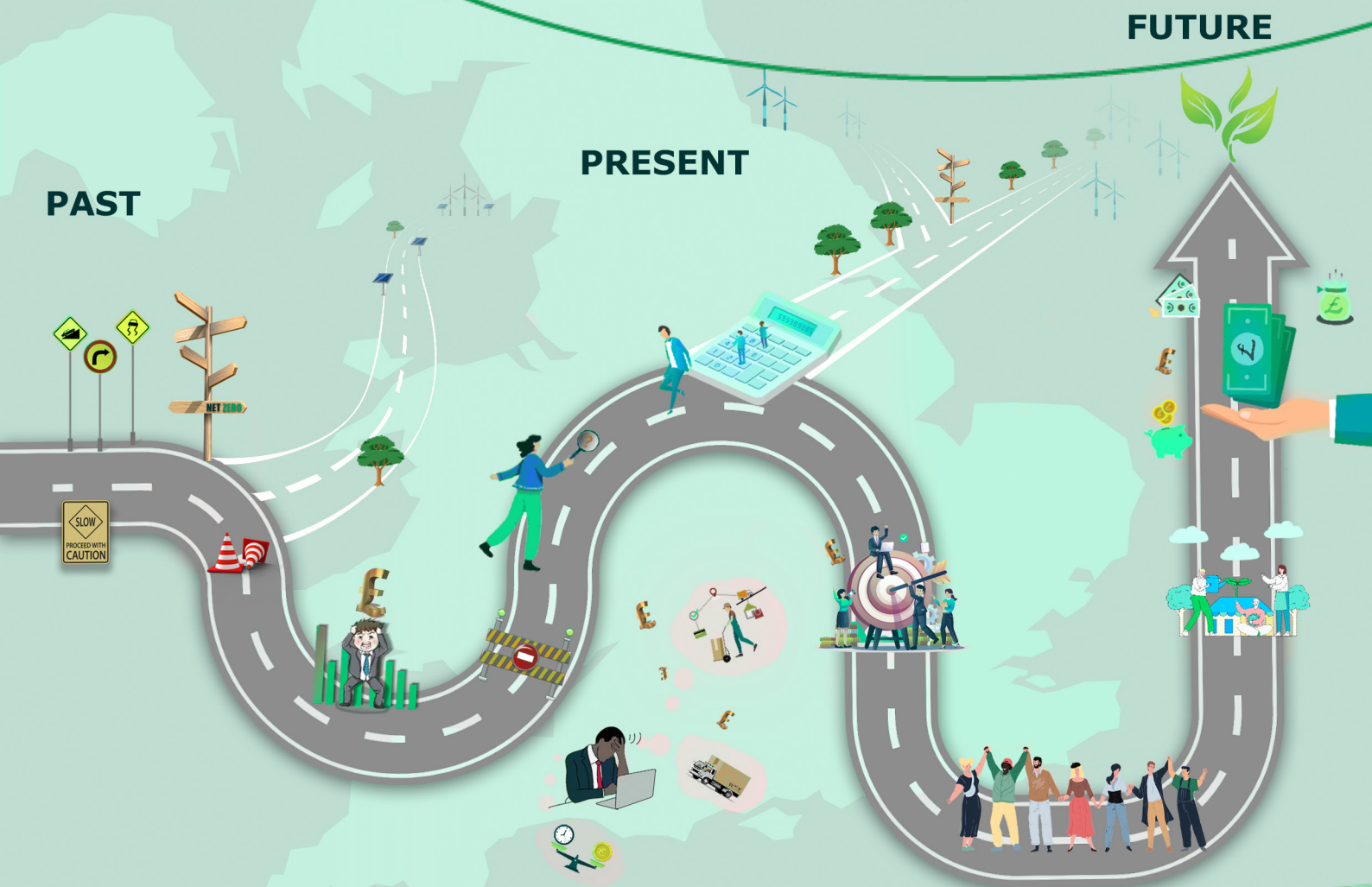


# ENGAGING SMALL AND MICRO BUSINESSES WITH **NET ZERO**

A report and tool for  
engagement

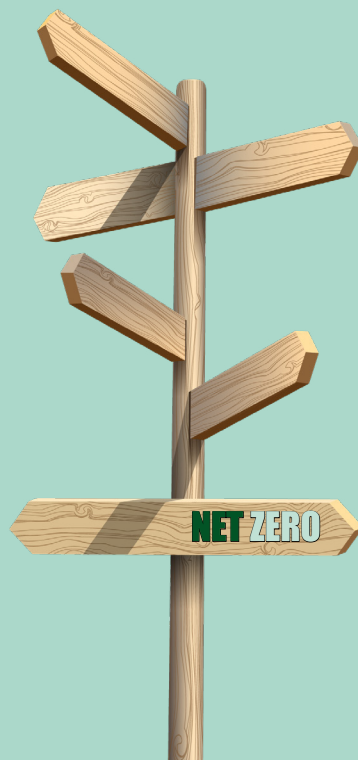


**Dr Ralitsa Hiteva and Franco Gonzalez Zenteno**  
Science Policy Research Unit, University of Sussex

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Micro and small businesses (with up to 49 employees) face more barriers to engaging with Net Zero: fewer resources to take action, higher costs of greener packaging and transport, higher cost to investment, to name a few.

