Zero Carbon Academy's top 5 trends for 2023

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zero carbon academy

Introduction

Overview

In this report, Zero Carbon Academy (ZCA) have identified our top 5 trends for 2023 within the net zero & sustainability space. These are trends we feel will define the coming 12 months and substantially alter the net zero landscape.

Methodology

ZCA set out to identify a broad range of trends, utilising our experience and understanding of developing stories and subject areas over the past 18 months. We then shortlisted 5 topics from a broad range of areas, including corporate ESG, clean technologies, and climate change adaptation.

The top 5 are provided in order from what we consider the least impactful trend (5) to the greatest impact (1). To produce the ranking, we have scored each trend based on a range of factors. Each factor has been scored from 5 (low impact/probability) to 1 (high impact/ probability). These factors are as follows:

- Impact on consumers
- Impact on businesses
- Likelihood of happening in 2023
- Risk from failing to take action
- Complexity of action required

<u>As a result, our top 5 trends for 2023 are as follows:</u>

Source: ZCA

We provide a heatmap of the scoring on the next page.

Figure 1: ZCA's top 5 sustainability trends for 2023

	2023: the year of inclusive action	Scrutiny of corporate green credentials	Energy security and investment in clean technology	Increased focus on adaptation (loss and damage)	Climate activism
Impact on consumers	2	3	2	4	3
Impact on businesses	2	1	2	3	2
Likelihood of happening in 2023	4	1	1	3	1
Risk from failing to act	3	1	2	2	2
Complexity of action required	4	1	2	2	3
Total	**15**	**7**	**9**	**14**	**11**
Rank	**5**	**1**	**2**	**4**	**3**

Source: Zero Carbon Academy

Top 5 trends: analysis and explanation

In the following section, we analyse and provide reasoning for ZCA's top trends for 2023, descending from 5 (least likely/impactful) to 1 (most likely impactful).

5. 2023 is the year of inclusive action

Net zero success requires cooperation

It is common knowledge that for net zero to be reached as quickly and effectively as possible, associated actors must come together and work hand in hand to achieve it. When we consider net zero on a national scale, the 3 key actors are government, the general public, and businesses, all of whom will play a critical role over the coming months and years. When looking at the coming year, inclusive action- that is, measures or actions taken on-mass or by a large section of the population/ businesses, will be key in helping move net zero a step closer.

Consumer sentiment & threat of 'not zero' to help drive change

There are several factors at play as we enter 2023 which will see this accelerate. For a start, consumer sentiment relating to addressing environmental issues and sustainability is strong and showing signs that it will continue to grow, for example, with increased use of reselling and upcycling services.

Deloitte's 2021 Sustainability and Consumer Behaviour[i] research provided interesting reading for companies in the UK. It found that sustainability remained a key consideration for consumers in 2021, even with the global pandemic; 32% of consumers say they are highly engaged with adopting a more sustainable lifestyle. Further, almost 1 in 3 consumers stated that they had stopped purchasing certain brands or products because they had ethical or sustainability concerns about them. More recently, UK survey data from Sensu Insight found that 9 out of 10 (89%) respondents said that they cared about the environmental stance of businesses and brands, and 86% wanted an increase in their level of transparency on environmental matters. Concerningly, just 8% agreed that most businesses currently do enough for the environment. Failure to provide transparency and to address greenwashing concerns can be severely damaging for brands- Sensu's survey found that well over half (59%) of consumers said they had changed their behaviour in some way because of perceived examples of greenwashing.

Figure 2: Key statistics

Source: Deloitte, Sensu Insight

Further, growing awareness around the cost of 'not zero'- the impact of failing to address emissions and net zero challenges, will help foster a public willingness to engage with net zero measures. New research published by the Energy and Climate Intelligence Unit (ECIU) sought to quantify the monetary impact climate change and delayed progress towards net zero may have had on UK households in 2022. The study looked at the impact of various factors, including delays to home insulation improvement, slow adoption of EVs, and lack of progress on the installation of rooftop solar panels. Overall, households could have saved an estimated £1,750 on bills in 2022, and with an additional average of £400 extra in food bills seen in the past year, this figure may have risen to as much as £2,150 per householdii.

