingness (Base: 3024)

Done it/ always do it

4%

Willing

41%

Not willing/ can’t

54%

Money restraints and home ownership are key barriers

Key barriers (Base: 1244)

- I don't have enough money for the upfront costs of doing this: 27%
- I do not own my own home: 17%
- There is no/not enough government help to do this: 16%

Action is linked to installing insulation

Behaviour change evidence

Impact of behaviour change campaign: Low

Existing evidence: Low

Level of influence: Medium

Best marketing approach

Not determined

Most linked action

Install insulation

Key motivations (Base: 1244)

- Receiving money/a grant to do it: 34%
- I want to help the environment: 25%
- Saving money: 24%
Modify my home to be more resilient to storms and flooding

### Willingness (Base: 3024)

<table>
<thead>
<tr>
<th></th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/ can't</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4%</td>
<td>41%</td>
<td>54%</td>
</tr>
</tbody>
</table>

### Key motivations (Base: 1244, 131, multi-choice)

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Willing</th>
<th>Done it/ always do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving money/a grant to do it</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to help the environment</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Saving money</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Makes my home warmer/more efficient</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Making my life more comfortable/easy</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Helping to reduce carbon</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Preventing harm to wildlife</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>I want to set an example to friends/family</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>I would enjoy making the change</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Not applicable - nothing in particular would motivate me</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Saving time</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>My friends/family do it</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

### Key barriers (Base: 458, 1244, multi-choice)

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Willing</th>
<th>Done it/ always do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t have enough money for the upfront costs of doing this</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>I do not own my own home</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>None of these</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>There is no/not enough government help to do this</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>I have to spend money on other priorities</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>I would not know how to do this</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>I don’t have enough money to pay for the ongoing costs of doing this</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>I do not believe this will make a difference to climate change</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>This is not possible where I live</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>I do not have time to do this</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>I believe it will make a difference but have chosen to do something else to reduce climate change</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Nobody else in my community does this</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>The people I live with do not want to do this</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>My friends/family do not want to do this</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

### Summary/key points
- Willing are motivated to do this but want to be paid/assisted to do so as money is key barrier
Modify my home to be more resilient to storms and flooding

What is the most effective practise?
• Make salience of extreme weather conditions less abstract i.e. relevant to individuals

See ‘Install loft and wall insulation and plug gaps to stop drafts’ and ‘Avoid unnecessary water usage’

Case study – timely interventions
• Personal experience with an extreme weather event increases willingness to pay higher taxes to support mitigation and adaption (USA, 2019)

Reference
Bergquist et al., Experiencing a Severe Weather Event Increases Concern About Climate Change, 2019
Detailed quantitative survey findings
Online survey - Methodology

What and when:

• Online survey created by the Insight and Engagement Team with sample provided by YouGov (commissioned due to their ability to deliver Mosaic demographic groups without the need to collect personally identifiable information and survey software capabilities)
• 3,024 responses between 14 April and 22 April representative of the South East by interlocking age and gender quotas

Audience Profile – Audience profile in the South East broadly matched that of Hampshire

Base size: 3,024 South East residents
Installing renewable energy devices is the largest CO\textsuperscript{2} saving opportunity

Below is a representation of the carbon opportunity size (% of the Hampshire population willing to take an action multiplied by the amount of carbon saved for doing the action) in millions of kg of CO\textsuperscript{2} equivalent annually

<table>
<thead>
<tr>
<th>Action</th>
<th>Opportunity size (millions of kg CO\textsuperscript{2} annually)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install renewable energy devices in your home (e.g. heat pump, solar etc.)</td>
<td>1690.49</td>
</tr>
<tr>
<td>Change to a green energy tariff for your gas and electric</td>
<td>1303.08</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>636.64</td>
</tr>
<tr>
<td>Avoid flights by working from home/conference/video calls</td>
<td>372.84</td>
</tr>
<tr>
<td>Install insulation (e.g. loft, cavity wall insulation etc.)</td>
<td>321.18</td>
</tr>
<tr>
<td>Avoid short haul flights by taking the train instead</td>
<td>151.72</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>135.70</td>
</tr>
<tr>
<td>Avoid long haul flights by choosing not to travel internationally</td>
<td>101.30</td>
</tr>
<tr>
<td>Reduce meat consumption</td>
<td>84.46</td>
</tr>
<tr>
<td>Use water saving devices (e.g. shower timer, rainwater barrel, toilet water tank limiter...)</td>
<td>80.31</td>
</tr>
<tr>
<td>Reduce dairy consumption</td>
<td>76.42</td>
</tr>
<tr>
<td>Avoid local travel by working from home/conference/video calls</td>
<td>70.32</td>
</tr>
<tr>
<td>Reduce car/taxi use by using public transport</td>
<td>44.81</td>
</tr>
<tr>
<td>Choose energy efficient appliances when purchasing or replacing (e.g. with an A-rated...)</td>
<td>31.13</td>
</tr>
<tr>
<td>Buy locally produced food</td>
<td>16.54</td>
</tr>
<tr>
<td>Reduce car/taxi use by using active forms of transport (e.g. walking, cycling instead of a...)</td>
<td>15.56</td>
</tr>
<tr>
<td>Use less water (e.g. turn the tap off when brushing your teeth)</td>
<td>4.33</td>
</tr>
<tr>
<td>Correctly recycle materials</td>
<td>2.63</td>
</tr>
</tbody>
</table>

Key takeout – Home energy (renewable energy devices and green energy tariffs) is the largest opportunities to save carbon

Base size: 3,024 South East residents scaled to represent Hampshire
Willingness is concentrated in food choices and improvements at home

<table>
<thead>
<tr>
<th>Action</th>
<th>Willing</th>
<th>Done it/ always do it</th>
<th>Not willing/can't</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy locally produced food</td>
<td>78%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Make ethical food choices (e.g. buy Fairtrade, don’t buy palm oil etc.)</td>
<td>66%</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>Reduce use of plastics</td>
<td>63%</td>
<td>30%</td>
<td>7%</td>
</tr>
<tr>
<td>Use water saving devices (e.g. shower timer, rainwater barrel, toilet water tank limiter (hippo,...)</td>
<td>61%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>Modify my home to be more resilient to heat and drought (e.g. drought resilient plants, install...</td>
<td>60%</td>
<td>29%</td>
<td>26%</td>
</tr>
<tr>
<td>Change to a green energy tariff for your gas and electric</td>
<td>59%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Install renewable energy devices in your home (e.g. heat pump, solar etc.)</td>
<td>58%</td>
<td>37%</td>
<td>26%</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>52%</td>
<td>46%</td>
<td>20%</td>
</tr>
<tr>
<td>Reduce car/taxi use by using active forms of transport (e.g. walking, cycling instead of a vehicle)</td>
<td>48%</td>
<td>9%</td>
<td>31%</td>
</tr>
<tr>
<td>Choose energy efficient appliances when purchasing or replacing (e.g. with an A-rated energy...</td>
<td>48%</td>
<td>43%</td>
<td>9%</td>
</tr>
<tr>
<td>Avoid local travel by working from home/conference/video calls</td>
<td>47%</td>
<td>42%</td>
<td>9%</td>
</tr>
<tr>
<td>Reduce car/taxi use by using public transport</td>
<td>41%</td>
<td>54%</td>
<td>40%</td>
</tr>
<tr>
<td>Modify my home to be more resilient to storms and flooding (e.g. property level protection)</td>
<td>40%</td>
<td>56%</td>
<td>5%</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>38%</td>
<td>44%</td>
<td>11%</td>
</tr>
<tr>
<td>Reduce meat consumption</td>
<td>38%</td>
<td>51%</td>
<td>11%</td>
</tr>
<tr>
<td>Reduce dairy consumption</td>
<td>37%</td>
<td>23%</td>
<td>40%</td>
</tr>
<tr>
<td>Install insulation (e.g. loft, cavity wall insulation etc.)</td>
<td>35%</td>
<td>48%</td>
<td>18%</td>
</tr>
<tr>
<td>Avoid short haul flights by taking the train instead</td>
<td>34%</td>
<td>61%</td>
<td>18%</td>
</tr>
<tr>
<td>Use less water (e.g. turn the tap off when brushing your teeth)</td>
<td>34%</td>
<td>62%</td>
<td>18%</td>
</tr>
<tr>
<td>Use reusable alternatives wherever possible (e.g. shopping bags, containers etc.)</td>
<td>34%</td>
<td>62%</td>
<td>18%</td>
</tr>
<tr>
<td>Avoid long haul flights by choosing not to travel internationally</td>
<td>26%</td>
<td>62%</td>
<td>12%</td>
</tr>
<tr>
<td>Avoid flights by working from home/conference/video calls</td>
<td>24%</td>
<td>61%</td>
<td>14%</td>
</tr>
<tr>
<td>Correctly recycle materials</td>
<td>20%</td>
<td>75%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Base size: 3,024 South East residents
**Majority of people believe they always recycle and reuse**