For many micro and small businesses starting the journey towards Net Zero can lead to increase in costs and resource pressures which can threaten the business's ability to absorb such cost and continue to service the local community. Most small businesses face **considerable costs and barriers in accessing green packaging, transport and finance.**

While most micro and small businesses have heard about Net Zero, there is limited understanding about what the term means in general and in practical terms for the operation of the business. Available support for engaging with Net Zero can vary greatly from place to place, and is rarely perceived as adequate.

There are **big systemic barriers** that are out of the control of micro and small businesses: such as lack of control over the built environment and the infrastructures that businesses depend on to operate.

Addressing these barriers and the challenges associated with the smaller size of operations requires using a combined approach including national proactive action and place-based collective action for supporting micro and small businesses on their path to Net Zero.

### ***The need for national proactive action includes:***

- Introducing Net Zero regulation, standards and a suite of incentives appropriate for the capacities of micro and small businesses.

- Identifying and acting upon systemic barriers outside of the control of micro and small businesses.
- Proactive supply chain and industry support to encourage the development of services and products which would facilitate action on Net Zero, such as training, monitoring and reporting, and one-stop shop platforms.
- Supporting innovation in the supply chains through government procurement and creating economic value in Net Zero.

### ***The need for collective and place-based action includes:***

- Self-organisation of micro and small business through local collectives and hubs, to share experiences and find inspiration and for Net Zero action in their communities
- Proactive place-based action by local authorities, NGOs and organisations to provide low cost, accessible Net Zero options (e.g. waste collection infrastructure and low emissions transport) and local points of support.



This report and Guide was developed by Dr Ralitsa Hiteva and Franco Gonzalez Zenteno from the Science Policy Research Unit at the University of Sussex as part of the “Methods for engaging micro and small businesses with Net Zero” project (May 2022- March 2023), funded by ASPECT. The project was carried out in partnership with Orbit.

The report and Guide were developed by working with micro and small businesses (with up to 49 employees) between June 2022 and March 2023 to identify the barriers, challenges and aspirations they have for engaging with Net Zero. We worked with 22 micro and small businesses and industry representatives from different sectors (see Figure 1), to co-develop a new, free method for engagement with Net Zero for small and micro businesses in the UK.

This report aims to help understanding and accelerate engagement of micro and small businesses with Net Zero, proposing a practical approach involving national level action, place-based action and a proactive role for businesses and industry organisations. The Guide you will find on pages 16-25 has an accessible format and language tailored to the needs of micro and small businesses.

The Guide provides a step-by-step introduction to a new method for engagement called Net Zero Pathways Map and can be used directly by micro and small businesses to take their first steps towards engaging with Net Zero.

The process does not require any prior understanding of Net Zero and could be carried out by the senior managers or owners of the business or the whole team, or any organisation (e.g. industry organisations or Chambers of Commerce) working with micro and small businesses.

### *EDI of the project*

In canvassing and working with micro and small businesses we tried to be as inclusive as possible. Women represent 41% of participants and 50% of participants were selected from minoritised ethnic groups.