Positively, businesses are also continuing with plans to tackle sustainability, despite economic pressures. Data from NatWest for Q3 2022 shows that sustainability is being given increasing priority at smaller firms, despite the current economic challenges. The quarterly study utilises data from IHS Markit's Purchasing Managers Index survey, with this iteration conducted in June, well into the current cost of living crisis. The latest edition of NatWest's research found that 3 of the 5 sustainability priorities of the Sustainable Business Tracker have increased since March 2022, with low carbon energy consumption seeing the biggest rise in prioritisation. Those reporting green energy as a high priority for the year ahead increased from 42% in March to 51% this quarter- the highest proportion since the study began. In addition, firms shared their plans to boost low carbon energy consumption by installing solar panels on-site and investing in battery storage and electric vehicle charging infrastructure.iii

With the cost-of-living crisis hitting consumer wallets, companies should seek to inform consumers about how sustainable spending can deliver longer-term benefits. New research by Capgemini found that just 41% of consumers are now willing to pay more for a product they believe to be sustainable, compared to 57% in 2020. The research suggests that brands reassess pricing strategies to provide affordable and sustainable options to consumers. Further, loyalty programmes, including incentivised take-back schemes, can help build customer trust in the long termiv.

Why 2023?

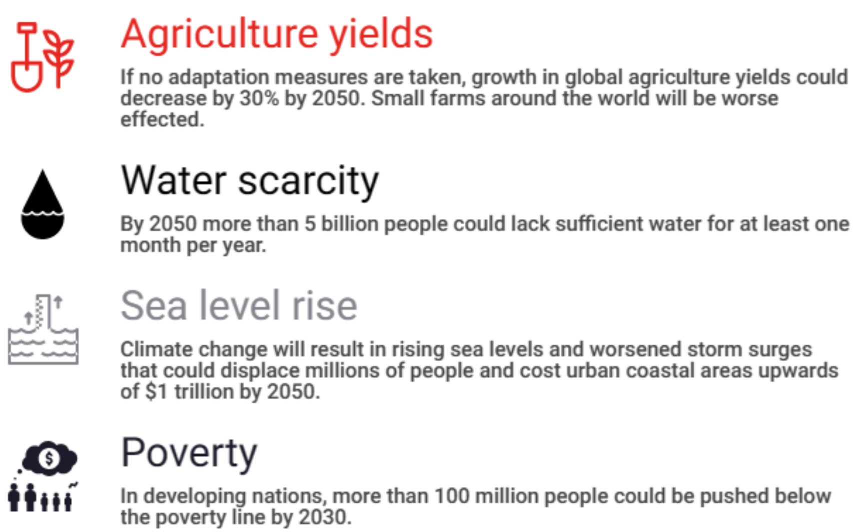
A perfect storm has been created- consumer desire to address sustainability and live in a more environmentally conscious way, coupled with growing research and awareness relating to the cost of 'not zero'. In addition, the cost of living crisis has brought to light areas where consumers are haemorrhaging money- for example, insufficient insulation in homes, appliances with poor energy efficiency ratings, and reliance on gas heating. With these factors weighing on consumers' minds, this is the year that we will see businesses, communities, and local authorities work to improve living standards and tackle failings in sustainability. Education and government schemes will help fuel this and will be critical in helping to drive such ambitions forward. We have already seen announcements in the UK around the ECO+ scheme launching in 2023. The scheme seeks to provide thousands of households with access to grants which will help them fund insulation and other energy efficiency improvements. Around 80% of the funding will be made available to households in some of the least energy-efficient homes in the country- those with an EPC rating of D or below and within lower council tax bands.

4. Is adaptation net zero's understudy, and will it take on a bigger role in 2023?

The case for adaptation and progress to 2022

Adaptation has arguably taken a back seat in the global discussion of climate change ever since net zero became the leading light in the pursuit of a greener future. That said, those voices that have been calling for a greater focus on adaptation have done so with eloquence and with profundity. In 2019, the Global Commission on Adaptation provided four compelling reasons why adaptation must not be ignored.[v]