<table>
<thead>
<tr>
<th>Action</th>
<th>Done it/ always do it</th>
<th>Willing</th>
<th>Not willing/can't</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correctly recycle materials</td>
<td>75%</td>
<td>20%</td>
<td>4%</td>
</tr>
<tr>
<td>Use reusable alternatives wherever possible (e.g. shopping bags, containers etc.)</td>
<td>62%</td>
<td>34%</td>
<td>4%</td>
</tr>
<tr>
<td>Use less water (e.g. turn the tap off when brushing your teeth)</td>
<td>61%</td>
<td>34%</td>
<td>5%</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>56%</td>
<td>40%</td>
<td>5%</td>
</tr>
<tr>
<td>Choose energy efficient appliances when purchasing or replacing (e.g. with an A-rated energy...)</td>
<td>43%</td>
<td>48%</td>
<td>9%</td>
</tr>
<tr>
<td>Install insulation (e.g. loft, cavity wall insulation etc.)</td>
<td>40%</td>
<td>37%</td>
<td>23%</td>
</tr>
<tr>
<td>Reduce use of plastics</td>
<td>30%</td>
<td>63%</td>
<td>7%</td>
</tr>
<tr>
<td>Change to a green energy tariff for your gas and electric</td>
<td>22%</td>
<td>59%</td>
<td>19%</td>
</tr>
<tr>
<td>Reduce car/taxi use by using active forms of transport (e.g. walking, cycling instead of a vehicle)</td>
<td>21%</td>
<td>48%</td>
<td>31%</td>
</tr>
<tr>
<td>Reduce car/taxi use by using public transport</td>
<td>19%</td>
<td>41%</td>
<td>40%</td>
</tr>
<tr>
<td>Reduce meat consumption</td>
<td>16%</td>
<td>38%</td>
<td>44%</td>
</tr>
<tr>
<td>Avoid short haul flights by taking the train instead</td>
<td>16%</td>
<td>35%</td>
<td>48%</td>
</tr>
<tr>
<td>Use water saving devices (e.g. shower timer, rainwater barrel, toilet water tank limiter (hippo,...)</td>
<td>17%</td>
<td>61%</td>
<td>22%</td>
</tr>
<tr>
<td>Make ethical food choices (e.g. buy Fairtrade, don't buy palm oil etc.)</td>
<td>15%</td>
<td>66%</td>
<td>19%</td>
</tr>
<tr>
<td>Avoid flights by working from home/conference/video calls</td>
<td>14%</td>
<td>24%</td>
<td>61%</td>
</tr>
<tr>
<td>Avoid long haul flights by choosing not to travel internationally</td>
<td>12%</td>
<td>26%</td>
<td>62%</td>
</tr>
<tr>
<td>Modify my home to be more resilient to heat and drought (e.g. drought resilient plants, install...</td>
<td>11%</td>
<td>60%</td>
<td>29%</td>
</tr>
<tr>
<td>Avoid local travel by working from home/conference/video calls</td>
<td>11%</td>
<td>47%</td>
<td>42%</td>
</tr>
<tr>
<td>Reduce dairy consumption</td>
<td>11%</td>
<td>38%</td>
<td>51%</td>
</tr>
<tr>
<td>Buy locally produced food</td>
<td>10%</td>
<td>78%</td>
<td>12%</td>
</tr>
<tr>
<td>Install renewable energy devices in your home (e.g. heat pump, solar etc.)</td>
<td>6%</td>
<td>58%</td>
<td>37%</td>
</tr>
<tr>
<td>Modify my home to be more resilient to storms and flooding (e.g. property level protection)</td>
<td>4%</td>
<td>41%</td>
<td>54%</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>2%</td>
<td>52%</td>
<td>46%</td>
</tr>
</tbody>
</table>

*Base size: 3,024 South East residents*
Resistance strongest for flying, storm resilience, electric cars and meat and dairy reduction

- Avoid long haul flights by choosing not to travel internationally
  - Not willing/can't: 62%
  - Willing: 26%
  - Done it/ always do it: 12%
- Avoid flights by working from home/conference/video calls
  - Not willing/can't: 61%
  - Willing: 24%
  - Done it/ always do it: 14%
- Modify my home to be more resilient to storms and flooding (e.g. property level protection)
  - Not willing/can't: 54%
  - Willing: 41%
  - Done it/ always do it: 4%
- Reduce dairy consumption
  - Not willing/can't: 51%
  - Willing: 38%
  - Done it/ always do it: 4%
- Avoid short haul flights by taking the train instead
  - Not willing/can't: 48%
  - Willing: 35%
  - Done it/ always do it: 11%
- Buy/lease an electric car
  - Not willing/can't: 46%
  - Willing: 52%
  - Done it/ always do it: 2%
- Reduce meat consumption
  - Not willing/can't: 44%
  - Willing: 38%
  - Done it/ always do it: 11%
- Avoid local travel by working from home/conference/video calls
  - Not willing/can't: 42%
  - Willing: 47%
  - Done it/ always do it: 11%
- Reduce car/taxi use by using public transport
  - Not willing/can't: 40%
  - Willing: 41%
  - Done it/ always do it: 19%
- Install renewable energy devices in your home (e.g. heat pump, solar etc.)
  - Not willing/can't: 37%
  - Willing: 58%
  - Done it/ always do it: 5%
- Reduce car/taxi use by using active forms of transport (e.g. walking, cycling instead of a vehicle)
  - Not willing/can't: 31%
  - Willing: 48%
  - Done it/ always do it: 21%
- Modify my home to be more resilient to heat and drought (e.g. drought resilient plants, install...)
  - Not willing/can't: 29%
  - Willing: 60%
  - Done it/ always do it: 11%
- Install insulation (e.g. loft, cavity wall insulation etc.)
  - Not willing/can't: 23%
  - Willing: 37%
  - Done it/ always do it: 40%
- Use water saving devices (e.g. shower timer, rainwater barrel, toilet water tank limiter (hippo,...)
  - Not willing/can't: 22%
  - Willing: 61%
  - Done it/ always do it: 17%
- Make ethical food choices (e.g. buy Fairtrade, don't buy palm oil etc.)
  - Not willing/can't: 19%
  - Willing: 66%
  - Done it/ always do it: 15%
- Change to a green energy tariff for your gas and electric
  - Not willing/can't: 19%
  - Willing: 59%
  - Done it/ always do it: 22%
- Buy locally produced food
  - Not willing/can't: 12%
  - Willing: 78%
  - Done it/ always do it: 10%
- Choose energy efficient appliances when purchasing or replacing (e.g. with an A-rated energy...
  - Not willing/can't: 9%
  - Willing: 48%
  - Done it/ always do it: 43%
- Reduce use of plastics
  - Not willing/can't: 7%
  - Willing: 63%
  - Done it/ always do it: 30%
- Use less water (e.g. turn the tap off when brushing your teeth)
  - Not willing/can't: 5%
  - Willing: 34%
  - Done it/ always do it: 61%
- Reduce food waste
  - Not willing/can't: 5%
  - Willing: 40%
  - Done it/ always do it: 56%
- Use reusable alternatives wherever possible (e.g. shopping bags, containers etc.)
  - Not willing/can't: 5%
  - Willing: 34%
  - Done it/ always do it: 62%
- Correctly recycle materials
  - Not willing/can't: 2%
  - Willing: 20%
  - Done it/ always do it: 75%

Base size: 3,024 South East residents
Detailed responses for one-off actions

- The action that the most people are very willing to take is to use water saving devices.
- The action that the most people feel they have done is insulating their home.
- The action that the most people feel least applies to them is modifying the home to be more resilient to floods and storms.
Avoid long haul flights by choosing not to travel internationally
Correctly recycle materials

I always do this action
I sometimes do this action but I am willing to do it more
I sometimes do this action and I am not willing to do it more
I never do this action but I am willing to do it
I never do this action and I am not willing to do it
Not applicable – this does not apply to me

Note: Any response with <10%, the number has been removed from the graph

The actions that most people already do and are willing to do more of are buying locally produced food, reducing use of plastics and making ethical food choices

The actions that most people do not already do but are willing to do are avoid short haul flights by taking the train instead, avoid local travel by working from home and reduce diary consumption
Actions link together in clusters

There are three larger clusters of actions (Home, Food and Travel) where being willing to take one makes a person more likely to be willing to do another.

