# Itís not easy being green

n 2021, sustainable behavioural change is no longer a lifestyle choice, it is a necessity. We need to find ways to accelerate sustainable behaviour before it's too late. Behavioural science helps us understand why a sustainable lifestyle is currently not easy to achieve, yet it also tells us how to make it easier for consumers.

Climate change scientists calculate that we need to reduce our individual carbon footprints by 75%, to less than two tonnes per person per year, to have any hope of avoiding a catastrophic rise in global temperatures of two degrees. The average Briton emitted more than eight tonnes in 2017 and the global average is around four tonnes.

Clearly, companies need to take action to reduce their footprints, but changing individual behaviours is equally critical; 40% of UK emissions are estimated to come from households, and basic necessities such as heating, food and daily travel are the main contributors.

So how can we make the dramatic inroads urgently needed to reduce our carbon footprint by 75%?

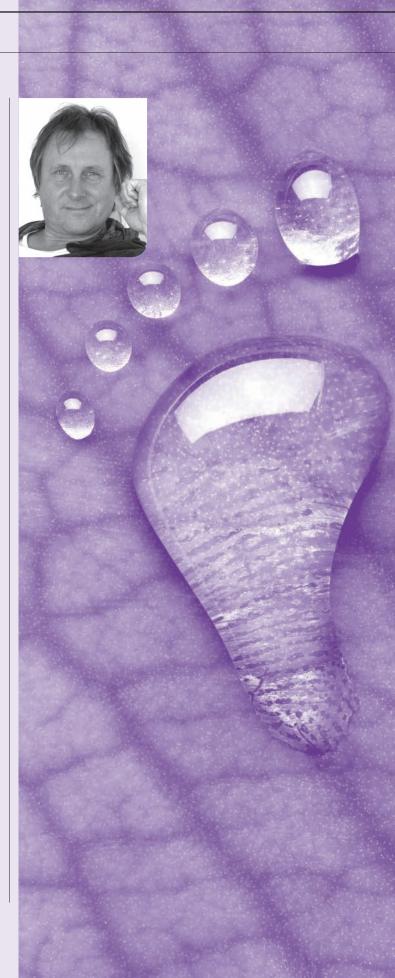
## 1. Make impacts and gains much easier to understand

'Cognitive strain' – having to think too hard or navigate complexity – can lead to lack of engagement and action. Cognitive strain is often high for those wanting to lead a sustainable lifestyle, as it's so complex to understand. 'Tonnes of carbon' is a very abstract term; with few common reference points it is hard to visualise, which makes taking informed decisions difficult.

Seth Wynes, at the University of British Columbia, calls this low 'carbon numeracy'. Several surveys that he and his colleagues have run show that, when asked to rank the impact of different actions on their carbon footprint, people seem confused about which behaviours they need to reduce or stop, and which are important to start or increase.

#### In general, people:

- Forget that flying has one of the highest carbon footprints, yet they are disproportionately aware that they need to stop using plastic bags
- Underestimate the carbon footprint of eating red meat



- Hugely overestimate the impact recycling can have
- Are unaware of how large a positive impact can be achieved by using low-carbon renewable energy in their homes. A 2020 poll found that 47% of people did not consider their gas boilers as contributing to global warming — even though they account for 17% of carbon emissions.

Overall, people lack joined-up thinking on sustainability and lowering their carbon footprint, partly because of the plethora of lists and tips in the media on how to live more sustainably.

Low-carbon numeracy is, in part, down to availability bias – where people give more weight to things that spring to mind easily, often caused by campaigns focused on simple changes such as reusable coffee cups or bags for life.

Households lack guidance to help them understand what steps will have the greatest impact and how they can practically cut their carbon footprint by 75%. Bill Gates recently said, in an interview with *Wired*: "It's a field with a lot of positive energy, but without a plan."

Without any plan, people don't realise the importance of retrofitting their housing (insulation, solar panels and heat pumps) and buying energy-efficient appliances (for example, A+rated) that can make a substantial impact in reducing a household's carbon footprint. Even though households will gain money back in the future because of lower running costs, the pain of the initial financial outlay weighs heavier, and means we disregard future gains – a concept known as present bias.

Behavioural science practitioners have explored how to increase energy-efficient, A+ rated purchases by aiding carbon numeracy. In 2018, the Australian government's Behavioural Economics Team trialled simple, salient energy labels at an online appliances store, and found they led to an increase in purchases of more energy-efficient products. Consumers who saw an energy rating label were 20% more likely to purchase efficient appliances.

### 2. Make low-carbon choices the default

Even if people are given a clear goal to improve their carbon numeracy, and have committed to doing so, they often find it hard to change behaviour. We're frequently short of time or mental bandwidth, or procrastinate if there are choices to make.

Indeed, recent research indicates that voluntary action by individuals may be limited. A 2018 study by Milena Buchs and her colleagues at the universities of Leeds and Southampton found that, despite raising awareness by giving households personalised carbon footprint estimates, there were no measurable changes in those households' travel behaviours and home energy use, even after a year.

Defaults, or automatically opting people into certain choices, are the most effective tool in the behavioural scientist's box. A review of behaviour change interventions found that defaults increase participation or selection of a choice by 50% (Hummel and Maedche, 2019).

Defaults have been shown to reduce a household's carbon footprint, particularly for big, one-time changes – such as retrofitting homes – that will help to make significant leaps

"Households lack guidance to help them understand what steps will have the greatest impact, and how they can practically cut their carbon footprint by the required 75%"

towards meeting the 75% reduction. However, these measures still need to be communicated in a way that creates momentum and a sense of progress and, ultimately, to communicate achievement of a goal.

A 2020 study in Germany found that offering renewable energy tariffs as the default led to a 20% increase in green electricity consumption (Kaiser, Bernauer, Sunstein and Reisch, August 2020).

Similarly, a Danish utility company offered free upgrades to heat pumps; 85% of households accepted the offer in the default condition, but that figure dropped to 35% if a household had to opt in itself.

Importantly, implementing a default strategy takes some of the responsibility off the consumer's shoulders, returning it to energy providers, companies and governments, just as autoenrolment pensions in the UK have lifted some of the pressure from employees.

Let's see if we can identify opportunities in more sectors where changing the default to a low-carbon option could play a significant part in cutting our carbon footprints by the required 75%.

#### Implications and call to action:

- Behavioural science practitioners and consumer experts must develop a cognitively easy action plan for people to follow
- We don't need yet another list of 'tips' or another carbon calculator, but a coherent personal goal and step-by-step strategy to achieve that goal – for example, what five actions get us down to a two-tonne footprint, split into what consumers can do voluntarily and which measures would be undertaken on their behalf by government and industry initiatives, using default options and other measures
- Behavioural science and research has a central role to develop simple yet persuasive communications that frame low-carbon behaviour changes in the most powerful way, identifying easy-to-grasp reference points that can build greater meaning and motivation. This can help consumers understand exactly what their personal 75% reduction goal is and how to achieve it, while also building behavioural energy and momentum to achieve these goals.