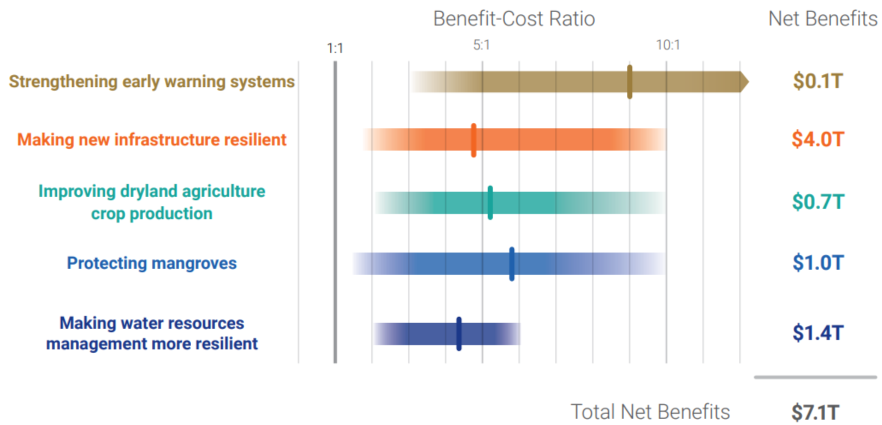
Figure 3: Global Commission on Adaptation make the case for adaptation



Source: Global Commission on Adaptation

It's not just avoiding the negative effects of climate change that the Global Commission highlighted back in 2019; they also describe what they called the triple dividend. The triple dividend refers to the variety of advantages that adaptation efforts bring. The potential of investment to decrease future losses constitutes the first dividend, which is losses that can be avoided. The second is favourable economic gains, which come from lowering risk, boosting productivity, and stimulating innovation by imposing adaptation. The third is social and environmental benefits.[vi] The economic benefits that the Global Commission suggest could be generated by focusing on adaptation are nothing short of eye-watering.

Figure 4: Cost and benefits of investments in adaptation



Source: Global Commission on Adaptation

With their case made, the Global Commission on Adaptation set out their recommendations for how to ensure that adaptation's potential across the world was met. This led to their call to action that focused on three so-called 'revolutions'. A revolution of understanding, a revolution of planning and a revolution of finance.[vii]

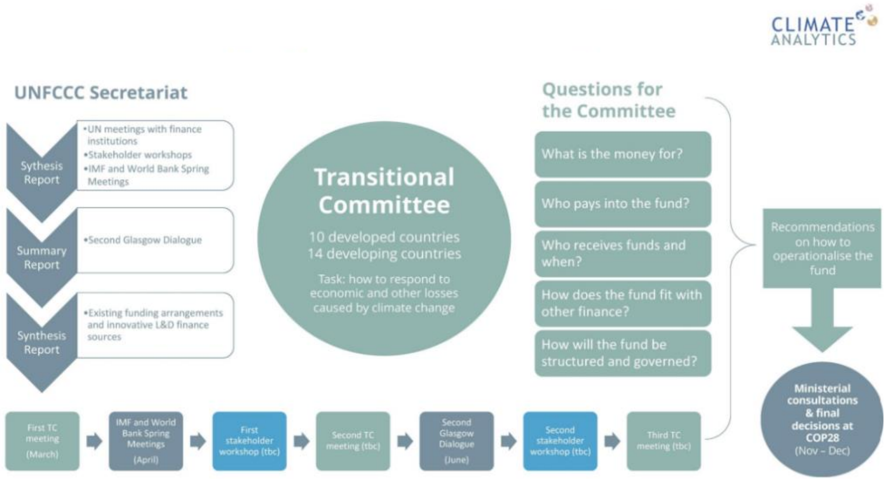
Of course, the Global Commission's call to action, with which all these figures and information were produced, is now over 3 years old. In those three years, the Global Commission have released a yearly report on the state and trends of adaptation. The most recent of its kind, from 2022, describes the progress towards the revolutions that the commission put forward in 2019. The 2022 report painted a picture of insufficient finance, a bias towards short-term and medium-term planning horizons and a lack of understanding of how to work adaptation solutions on a local level due to inadequate research.[viii] This is fairly bleak reading for proponents of adaptation, but in November 2023, at COP27, a deal was struck which may well see progress in this area accelerate like it has not before.

Loss and damage: a game-changer for adaptation?