**Home**
- Use water saving devices
- Install insulation
- Modify my home to be more resilient to storms and flooding
- Change to a green energy tariff
- Modify my home to be more resilient to heat and drought
- Install renewable energy

More likely to be Male, Younger (18-44), ABC1 social grade

**Travel**
- Avoid local travel by working from home/conference/video calls
- Avoid short haul flights by taking the train instead
- Reduce car/taxi use by using active forms of transport
- Reduce long haul flights by choosing not to travel internationally
- Reduce car/taxi use by using public transport
- Avoid flights by working from home/conference/video calls

**Food and resources**
- Reduce food waste
- Make ethical food choices
- Correctly recycle materials
- Use reusable alternatives wherever possible
- Reduce use of plastics

More likely to be younger (25-44)

Travel - More likely to be Male, middle age groups (25-54), ABC1 social grade and Mosaic group G – Domestic Success

*Key takeout – Targeting people who have taken one action or are willing to take it may be a good way to target them for another related action.*
## Action willingness clusters together

Table below shows the relationship between being willing to take one climate change action and any other action. Colour indicates the strength of this correlation with 1 (Dark Green) being fully correlated and 0 or dark red being completely unrelated. Any negative scores mean that being willing to take an action makes people less likely to take the related action.

### Use/water saving devices (e.g. shower, timer, rainwater tank, dual flush toilet, low flow shower, replacement of hot water system, move to a smaller water heater, replace kitchen sink with water saving), insulation (e.g. loft, cavity wall insulation etc.), renewable energy devices in your home (e.g. offshore wind farm, solar panels on your roof, wind turbine on your land, geothermal plant), buy/lease an electric car, change to a green energy tariff for your gas and electricity, modify your home to be more resilient to heat and drought (e.g. drought resilient plants, install window shades), install renewable energy devices in your home (e.g. heat pump, solar photovoltaics, wind turbine, geothermal plant), buy/lease an electric car, modify your home to be more resilient to heat and drought (e.g. loft, cavity wall insulation etc.), reduce meat consumption, buy/lease locally produced food, reduce food waste, use reusable alternatives whenever possible (e.g. cloth bags, glass instead of plastic bottles, reusable coffee cups, single use items), correctly recycle materials, reduce use of plastics

### Home

Use water saving devices (e.g. shower, timer, rainwater tank, dual flush toilet, low flow shower, replacement of hot water system, move to a smaller water heater, replace kitchen sink with water saving), insulation (e.g. loft, cavity wall insulation etc.), install renewable energy devices in your home (e.g. offshore wind farm, solar panels on your roof, wind turbine on your land, geothermal plant), buy/lease an electric car, change to a green energy tariff for your gas and electricity, modify your home to be more resilient to heat and drought (e.g. drought resilient plants, install window shades), install renewable energy devices in your home (e.g. heat pump, solar photovoltaics, wind turbine, geothermal plant), buy/lease an electric car, modify your home to be more resilient to heat and drought (e.g. loft, cavity wall insulation etc.), reduce meat consumption, buy/lease locally produced food, reduce food waste, use reusable alternatives whenever possible (e.g. cloth bags, glass instead of plastic bottles, reusable coffee cups, single use items), correctly recycle materials, reduce use of plastics

### Travel

Reduce dairy consumption, use water saving devices (e.g. shower, timer, rainwater tank, dual flush toilet, low flow shower, replacement of hot water system, move to a smaller water heater, replace kitchen sink with water saving), insulation (e.g. loft, cavity wall insulation etc.), install renewable energy devices in your home (e.g. offshore wind farm, solar panels on your roof, wind turbine on your land, geothermal plant), buy/lease an electric car, change to a green energy tariff for your gas and electricity, modify your home to be more resilient to heat and drought (e.g. drought resilient plants, install window shades), install renewable energy devices in your home (e.g. heat pump, solar photovoltaics, wind turbine, geothermal plant), buy/lease an electric car, modify your home to be more resilient to heat and drought (e.g. loft, cavity wall insulation etc.), reduce meat consumption, buy/lease locally produced food, reduce food waste, use reusable alternatives whenever possible (e.g. cloth bags, glass instead of plastic bottles, reusable coffee cups, single use items), correctly recycle materials, reduce use of plastics

### Food

Use water saving devices (e.g. shower, timer, rainwater tank, dual flush toilet, low flow shower, replacement of hot water system, move to a smaller water heater, replace kitchen sink with water saving), insulation (e.g. loft, cavity wall insulation etc.), install renewable energy devices in your home (e.g. offshore wind farm, solar panels on your roof, wind turbine on your land, geothermal plant), buy/lease an electric car, change to a green energy tariff for your gas and electricity, modify your home to be more resilient to heat and drought (e.g. drought resilient plants, install window shades), install renewable energy devices in your home (e.g. heat pump, solar photovoltaics, wind turbine, geothermal plant), buy/lease an electric car, modify your home to be more resilient to heat and drought (e.g. loft, cavity wall insulation etc.), reduce meat consumption, buy/lease locally produced food, reduce food waste, use reusable alternatives whenever possible (e.g. cloth bags, glass instead of plastic bottles, reusable coffee cups, single use items), correctly recycle materials, reduce use of plastics

### Key takeout – Targeted interventions that have taken or have nothing to take have an impact on other actions. This underlines how collective efforts lead to greater impact.
COVID-19 is making 1 in 3 people think and act differently on climate change

In an open-ended question at the end of the survey, we asked respondents whether Coronavirus has made them reconsider any of their actions. Respondents were given an opportunity to spontaneously reflect on how Coronavirus has changed their routines and lifestyles.

The open-ended question was as follows:

*Thinking generally about the answers you provided in this survey. In which, if any, ways would you say the current public health situation (i.e. the outbreak of Covid-19 (Coronavirus)) causes you to think differently about any of the answers you provided?*

![Survey results](chart)

- 67% COVID-19 has not made me think differently about my actions
- 25% COVID-19 has encouraged me to undertake more environmentally friendly behaviours
- 9% COVID-19 has encouraged me to undertake more environmentally unfriendly behaviours

As we are interested in understanding what behaviours are particularly relevant and salient at this time, we will be looking into more detail at **34% who have reported that Coronavirus has changed their behaviour**
Travel climate actions are where most people are thinking differently due to COVID-19.

People had mentioned many positives involving travel and diet whereas resources and their willingness and ability to modify their home were more mixed.

Key takeout – Behaviour has changed in a number of areas, particularly travel and diet – this presents an opportunity to encourage or reinforce behaviours that are positive for climate action.
What would people change – Travel positive and negative

42% of people who reported COVID-19 having changed their behaviour said they would travel more sustainably. The most common reason for this was working from home. Many people expressed a desire to continue doing so.

<table>
<thead>
<tr>
<th>Travel positive</th>
<th>42%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working from home</td>
<td>22%</td>
</tr>
<tr>
<td>Reduce car travel</td>
<td>8%</td>
</tr>
<tr>
<td>Less flying now/more cautious in future</td>
<td>6%</td>
</tr>
<tr>
<td>More active transport e.g. walk cycle</td>
<td>5%</td>
</tr>
<tr>
<td>Video conference meant travel less</td>
<td>4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Travel - negative</th>
<th>6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not travelling by public transport</td>
<td>4%</td>
</tr>
<tr>
<td>Driving more</td>
<td>1%</td>
</tr>
<tr>
<td>Food deliveries increased</td>
<td>1%</td>
</tr>
<tr>
<td>Not buying an electric car</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Key takeout – There is a large positive opportunity to lock in working from home behaviours to reduce unnecessary travel and enhance work/life balances. This may be needed to balance out a drop in use of public transport.
33% of people who reported COVID-19 having changed their behaviour said they are eating differently with many finding local foods, which they link with sustainability.

### Key takeout
- People believe that shopping locally is helping carbon impact when it might make little difference.
What would people change – Resources positive and negative

9% of people who reported COVID-19 having changed their behaviour said they use resources less sustainably. The most common reason for this was single use plastic.

Key takeout – While many respondents are making positive changes there is evidence of waste that would not usually have occurred.
What would people change – Home and energy positive and negative

7% of people who reported COVID-19 having changed their behaviour said they would or are using energy less sustainably. The most common reason for this was feeling they had less ability to invest in modifications.

Key takeout – Many respondents may be thinking more about sustainable actions but feel less able to do this. Identifying easy to do and safe ways to save money and energy could go down well with citizens.
Priorities for change in the next twelve months are led by diet

Among those who were willing to take any of the 23 climate related actions we asked whether people felt they were likely to make changes in the next twelve months. Below shows the broad areas where people felt they were most likely to make change in the short term.

Key takeout – Immediate changes are dominated by diet perhaps reflecting the level of control people have and the relative ease to make change.

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet</td>
<td>70%</td>
</tr>
<tr>
<td>Home and water</td>
<td>55%</td>
</tr>
<tr>
<td>Resources</td>
<td>51%</td>
</tr>
<tr>
<td>Travel</td>
<td>45%</td>
</tr>
</tbody>
</table>
Priorities for change 1/2

Buying locally produced food is the single climate action that is most mentioned as a change that respondents expect to make in the next 12 months.

Diet (any action) 70%
Buy locally produced food 47%
Make ethical food choices (e.g. buy Fairtrade, don’t buy palm oil etc.) 34%
Reduce food waste 27%
Reduce meat consumption 22%
Reduce dairy consumption 14%

Home and water (any action) 55%
Use less water (e.g. turn the tap off when brushing your teeth) 20%
Choose energy efficient appliances when purchasing or replacing 20%
Use water saving devices (e.g. shower timer, rainwater barrel) 16%
Change to a green energy tariff for your gas and electric 16%
Modify my home to be more resilient to heat and drought 8%
Install renewable energy devices in your home (e.g. heat pump, solar etc.) 6%
Install insulation (e.g. loft, cavity wall insulation etc.) 5%
Modify my house to be more resilient to storms and flooding 3%

Buying locally produced food was the biggest priority for respondents.

The highest priorities in the household were to undertake small changes (e.g. use less water, choose energy efficient appliances) rather than big changes (house modification, insulation).

Key takeout – Respondents are taking climate actions but potentially not the ones the County Council would want them to take to save the most carbon.
Buying locally produced food is the single climate action that is most mentioned as a change that respondents expect to make in the next 12 months.

Here are the priorities for change:

**Resources (any action)**
- Reduce use of plastics: 42%
- Use reusable alternatives wherever possible (e.g., shopping bags, containers): 23%
- Correctly recycle materials: 12%

**Travel (any action)**
- Reduce car/taxi use by using active forms of transport (e.g., walking, cycling): 20%
- Reduce car/taxi use by using public transport: 14%
- Avoid local travel by working from home/conference/video calls: 13%
- Avoid short haul flights by taking the train instead: 11%
- Avoid long haul flights by choosing not to travel internationally: 11%
- Buy/lease an electric car: 6%
- Avoid flights by working from home/conference/video calls: 5%

Reducing plastic use was a clear priority for respondents.

While respondents noted that Coronavirus had altered their travel behaviours most out of the four categories, when it comes to priorities, travel is the lowest. This suggests individuals will need more ‘nudging’ to change their behaviour.