The creation of a Loss and Damage Fund, which was the result of years of lobbying from developing nations that are susceptible to climate change, was, for many, COP27's high point. The fund aims to distribute money to countries that are most affected and at risk from the effects of climate change. Although the historic move was applauded, this is only the first step, and the effectiveness of the fund will rely on how quickly it starts operating. During 2023, representatives from 24 nations will collaborate to establish how the fund should be structured, which nations should contribute, and where and how the money should be allocated.[ix] These 24 nations, 14 of which represent developing nations most at risk, will form a 'transitional committee' and gather to design the details of the loss and damage fund. Their task will not be an easy one as they seek to clarify how the fund will be paid for, how it will be accessed and exactly what it will be for. With the breadth of need from sudden onset flooding to more chronic protracted impacts like sea level rise, the application of funding will need to be well designed to deal with such granularity.[x]

Adaptation initiatives may also be bolstered by the renewed vigour with which nature-based solutions are being discussed. The global biodiversity framework agreed upon at the end of 2022 at COP15 outlined a broad agenda for restoring biodiversity and reducing nature loss.[xi] Coastal zone protection, wetland restoration, river/floodplain restoration, agroforestry, close-to-nature forestry, (peri)urban greening, and soil protection are examples of nature-based solutions. Thus, using natural methods to solve problems can provide benefits, including erosion control, drought and flood mitigation, carbon sequestration, cooling, and wildfire prevention.[xii] As such, this new push for nature-based solutions may feed into an increased desire to engage in adaptation activities.

Figure 5: Process for designing the loss and damage fund



Source: Climate Analytics

Why 2023?

As the 'Transitional Committee' do their work, there will undoubtedly be commentary and opinion from across the world and society. It is impossible to say where the discourse will end up, but 2023 will be a year that shapes the relationship between developed and developing nations in the arena of adaptation, and it may not be long before the discussion begins to touch upon the business world. With ever more globalised supply chains and resilience key to a competitive edge, adaptation arguments could well be heading for the c-suite.

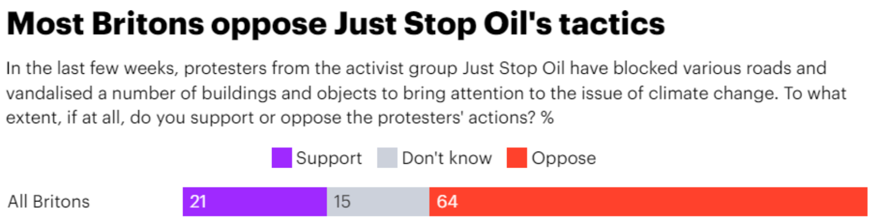
3. Climate activism: "you throw a couple of cans of soup and suddenly everyone wants to talk to you."

The public support the ends but contend the means

2022 saw climate activism taken to new heights; those heights included gantries on the M25 and the towering Queen Elizabeth II bridge at the Dartford crossing.[xiii,xiv] The group responsible first drew attention in March last year when an activist zip-tied themself to a goalpost during a premier league match. They stuck to their task, quite literally. As the year progressed, orange shirt-clad protestors with their hand glued to a recognisable painting or to the surface of a road became a common sight within newspapers and online publications.

The goal of the group is to prevent the licensing of new oil and gas in the UK but have links to several other civil disruption-led climate activism organisations that are staging protests across the globe. Despite the prevailing public opinion that more must be done to combat the climate crisis, the tactic of civil disruption carried out by groups like Just Stop Oil did not enjoy the same support.[xv,xvi]

Figure 6: YouGov polling on support for Just Stop Oil's tactics



Source: YouGov

The radical flank effect could see moderate forms of climate activism wield more power

Prior to and following Just Stop Oil's M25 blockades, November 4th and November 14th, respectively, two nationally representative surveys of 1,415 individuals in the UK were undertaken. Results showed that support for and identification with more moderate climate groups increased by a statistically significant amount as the public reported hearing more about Just Stop Oil, probably as a result of their M25 blockades.

James Ozden, Director of Social Change Lab (the organisation that commissioned the polls), said:

"This is one of the first empirical examples of what is known as the radical flank effect - whereby radical tactics can actually increase support for more moderate parts of movement. Despite Just Stop Oil receiving significant negative media coverage for their actions, it may be that they're playing an important role in building support for more moderate climate organisations amongst the public."[xvii]

Why 2023?

Just Stop Oil show no signs of slowing down their disruption campaign as we enter 2023, and with their actions, if the radical flank effect continues to have an impact, more support will be awarded to more moderate climate activist groups. These moderate climate groups may not go as far as to spray orange paint all over businesses that they deem inadequate in terms of climate credentials, but they may still have an impact. One such impact could be boycotting. Boycotting is a powerful tool and one that may grow into a powerful group of consumers. Called 'climate catalysts', the group were coined by the Oliver Wyman Forum and considered by the World Economic Forum as a force on par with generation Z activism.[xviii] Of this group, in 2022, 34% said they had boycotted a company due to its climate credentials. If the radical flank effect impacts 2023, boycotting could well become a major commercial risk for those failing to address the climate crisis.