**Base size:** 2,995

**Key takeout** – Respondents are taking climate actions but potentially not the ones the County Council would want them to take to save the most carbon.
<table>
<thead>
<tr>
<th>Action</th>
<th>Groups that are significantly more likely to be willing to take the action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use water saving devices</td>
<td>Women, Mosaic Group C – County Living, Fulltime employed, Unemployed</td>
</tr>
<tr>
<td>Install insulation (e.g. loft, cavity wall insulation etc.)</td>
<td>35-44, Mosaic Group C – County Living, Mosaic Group G - Domestic Success, Fulltime employed, Unemployed</td>
</tr>
<tr>
<td>Install renewable energy devices in your home</td>
<td>ABC1 social grade, 18-54, East Sussex, Isle of Wight, C - Country Living, G - Domestic Success, N - Urban Cohesion, Fulltime employed, Unemployed, LinkedIn, Pinterest, WhatsApp</td>
</tr>
<tr>
<td>Change to a green energy tariff for your gas and electric</td>
<td>Women, ABC1 social grade, 18-54, Oxfordshire, N - Urban Cohesion, Fulltime employed, Unemployed, 2 children in household, Pinterest, WhatsApp</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>ABC1 social grade, 18-34, 45-54, A - City Prosperity, B - Prestige Positions, C - Country Living, G - Domestic Success, Fulltime employed, Unemployed, Twitter, WhatsApp</td>
</tr>
<tr>
<td>Modify my home to be more resilient to heat and drought</td>
<td>ABC1 social grade, Isle of Wight, B - Prestige Positions, N - Urban Cohesion, Fulltime employed, Unemployed</td>
</tr>
<tr>
<td>Modify my home to be more resilient to storms and flooding</td>
<td>ABC1 social grade, West Sussex, A - City Prosperity, C - Country Living, G - Domestic Success, Fulltime employed, Unemployed</td>
</tr>
<tr>
<td>Use less water</td>
<td>Men, 25-34, Oxfordshire, Twitter</td>
</tr>
<tr>
<td>Choose energy efficient appliances when purchasing or replacing</td>
<td>18-34, Isle of Wight, Surrey, Oxfordshire, O - Rental Hubs, Never married</td>
</tr>
<tr>
<td>Reduce car/taxi use by using active forms of transport</td>
<td>A - City Prosperity, C - Country Living, F - Suburban Stability, G - Domestic Success, H - Aspiring Homemakers, Living as married, Snapchat</td>
</tr>
<tr>
<td>Reduce car/taxi use by using public transport</td>
<td>Berkshire, Buckinghamshire, A - City Prosperity, B - Prestige Positions, F - Suburban Stability, G - Domestic Success, N - Urban Cohesion, Fulltime employed, LinkedIn, Skype</td>
</tr>
<tr>
<td>Avoid short haul flights by taking the train instead</td>
<td>18-24, A - City Prosperity, B - Prestige Positions, C - Country Living, G - Domestic Success H - Aspiring Homemakers, Skype</td>
</tr>
<tr>
<td>Avoid long haul flights by choosing not to travel internationally</td>
<td>Male, 18-24, A - City Prosperity, C - Country Living, G - Domestic Success, Skype</td>
</tr>
<tr>
<td>Avoid flights by working from home/conference/video calls</td>
<td>A - City Prosperity, Surrey</td>
</tr>
<tr>
<td>Avoid local travel by working from home/conference/video calls</td>
<td>25-34, Berkshire, Oxfordshire, C - Country Living, E - Senior Security, H - Aspiring Homemakers, LinkedIn, Skype</td>
</tr>
<tr>
<td>Reduce meat consumption</td>
<td>18-24, G - Domestic Success, I - Family Basics, M - Modest Traditions, 4 years and under, Instagram, Snapchat, WhatsApp</td>
</tr>
<tr>
<td>Reduce dairy consumption</td>
<td>Female, 18-24, East Sussex, Oxfordshire, G - Domestic Success, I - Family Basics, M - Modest Traditions, O - Rental Hubs, Working (Full or part-time), Skype</td>
</tr>
<tr>
<td>Buy locally produced food</td>
<td>Female, 25-54, H - Aspiring Homemakers, K - Municipal Tenants, O - Rental Hubs, Instagram, Twitter</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>Female, 18-44, H - Aspiring Homemakers, Married/ Civil Partnership, Never married</td>
</tr>
<tr>
<td>Make ethical food choices</td>
<td>Female, 25-44, G - Domestic Success, Pinterest, Instagram</td>
</tr>
<tr>
<td>Use reusable alternatives wherever possible</td>
<td>Male, 25-44, Oxfordshire, West Sussex, C - Country Living, H - Aspiring Homemakers, Full-time working, Living as married, Never married</td>
</tr>
<tr>
<td>Correctly recycle materials</td>
<td>18-44, East Sussex, isle of Wight, H - Aspiring Homemakers, I - Family Basics, K - Municipal Tenants, O - Rental Hubs</td>
</tr>
<tr>
<td>Reduce use of plastics</td>
<td>25-44, Oxfordshire, Surrey, Living as married</td>
</tr>
<tr>
<td>Action</td>
<td>Profile</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Use water saving devices (e.g. shower timer, rainwater barrel, toilet water tank limiter (hippo, brick))</td>
<td>Female, Full time, Children over 18 years old, Facebook messenger</td>
</tr>
<tr>
<td></td>
<td>Female, Full time, Facebook messenger</td>
</tr>
<tr>
<td></td>
<td>Female, Full time, Facebook messenger, less than 55 years old, not Widowed, having more or less than one child (i.e. except of one child), and ABC1 social grade</td>
</tr>
<tr>
<td>Install insulation (e.g. loft, cavity wall insulation etc.)</td>
<td>Full time, 35-44 years old, Pinterest</td>
</tr>
<tr>
<td></td>
<td>Full time, 35-44 years old, ABC1 social grade, not Widowed, at least one child, and Children Profile: 4 years and under</td>
</tr>
<tr>
<td>Install renewable energy devices in your home (e.g. heat pump, solar etc.)</td>
<td>Full time, less than 55 years old, ABC1 social grade, not Widowed, Children over 18 years old, uses LinkedIn</td>
</tr>
<tr>
<td>Change to a green energy tariff for your gas and electric</td>
<td>Female, full time, less than 55 years old, ABC1 social grade, Married/ Civil Partnership, 2 children, uses WhatsApp</td>
</tr>
<tr>
<td></td>
<td>Female, full time, less than 55 years old, ABC1 social grade, Married/ Civil Partnership, uses Pinterest</td>
</tr>
<tr>
<td></td>
<td>Female, full time, less than 55 years old, ABC1 social grade, Married/ Civil Partnership, uses WhatsApp</td>
</tr>
<tr>
<td></td>
<td>Female, full time, less than 55 years old, ABC1 social grade, Married/ Civil Partnership, uses Skype</td>
</tr>
<tr>
<td></td>
<td>Female, full time, less than 55 years old, ABC1 social grade, uses Pinterest</td>
</tr>
<tr>
<td></td>
<td>Female, full time, less than 55 years old, ABC1 social grade, uses WhatsApp</td>
</tr>
<tr>
<td></td>
<td>Female, full time, less than 55 years old, ABC1 social grade, uses Skype</td>
</tr>
<tr>
<td>Buy/lease an electric car</td>
<td>Full time, less than 55 years old, ABC1 social grade, Children Profile: 12 to 16 years, uses Facebook</td>
</tr>
<tr>
<td></td>
<td>Full time, less than 55 years old, ABC1 social grade, Children Profile: 12 to 16 years, uses Twitter</td>
</tr>
<tr>
<td></td>
<td>Full time, less than 55 years old, ABC1 social grade, Children Profile: 12 to 16 years, uses Instagram</td>
</tr>
<tr>
<td></td>
<td>Full time, less than 55 years old, ABC1 social grade, Children Profile: 12 to 16 years, uses WhatsApp</td>
</tr>
<tr>
<td></td>
<td>Full time, less than 55 years old, ABC1 social grade, uses Facebook &amp; Twitter &amp; Pinterest &amp; Instagram &amp; WhatsApp</td>
</tr>
<tr>
<td></td>
<td>Full time, less than 55 years old, ABC1 social grade, uses Facebook</td>
</tr>
<tr>
<td>Modify my home to be more resilient to heat and drought (e.g. drought resilient plants, install window shades)</td>
<td>Full time, ABC1 social grade, not Widowed, WhatsApp</td>
</tr>
<tr>
<td></td>
<td>Full time, ABC1 social grade, not Widowed, WhatsApp, less than 55 years old, number of children different of 2, Children Profile: 12 to 16 years</td>
</tr>
<tr>
<td>Modify my home to be more resilient to storms and flooding (e.g. property level protection)</td>
<td>Full time, ABC1 social grade, not Widowed, less than 55 years old, uses Facebook_Messenger</td>
</tr>
<tr>
<td></td>
<td>Full time, ABC1 social grade, not Widowed, less than 55 years old, uses Instagram</td>
</tr>
<tr>
<td></td>
<td>Full time, ABC1 social grade, not Widowed, less than 55 years old, uses Facebook_Messenger</td>
</tr>
<tr>
<td>Action</td>
<td>Profile</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Reduce dairy consumption</td>
<td>Female, less than 55 years old, not full time employed, uses Skype</td>
</tr>
<tr>
<td></td>
<td>Female, less than 55 years old, not full time employed, uses Skype, ABC1 social grade, not more than 2 children (i.e. less than 2 children)</td>
</tr>
<tr>
<td></td>
<td>Female, over 35 years old, not Widowed, uses Twitter and Instagram</td>
</tr>
<tr>
<td>Buy locally produced food</td>
<td>Female, over 35 years old, not Widowed, uses Instagram</td>
</tr>
<tr>
<td></td>
<td>Female, over 35 years old, not Widowed, uses Instagram, ABC1 social grade, not more than 2 children (i.e. less than 2 children)</td>
</tr>
<tr>
<td></td>
<td>Female, over 35 years old, not Widowed, uses Twitter, ABC1 social grade, not more than 2 children (i.e. less than 2 children), Children Profile: 4 years and under</td>
</tr>
<tr>
<td></td>
<td>Female, over 35 years old, not Widowed, uses Twitter, ABC1 social grade, not more than 2 children (i.e. less than 2 children), Children Profile: 5 to 11 years</td>
</tr>
<tr>
<td></td>
<td>Female, over 35 years old, not Widowed, uses Instagram, ABC1 social grade, not more than 2 children (i.e. less than 2 children), Children Profile: 5 to 11 years</td>
</tr>
<tr>
<td>Reduce food waste</td>
<td>Female, not 25-34 years old (i.e from any other age group), not Never Married (i.e. with any other marital status), uses Facebook</td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old (i.e from any other age group), not Never Married (i.e. with any other marital status), not full time employed, less or more than one child (i.e. not one child), uses Facebook</td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old (i.e from any other age group), not Never Married (i.e. with any other marital status), not full time employed, less or more than one child (i.e. not one child), uses WhatsApp, Children Profile: 5 to 11 years</td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old (i.e from any other age group), not Never Married (i.e. with any other marital status), not full time employed, less or more than one child (i.e. not one child), uses Facebook, Children Profile: 12 to 16 years</td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old (i.e from any other age group), not Never Married (i.e. with any other marital status), not full time employed, less or more than one child (i.e. not one child), uses WhatsApp, Children Profile: 5 to 11 years</td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old (i.e from any other age group), not Never Married (i.e. with any other marital status), not full time employed, less or more than one child (i.e. not one child), uses WhatsApp, Children Profile: 12 to 16 years</td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old (i.e from any other age group), not Never Married (i.e. with any other marital status), uses Pinterest</td>
</tr>
<tr>
<td>Make ethical food choices (e.g. buy Fairtrade, don't buy palm oil, etc.)</td>
<td>Inactive, female, not 25-34 years old (i.e from any other age group), not Never Married (i.e. with any other marital status), not Part time employed, at least one child (i.e. one child or more)</td>
</tr>
<tr>
<td>Use reusable alternatives wherever possible (e.g. shopping bags, containers etc.)</td>
<td>Female, not full time employed, not 25-34 years old (i.e from any other age group), not Separated/ Divorced, uses Twitter</td>
</tr>
<tr>
<td>Correctly recycle materials</td>
<td>Female, ABC1 social grade, not 25-34 years old (i.e from any other age group), not Separated/ Divorced, uses Instagram</td>
</tr>
<tr>
<td>Reduse use of plastics</td>
<td>Female, ABC1 social grade, not 25-34 years old (i.e from any other age group), not Separated/ Divorced, uses Instagram, not employed, less than 3 children, Children Profile: 5 to 11 years</td>
</tr>
<tr>
<td></td>
<td>Female, ABC1 social grade, not 25-34 years old (i.e from any other age group), not Separated/ Divorced, uses Instagram, not employed, less than 3 children, Children Profile: 12 to 16 years</td>
</tr>
<tr>
<td></td>
<td>Female, ABC1 social grade, not 25-34 years old (i.e from any other age group), not Separated/ Divorced, uses Instagram, not employed, less than 3 children, Children Profile: Over 18 years</td>
</tr>
</tbody>
</table>
## Who is best to target for each action – combined demographic target groups 3/3

<table>
<thead>
<tr>
<th>Action</th>
<th>Profile</th>
<th>Count (# of observ.)</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use less water (e.g. turn the tap off when brushing your teeth)</strong></td>
<td>Unemployed, female, 45-54 years old, uses WhatsApp</td>
<td>4</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Female, 45-54 years old, uses WhatsApp</td>
<td>206</td>
<td>6.81</td>
</tr>
<tr>
<td></td>
<td><strong>Female, 55+ years old, uses WhatsApp</strong></td>
<td><strong>382</strong></td>
<td><strong>12.63</strong></td>
</tr>
<tr>
<td></td>
<td>Female, 45-54 years old, uses WhatsApp, every other marital status except of &quot;Never Married&quot;, one child</td>
<td>40</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td>Female, 45-54 years old, uses WhatsApp, every other marital status except of &quot;Never Married&quot;, two children</td>
<td>40</td>
<td>1.32</td>
</tr>
<tr>
<td><strong>Choose energy efficient appliances when purchasing or replacing</strong></td>
<td><strong>Female, not part time employed, over 25 years old, not Widowed, 2 children or less, uses Facebook_Messenger</strong></td>
<td><strong>683</strong></td>
<td><strong>22.59</strong></td>
</tr>
<tr>
<td></td>
<td>Female, not part time employed, over 25 years old, not Widowed, 2 children or less, uses Facebook_Messenger, Children Profile: 5 to 11 years</td>
<td>69</td>
<td>2.28</td>
</tr>
<tr>
<td></td>
<td>Female, not part time employed, over 25 years old, not Widowed, 2 children or less, uses Facebook_Messenger, Children Profile: 12 to 16 years</td>
<td>66</td>
<td>2.18</td>
</tr>
<tr>
<td><strong>Reduce car/taxi use by using active forms of transport (e.g. walking, cycling instead of a vehicle)</strong></td>
<td>Less than 55 years old, living as married</td>
<td>333</td>
<td>11.01</td>
</tr>
<tr>
<td><strong>Reduce car/taxi use by using public transport</strong></td>
<td>Not 25-34 years old, not full time employed, uses LinkedIn and Skype</td>
<td>52</td>
<td>1.72</td>
</tr>
<tr>
<td></td>
<td><strong>Not 25-34 years old, not full time employed, uses LinkedIn</strong></td>
<td><strong>208</strong></td>
<td><strong>6.88</strong></td>
</tr>
<tr>
<td></td>
<td>Not 25-34 years old, not full time employed, uses Skype</td>
<td>150</td>
<td>5.29</td>
</tr>
<tr>
<td><strong>Avoid short haul flights by taking the train instead</strong></td>
<td>18-24 years old, uses Pinterest</td>
<td>44</td>
<td>1.46</td>
</tr>
<tr>
<td></td>
<td>18-24 years old, uses Skype</td>
<td>41</td>
<td>1.36</td>
</tr>
<tr>
<td><strong>Avoid long haul flights by choosing not to travel internationally</strong></td>
<td>Female, not 25-34 years old, more or less than 2 children (i.e. not 2 children), Children Profile: 18 years and under</td>
<td>169</td>
<td>5.59</td>
</tr>
<tr>
<td></td>
<td><strong>Female, not 25-34 years old, more or less than 2 children (i.e. not 2 children)</strong></td>
<td><strong>1170</strong></td>
<td><strong>38.69</strong></td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old, more or less than 2 children (i.e. not 2 children), Children Profile: 18 years and under, not full time employed, not Never Married, uses Twitter</td>
<td>32</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old, more or less than 2 children (i.e. not 2 children), Children Profile: 18 years and under, not full time employed, Never Married, uses Twitter</td>
<td>157</td>
<td>5.19</td>
</tr>
<tr>
<td></td>
<td>Female, not 25-34 years old, more or less than 2 children (i.e. not 2 children), not full time employed, Not Never Married, uses Twitter</td>
<td>102</td>
<td>3.37</td>
</tr>
<tr>
<td><strong>Avoid flights by working from home/conference/video calls</strong></td>
<td><strong>Not 25-34 years old, uses Skype</strong></td>
<td><strong>371</strong></td>
<td><strong>12.27</strong></td>
</tr>
<tr>
<td></td>
<td>Not 25-34 years old, uses Skype, female, not Widowed, less than 3 children, Children Profile: 5 to 11 years, Children Profile: 17 to 18 years and/or Children Profile: 18 years and under, and/or Children Profile: Over 18 years</td>
<td>126</td>
<td>4.17</td>
</tr>
<tr>
<td><strong>Avoid local travel by working from home/conference/video calls</strong></td>
<td>No identified groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reduce meat consumption</strong></td>
<td>Female, less than 55 years old, not Widowed, ABC1 social grade, uses Pinterest and WhatsApp and Skype</td>
<td>39</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>Female, less than 55 years old, not Widowed, ABC1 social grade, uses Pinterest</td>
<td>171</td>
<td>5.65</td>
</tr>
<tr>
<td></td>
<td><strong>Female, less than 55 years old, not Widowed, ABC1 social grade, uses WhatsApp</strong></td>
<td><strong>579</strong></td>
<td><strong>19.15</strong></td>
</tr>
<tr>
<td></td>
<td>Female, less than 55 years old, not Widowed, ABC1 social grade, uses Skype</td>
<td>126</td>
<td>4.17</td>
</tr>
<tr>
<td></td>
<td>Female, less than 55 years old, not Widowed, ABC1 social grade, uses Pinterest, not inactive, not more than 2 children (i.e. less than 2 children), Children Profile: 18 years and under</td>
<td>47</td>
<td>1.55</td>
</tr>
<tr>
<td></td>
<td>Female, less than 55 years old, not Widowed, ABC1 social grade, uses WhatsApp, not inactive, not more than 2 children (i.e. less than 2 children), Children Profile: 18 years and under</td>
<td>155</td>
<td>5.13</td>
</tr>
<tr>
<td></td>
<td>Female, less than 55 years old, not Widowed, ABC1 social grade, uses Skype, not inactive, not more than 2 children (i.e. less than 2 children), Children Profile: 18 years and under</td>
<td>31</td>
<td>1.03</td>
</tr>
</tbody>
</table>
Qualitative focus group findings
Focus group – Methodology

What and when:

- Four focus groups were held across Hampshire
  - Gosport – 24th February
  - Romsey - 25th February
  - Basingstoke – 26th February
  - Petersfield – 3rd March
- The sample was representative of the South East (including Hertfordshire) for age (range 18-72, average age 42), gender (14 female, 12 male) and social economic status (range of social segments)
- Individuals were selected with a broad range of concerns to match national trends (e.g. EU/Brexit, health, immigration). Individuals were not aware that the focus group was centered on discussing climate actions
- The sessions were held in the evening and lasted 1.5 hours
- A total of 26 Hampshire residents took part – 5-7 people per group
- Original materials used during the group are available on request

Topics covered:

- Individuals values, lifestyles and motivations
- What low carbon actions individuals are already taking and what they are not
- Key barriers and motivations at different stages of change for different actions
- Effective messages to reduce individuals carbon emissions
Willingness to change exists but must overcome practical and psychological barriers

People are willing to change and know it is the right thing to do

But they must overcome a number of internal and external barriers

Limits to taking actions
Other motivations overriding climate change
National and local government support
Lack of knowledge / wrong information

Approaches to addressing climate change through citizen action must understand and work past these barriers
People are willing to change....

Individuals demonstrated a broad range of motivations to engage in low carbon activities:

### Health

"I spoke to someone who only eats meat at the weekend – they felt healthier, less tired and if that also helps the environment then it can’t be a bad thing”

### Finance

"At uni found cheese expensive so cut it out”

### Ease

"I use all public transport and live somewhere where everything is convenient shopping, exercise, work”

### Right thing to do

"At Christmas just two of us, and still wanted free range turkey but it was expensive so did a vegan loaf rather than a cheaper bird. Luckily, other half doesn’t mind.”

### Environment

"I really like meat but after chatting to my nephew who works in the environmental sector, he said if everyone had a day without meat it would cause a reduction in CO² so I’m having one day a week at least not eating meat”

### Social norms

"In certain shops it’s the fashion to take your own container. It’s becoming the cool thing to do, rather than weird”

### Good habits

"So when I was growing up my Mum had a water meter installed and she got really funny with us about how much water we used, so I have trained myself to shower in that way [turn it off when putting shampoo on] and it’s always stuck”

### Legislation

"It baffled me when I first got there [South Korea] but there is not option you have to do it [correctly recycle]. Where you take the rubbish out they have cameras, and if you are the person to do it wrong, you get fined.

Individuals had high engagement with visible environmental impact behaviours, with an easy to do alternative ...

Most individuals actively recycled, used reusable alternatives and reduce use of plastics

"I always try to use Tupperware or a reusable water bottle but if out will buy food or bottle”

... and for some individuals this was enough to overcome challenges

"[Supermarkets aren’t doing enough to reduce plastic] so that’s why we vote with our feet and change if we feel they aren’t”
Other motivations override low carbon motivations:

<table>
<thead>
<tr>
<th>Health</th>
<th>Finance</th>
<th>Established habits</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Growing up having milk and cheese is healthy, good for your bones. Never made a conscious effort not to have dairy. I don't have a lot anyway. Hear about osteoporosis so I make sure my kids have cereal&quot;</td>
<td>&quot;At the end of the day, yes they are interested in things being renewable and more energy efficient but if its going to cost them more money they will choose the cheaper option most of time and I know I would&quot;</td>
<td>&quot;There are a million and one options to have meat free meals, but you go to your favorites, on a Sunday you have a roast. For me it's my comfort zone&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety</th>
<th>Ease</th>
<th>Social norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;You need to have a death wish to cycle on the road. Drivers don't care and cycle lanes disappear they lead up to a roundabout then you are dumped into trouble&quot;</td>
<td>&quot;I live 20 minutes from the town centre and I would still drive because its more convenient. You don't have to rush, time to be anywhere else carry things back, what shoes I'm wearing. Purely just convenience more than anything&quot;</td>
<td>&quot;Happy to take the vegan option at lunch but would not consider at home as my husband will only have meat&quot;</td>
</tr>
</tbody>
</table>
Most people have concerns for the environment and want to do the right thing. People explain away behaviours that do not fit with this attitude.