2. Strides made towards energy security & increased investment in clean technologies

The continuing war in Ukraine will see energy security front of mind

Russia's war on Ukraine which began last February has had a significant impact on energy prices across the world, with Europe, in particular, facing severe challenges due to reliance on imports of Russian gas. This has led to governments exploring increased adoption of renewable sources and sadly, increased use of other fossil fuels as an alternative to gas. The goal has been to make strides towards energy security in the wake of gas supply uncertainty. For instance, The European Commission presented an outline of a strategy on the 8th March 2022 to make the EU independent from Russian fossil fuels well before 2030, starting with gas. The Commission reported that by the end of 2022, the EU's gas imports were to be cut and reduced to 33% of the 155 billion cubic meters imported in 2021[xix]. As we move into 2023 and with the war continuing, energy security and energy resilience continue to be a significant hurdle for governments across the globe.

We believe that the world stands very much at the tipping point in the development of a zero carbon, resilient and affordable energy system at scale. 2022 saw milestones reached in the UK in terms of green power, with record-breaking generation of electricity from wind turbines. 2023 is proving no different, with records broken already- in early January 2023, UK wind turbines produced over 50% of electricity generation for a time. Businesses are also on board with making the switch to clean energy this year- in NatWest's Q3 2022 sustainable business tracker, data showed that those reporting green energy as a high priority for the year ahead increased from 42% in March 2022 to 51% in Q3 2022- the highest proportion since the study began. In addition, firms shared their plans to boost low carbon energy consumption by installing solar panels on-site, as well as investing in battery storage and electric vehicle charging infrastructure.[xx]

Clean tech investment set to soar

Crucially, in parallel with green energy, clean technologies are seeing normalisation, for example, electric vehicles, heat pumps, and solar panels, and investment is set to soar in 2023. The UK government recently announced not only its EV Smart Charging Plan but an additional £16m of grant innovation funding for flexible energy projects, to be drawn from the £1bn Net Zero Innovation Portfolio[xxi].

Edie.net recently reported that £614,000 of this funding will be allocated to projects in the Vehicle-to-Everything (V2X space). V2X technologies enable energy stored in EV batteries to be shared elsewhere – for example, back to the grid. In addition, "A project in the North East of England, led by Otaski Energy Solutions, is taking a £229,000 share for its work to develop a lamppost with a vehicle-to-grid charging point. This could be a game-changer for residents who do not have off-street parking or those wishing to charge up while visiting loved ones."[xxii]

In a further sign of investment, at COP27 in November, the US climate envoy, John Kerry, revealed plans for a voluntary carbon trading market scheme, the aim of which would be to increase private investment in clean energy projects in developing countries. Dubbed the Energy Transition Accelerator (ETA), the scheme will reportedly be created in partnership with the Rockefeller Foundation and the Bezos Earth Fund to help deliver the trillions of dollars of investment needed to help poorer countries transition to renewables[xxiii].

John Kerry said that the US wanted to "put the carbon market to work to deploy capital to speed the transition from dirty to clean power, specifically for two purposes: to retire unabated coal-fired power and accelerate renewables"[xxiv].

Essentially, the United States wants to raise funding from purchasing carbon offsets and use this money to assist with the energy transition in developing nations. According to a press release by the US government, Chile and Nigeria are among the developing countries expressing early interest in exploring the ETA's potential benefits. Further, Bank of America, Microsoft, PepsiCo, and Standard Chartered Bank have expressed interest in informing the ETA's development, with decisions on whether to formally participate pending the completion of its design.[xxv]

Why 2023?

With energy security at the forefront, governments will be eager to push for increased energy resilience through the adoption of green energy. Likewise, clean technologies will see greater adoption and incorporation into daily lives as efficiencies are sought and the switch away from fossil fuels gathers pace.