**People justify a self-serving conclusion e.g. motivated reasoning**

- **My actions won’t make a difference:** "Grandparents say why not fly less but I always say the plane is going anyway so I might as well be on it."
- **Someone else can change:** "Its alright for Coldplay to say we aren’t going on tour anymore until we can find an alternative”

**People use one good act to justify the bad i.e. moral licensing**

- **Comparison between flying and recycling:** "Part of peoples’ lives that they enjoy most is going on holiday. They would much rather recycle than reduce flying.”

**Consequences of consumption are hard to see at point of use**

- "No one talks about saving water. I know every summer there is a water/ hose pipe ban, which makes me think oh okay we shouldn’t be using the hose”

**People underestimate effects of extreme weather**

- "Not something that would ever affect me [flooding]. There are so many things that we are thinking about on this sheet, plus what’s going on in our lives. I’m not going to worry about something that’s not going to affect me ... hopefully.”
People are overwhelmed by the amount of information out there and its lack of clarity

"Mine is an ignorance thing, I haven’t gone out of my way to seek as much information as I probably should do about some of these issues. It’s not been thrown at me and forced on me so I’m living in a bit of bubble, there’s key words – renewable energy. But do I really know? Drilling it down exactly what it means, no not really, not on all these actions. It’s overwhelming and I don’t now where to start"

Feeling overwhelmed leads to lack of knowledge, in 3 main areas

<table>
<thead>
<tr>
<th>1. Unsure how to complete actions</th>
<th>2. Misinformed on actions</th>
<th>3. Confusion on what action to take</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple messages such as ‘use less water’, ‘waste less food’ and ‘use less plastic’ may not be effective as people do not know how they can do this</td>
<td>People don’t know the carbon impacts of their actions ...</td>
<td>Environmental issues are not clear cut and citizens don’t know what to do</td>
</tr>
<tr>
<td>&quot;I would [save water] if I knew how ... other than taking more showers than baths”</td>
<td>&quot;Curious as to why I should decrease my meat because I disagree with it. It is unproven that it produces more carbon emissions”</td>
<td>How much glass do you have to have to make a car journey to the recycling center worthwhile? &quot;You’ve got a lot of bottles to make the journey worthwhile”</td>
</tr>
<tr>
<td>&quot;What is a water saving device, where would you find it?”</td>
<td>... and the other impacts</td>
<td>Some people are interested in the issues and have tried to research but are still not clear</td>
</tr>
<tr>
<td>&quot;I have a water butt and would be open to other water saving devices but there isn’t much awareness of water saving devices”</td>
<td>&quot;You wouldn’t get enough protein and would have to take lots of supplements”</td>
<td>Are electric cars environmentally friendly? &quot;Mining the lithium – there is a lot of eco stuff that is never talked about”</td>
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<tr>
<td></td>
<td></td>
<td>What type of milk should I drink – soy, almond, oat, dairy? &quot;You read that production of the soy can use as much energy if not more [than dairy milk], its really difficult to find alternatives that do the job environmentally”</td>
</tr>
</tbody>
</table>
...and feeling national and local government should be helping us...

Locally governments should be investing in better public transport, active transport routes, flood preparations and recycling services. Here we will look at recycling services in detail:

Recycling services used as an example (reflective of the picture for all areas)

We would do more if more services were provided for us

"That’s what Hampshire should be involved in, setting up bigger [recycling] places. We are prepared to drive now [to recycle], we would do it bigger scale, so would a lot of people."

There should be a standardised service across the UK

"One county does food, one doesn’t then there’s foil ... It really needs to start from the top ... If everyone sang from the same song sheet, we wouldn’t be there scratching our head about a plastic container”

Cross-country comparisons make the UK look bad / uncaring

"I was working in South Korea and their system puts ours to absolute shame."

There is a role of local government in large-scale, national problems ...

"It has to start from the top, it’s difficult for councils I know, but basically finding ways of forcing manufacturers to use recyclable stuff is a lot more important ultimately that what any individual can do”

... But national government should be taking forceful and directive action

"We are consumers at the end of the day, we do the best for ourselves but if the government set their plans and objectives. If we had an I have to box then we would have to and I would do it. Make certain things like renewable energy. Ban the use of gas. Don’t give me the choice as a consumer cos you are always going to get people that won’t“
...along with big businesses making it easier to do the right thing.

**Big business should be helping me**

They should be forcing me to make the right choice

"Why is the onus on consumers to make that choice [between energy efficient/non-efficient appliances]? Why don’t the companies have that responsibility and automatically when you buy that”

They should be nudging me to make the right choice

"You have all these price comparison websites telling you the cheapest – they are not telling you the greenest”

**Big businesses will drive technological innovation so I can continue my behaviour**

"Eventually technology will have to catch up. People won’t be able to drive round in cars that use lots of fuel”
Who are individuals willing to listen to and trust?

**Individuals value communications from trusted and impartial organisations**

<table>
<thead>
<tr>
<th>Businesses</th>
<th>Local government</th>
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</thead>
<tbody>
<tr>
<td><strong>Lack of trust in big businesses...</strong></td>
<td><strong>Individuals value communications they receive from the council...</strong></td>
</tr>
<tr>
<td>Assumption that profit is more important than the environment. “The information just isn’t there. It’s left to big companies that make a profit out of it to tell us what to do. It isn’t always in the best interest for us or the planet.”</td>
<td>“I think those letters you [the Council] send out are really handy. There are usually big letters you send out which say: you can get a water butt half price. I think those letters are really informative when they come out.”</td>
</tr>
<tr>
<td>Businesses are associated with green washing. “Have suspicions when it says this is an ethical product and I’m going to charge you £2 more for it – is it really an ethical product. It has come to light in recent years that this has been used as a marketing tool.”</td>
<td>“If its an official letter from Council or Southern Water I will actually read it. ’If you get this device, it will save this amount of money as well as the environmental impact’”</td>
</tr>
<tr>
<td><strong>... but not all businesses</strong></td>
<td><strong>... and would like to receive more clear information</strong></td>
</tr>
<tr>
<td>&quot;You have Ecosia – the search engine that plants trees and another one for helping with plastic. There are a few companies that are putting their profit into helping”</td>
<td>&quot;I would certainly like to know more [about what the Hampshire County Council are doing]”</td>
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<tr>
<td></td>
<td>&quot;We need better information, we need clarity [to know what is the right thing to do] ”</td>
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<tr>
<td></td>
<td><strong>Individuals are wary of incentives from Government</strong></td>
</tr>
<tr>
<td></td>
<td>&quot;What concerns me is that cars with low emissions are now taxed road tax – are they going to do the same thing with electric cars 5 years down the road?”</td>
</tr>
</tbody>
</table>
How to overcome barriers (1 – what people say)

Individuals spoke about ways that would help them to overcome barriers in relation to them conducting climate action. Ideas have been linked to the behaviour change element that the intervention is trying to change in the COM-B model.

<table>
<thead>
<tr>
<th>Nostalgia – back to the future</th>
<th>Positive focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Go backwards instead of forwards. You look at the 40's, 50's, 60's, paper bags, glass bottles, grow your own, there was all that stuff for the environment&quot;</td>
<td>Focus not on what we are losing by using low carbon alternatives but what we gain</td>
</tr>
<tr>
<td>&quot;You know how it used to work in the old days you take it back and you get your money back, couple of pence for that.&quot;</td>
<td>&quot;[I would be keen to try vegetarianism if I had] more exciting recipes I could try – I would be open for it&quot;</td>
</tr>
<tr>
<td>Put value back into traditional forms of transport</td>
<td>Focus on achievable steps</td>
</tr>
<tr>
<td>&quot;Our holidays to France involved the ferry and that used to be the highlight&quot;</td>
<td>&quot;Encouragement, if you don’t think you can live an eco life its okay to do as well as you can. It’s okay not be to perfect. If you know most of the time you do your recycling and run it down to the shop its okay the times that you can’t. It seems to be at the moment, if you aren’t doing it all the time you are not getting there. It’s okay to do what you can”</td>
</tr>
<tr>
<td>Resources are precious</td>
<td>Reflective motivation</td>
</tr>
<tr>
<td>Food – buying organic and reducing food waste</td>
<td></td>
</tr>
<tr>
<td>&quot;The people that come for the eggs, they go crazy for them because they can see the chickens running around ... they know the eggs came from that chicken”</td>
<td></td>
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<tr>
<td>&quot;I think it’s a bit of a generational thing, upbringing because I was always told don’t get up from the table until you have finished all your food ... but when I look at my children now they are spoilt, if they don’t want to eat something I can’t force them and they do leave food”</td>
<td></td>
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</tbody>
</table>

Reflective motivation
### How to overcome barriers (2 – what people say)