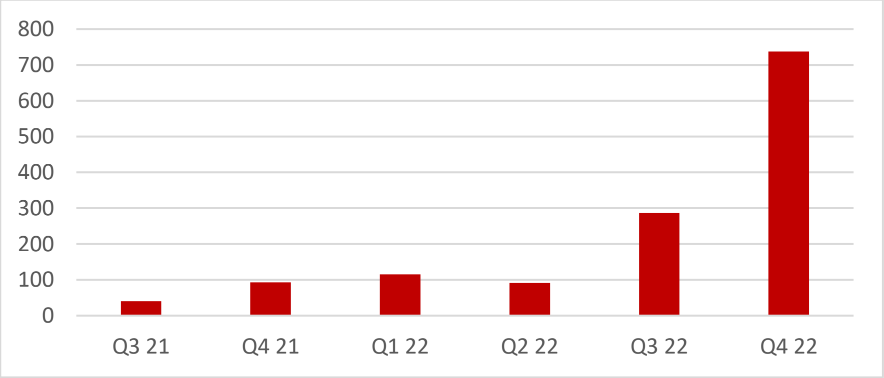
1. Increased scrutiny of corporate 'green credentials'

Greenwashing press coverage increases

Zero Carbon Academy believes that the coming year will see corporate green credentials under scrutiny like never before, as investors and consumers place increased pressure on businesses to not only tackle sustainability issues but to tell the truth about their practices.

Over the past 12 months, we have seen numerous accusations made around corporate greenwashing- the act of a company or business portraying themselves or their products as being 'green' or 'environmentally friendly' when in fact, this is not the case. The term is becoming far more recognised and better understood by the general public.

Figure 7: ZCA news tracker data on volume of news articles discussing 'greenwashing', split by quarter



Source: ZCA

As a result, 2023 will be the year we see greenwashing take centre stage, with green credentials placed under the microscope by investors and consumers alike. In 2022 we identified this trend emerging in some sectors; for example, Barclays reported findings that UK retailers were cancelling contracts with their suppliers over ethical and environmental concerns. There is increased risk for companies should they be found to have greenwashed- we saw backlash within the textiles sector in particular- for example, fashion brand H&M faced a class action lawsuit relating to claims of 'greenwashing'. The lawsuit argues that clothing in H&M's 'Conscious Choice' collection is deceptively marketed as sustainable, given that the items are made from materials damaging to the environment[xxvi]. Further, it adds that consumers are led to believe that Conscious Choice products are an environmentally responsible purchase, with H&M defining the collection with this statement on its website:

"The shortcut to more sustainable shopping? Conscious choice...pieces created with a little extra consideration for the planet. Each Conscious choice product contains at least 50% of more sustainable materials – like organic cotton or recycled polyester – but many more contain a lot more than that."[xxvii]

Thus, where 2022 saw those in perhaps more 'visible' industries in terms of sustainability credentials, for the textiles & retail sectors, 2023 will be the year that this goes mainstream. This is the year that we will see questions asked across a far broader range of industries.

ESG to become critical for companies of all sizes

The subject of ESG (Environmental, Social and Governance) is critical now for major corporations, and this is likewise becoming increasingly important for smaller players too, especially as supply chain partners of larger companies are being rigorously assessed on their environmental credentials. Consumer relations are also a significant hurdle, with findings at the end of 2022[xxviii] that less than a quarter (23%) of the British public take ESG claims at face value and that more than 1 in 10 (14%) say that they typically disbelieve claims[xxix], companies are challenged with a significant task in regaining public trust. On a global level, we are seeing scrutiny of ESG activities taking centre stage; for example, in Japan, the FSA (Financial Services Agency) has revealed draft guidance for ESG investment trusts, whereby 'supervisors' will scrutinise ESG investment products to protect customers[xxx].

Why 2023?

While we have seen examples of ESG scrutiny over the past 12 months, alongside growing awareness over greenwashing, this will be the year this matter comes to the forefront. As greenwashing concerns emerge across industry sectors, and consumer scepticism rises at a time when the public is becoming ever more concerned by sustainability matters, businesses will be eager to cut through the noise and accurately showcase their green credentials.

Disclaimer

Whilst every effort has been made to ensure the accuracy of the material in this document, neither Zero Carbon Academy, nor the report's authors will be liable for any loss or damages incurred through use of this report.

Authorship and acknowledgements

This report has been produced by Zero Carbon Academy, an independent company creating practical, actionable training and support to the people in business who are leading the charge against climate change. The views expressed herein are those of the authors only and are based upon independent research by them.

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