<table>
<thead>
<tr>
<th>Encourage reflective rather than automatic thinking</th>
<th>Use transitions</th>
<th>Promote community groups to talk about climate actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>“At school they have stickers on the bins ‘This bin takes paper, this bin takes …’. If we had that at home as well it would help the kids”</td>
<td>When young people go to university, they want to save money, promote low meat and dairy diets as a financial saving. When young people finish university, they are often used to not having a car, promote use of public/active transport into a job. <strong>Reflective motivation</strong></td>
<td>“It’s interesting hearing what everyone else says. You are so focused on your own life and what your parents tell you, what your friends do. Your freecycle thing [someone in the group gives unwanted items a home using a freecycle Facebook page] – I would never have thought of that – and you think actually that’s not hard work for me to do” <strong>Social opportunity</strong></td>
</tr>
<tr>
<td>“If I was rewarded, I would make more of a conscious effort to be environmentally friendly, think more about what I’m doing”</td>
<td><strong>Reflective motivation</strong></td>
<td><strong>Reflective motivation</strong></td>
</tr>
<tr>
<td>“The thing that is not very nice about it [food waste recycling in South Korea] is you have to handle your food waste a lot and keep it in your house for a week and the smell of it. But you become extremely conscious of the amount of food waste you produce. It made me finish my meals rather than throwing it away”</td>
<td><strong>Social opportunity</strong></td>
<td><strong>Social opportunity</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Don’t make changes look radical</th>
<th>Set an achievable goal</th>
<th>Tricking friends/families into carbon savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I think it’s labeled as an extreme thing to do [eating vegetarian] but some things are quite nice”</td>
<td>“When they tell you to reduce your meat consumption – [they should] tell you what to aim for because its not that helpful to say reduce because what does that really mean. If you say reduce to 2 or 3 times a week, that’s a benchmark you can work towards, otherwise its quite a general instruction” <strong>Reflective motivation</strong></td>
<td>“Tell wife to stop buying ironing water as can just use filtered water. So filling bottle up with water so she doesn’t notice”</td>
</tr>
<tr>
<td><strong>Reflective motivation</strong></td>
<td><strong>Reflective motivation</strong></td>
<td>Taking a group of “macho men” to a vegetarian Indian restaurant. “They were very surprised afterwards that is doesn’t have to be steak, you can have extremely nice food and not realise [its is vegetarian]”</td>
</tr>
</tbody>
</table>

### Reflective motivation

- Encourage reflective rather than automatic thinking
- Use transitions
- Promote community groups to talk about climate actions
- Don’t make changes look radical
- Set an achievable goal
- Tricking friends/families into carbon savings
# How to overcome barriers (3 – what people say)

<table>
<thead>
<tr>
<th>Short term trend vs. long term change</th>
<th>Education</th>
<th>Social opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For young people behaviour needs to be cool ...</strong></td>
<td>&quot;If they took more time to educate people on all these issues, then you will probably have more converted people making a choice about something because they are informed.&quot;</td>
<td></td>
</tr>
<tr>
<td>&quot;From my daughter’s perspective, teenagers are selfish unless something is cool and trendy. Then all of sudden if it’s cool to have your own reusable straw in your bag or a funky water bottle, then they are completely brought into it. If not, it’s not cool, its geeky to know about these things&quot;</td>
<td>Clear, engaging and simple messages are effective</td>
<td></td>
</tr>
<tr>
<td><strong>... But for older people it needs to be viewed as a long-term change</strong></td>
<td>&quot;I watched an advert about how leaving switches on causes a fire – although it’s stupid because you know it, when you see it and hear someone talking about it – it rewires you, I don’t leave plugs on anymore&quot;</td>
<td></td>
</tr>
<tr>
<td>&quot;Sometimes I think its all hipster stuff – opt-in, opt-out, one minute it’s straws, then its plastic, then its veganism and a lot of it you stand still and watch it go by“</td>
<td>Focus on young people</td>
<td></td>
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<tr>
<td></td>
<td>&quot;Education needs to come a lot earlier, primary schools and secondary schools. If the next generations are coming up with this ethos behind them, then it will be easier to adapt to situations in the future. Us older lot are stuck in our ways a lot more and need a lot more education to understand.&quot;</td>
<td></td>
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</tbody>
</table>

**Psychological capability**
Finance and making action easier are the dominant ways to approach people to change

From our focus groups (26 participants) those who were willing to undertake an action were asked to place each action into a bucket with labels reflecting the best way to communicate this issue to them e.g. by addressing the health benefits, money or the environment.

<table>
<thead>
<tr>
<th>Key takeout</th>
<th>Environment is rarely the leading way to encourage behaviour change according to respondents. Finance is a stronger motivator in many cases</th>
</tr>
</thead>
</table>

### Table of Actions and Communication Channels

<table>
<thead>
<tr>
<th>Action</th>
<th>Environment</th>
<th>Finance</th>
<th>Health</th>
<th>Right thing</th>
<th>If owned own home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green energy tariff</td>
<td>Easier</td>
<td>Easier</td>
<td>Easier</td>
<td>Easier</td>
<td>Easier</td>
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<tr>
<td>Renewable energy = solar, heat pump</td>
<td>Easier</td>
<td>Easier</td>
<td>Easier</td>
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<td>Easier</td>
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<tr>
<td>Water saving devices</td>
<td>Easier</td>
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<td>Electric car</td>
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<td>Ethical food</td>
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<tr>
<td>Adapt home for hot weather</td>
<td>Easier</td>
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<tr>
<td>Energy efficient appliance</td>
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<tr>
<td>Eat local</td>
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<td>Reduce flying</td>
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<tr>
<td>Public transport = bus, train, car share</td>
<td>Easier</td>
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<tr>
<td>Adapt home for storms and flooding</td>
<td>Easier</td>
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<td>Use less water</td>
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<td>Reduce meat</td>
<td>Easier</td>
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<td>Home insulation</td>
<td>Easier</td>
<td>Easier</td>
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<tr>
<td>Active transport e.g. walk, cycle</td>
<td>Easier</td>
<td>Easier</td>
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<td>Video calling</td>
<td>Easier</td>
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<td>Reduce dairy</td>
<td>Easier</td>
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<tr>
<td>Reduce plastics</td>
<td>Easier</td>
<td>Easier</td>
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<tr>
<td>Reduce food waste</td>
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<td>Reuse materials</td>
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</tbody>
</table>
Overcoming barriers is about framing the challenge in the right way 1/2

<table>
<thead>
<tr>
<th>An additive approach e.g. ‘every little helps’ could work for climate change</th>
<th>Encourage reflection through point of action communications</th>
<th>Show consistent, visible leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Addresses which barriers?</strong>&lt;br&gt;• People using one good act to justify a bad one&lt;br&gt;• People don’t know the carbon impacts of their actions&lt;br&gt;• They should be nudging me to make the right choice&lt;br&gt;• Focus on achievable steps</td>
<td><strong>Addresses which barriers?</strong>&lt;br&gt;• Environmental issues are not clear cut and citizens don’t know what to do&lt;br&gt;• Some people are interested in the issues and have tried to research but are still not clear&lt;br&gt;• Consequences of consumption are hard to see at point of use&lt;br&gt;• They should be nudging me to make the right choice</td>
<td><strong>Addresses which barriers?</strong>&lt;br&gt;• Someone else can change&lt;br&gt;• Governments should be investing</td>
</tr>
</tbody>
</table>

**Where has this principle been used?**

- **Relay For Life**
- **Cancer Research UK**
- **Every little helps**
- **Fundraising Thermometer**
- **Energy Efficiency Rating**
- **Fixed rate contract**
- **Green plan**
Overcoming barriers is about framing the challenge in the right way 2/2

| Make doing the right thing more visible – it’s not easy to see the people who didn’t drive/fly |
| Make it clear how much each action contributes |
| Create clear shared goals – people will change a lot if they agree |

| Addresses which barriers? |
| Addresses which barriers? |
| Addresses which barriers? |

- People justify a self-serving conclusion
- They should be nudging me to make the right choice
- Focus not on what we are losing by using low carbon alternatives but what we gain
- Focus on achievable steps
- People justify a self-serving conclusion
- Consequences of consumption are hard to see at point of use
- They should be nudging me to make the right choice
- Environmental issues are not clear cut and citizens don’t know what to do

**Addresses which barriers?**
- Environmental issues are not clear cut and citizens don’t know what to do
- An ability to discuss, agree goals and commit to change could lead to more behaviour change

**Where has this principle been used?**

- Flight shame/Train pride campaign in Sweden
- Points system showing how one action contributes to a target or limit
- Juries – people aim to seriously assess evidence and come to a conclusion with high stakes for the people involved
For more information contact insight@hants.gov.uk