# Project participants by sector

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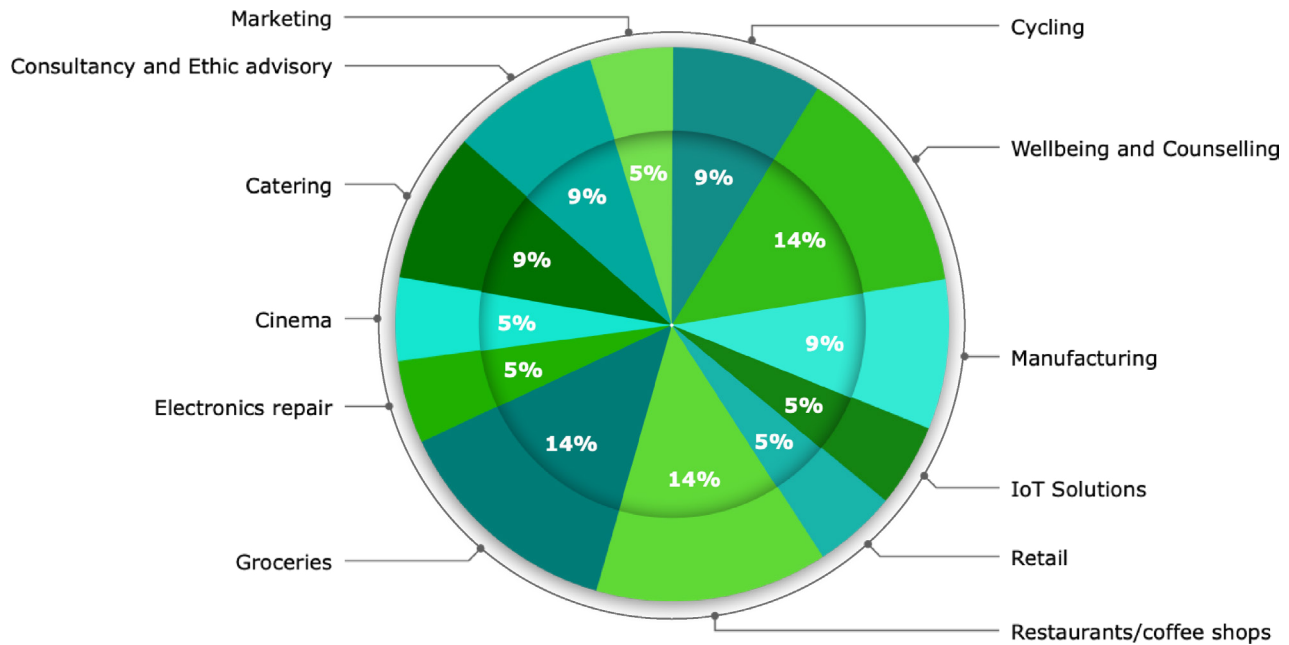


Figure 1. Businesses represented in the project

Video introductions to the report and the Guide can be viewed here:

If you would like more details about the project or would like to contact the research team,  
please email:

**Dr Ralitsa Hiteva at [r.hiteva@sussex.ac.uk](mailto:r.hiteva@sussex.ac.uk)**

**or**

**Franco Gonzalez Zenteno at [fg90@sussex.ac.uk](mailto:fg90@sussex.ac.uk)**

## Why is it important for small and micro businesses in the UK?

Net Zero is a UK specific target for reducing carbon emissions by 2050, set in law.

The objective of the Net Zero target is to reduce the UK greenhouse gas emissions starting immediately, while continuously reducing them to the lowest possible level or, if possible, to absolute zero emissions.

Achieving this objective will involve action to be taken by all sectors and businesses in the UK.

The earlier we start actively lowering carbon emissions from business activities, the more likely we are to be able to significantly lower emissions by 2050.

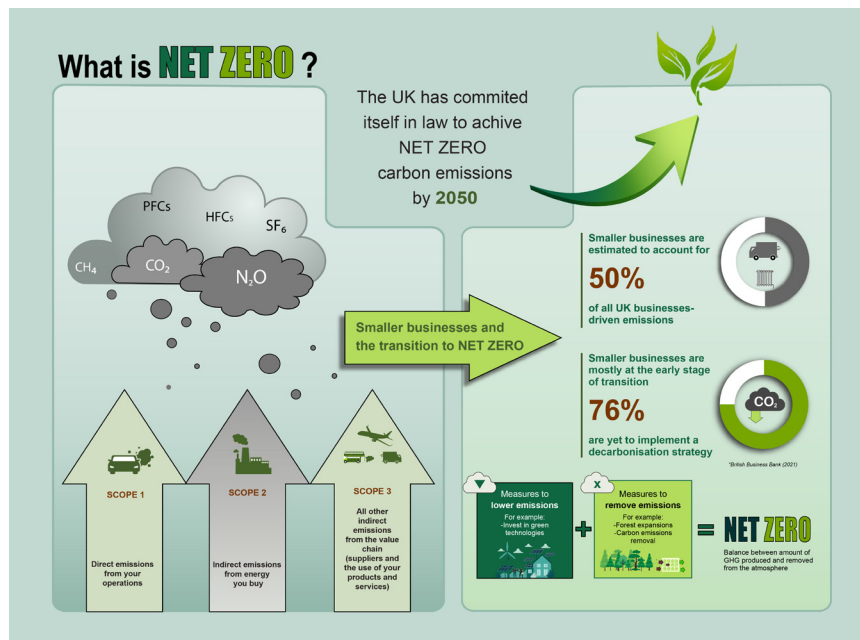


Figure 2

Emissions which cannot be reduced to zero, are expected to be reduced as much as possible and then offset by removing directly greenhouse gases from the atmosphere for example through technology such as carbon capture and storage. This is commonly referred to as Net Zero.

***Micro and small businesses have a big role to play to achieving Net Zero.***

This report and **Guide** are designed to help micro and small businesses to start thinking about Net Zero and what it would mean for the way they do business.



# Micro and small businesses in the UK and Net Zero

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## ***Smaller size but larger numbers and emissions***

Micro and small businesses (with up to 49 employees) have a key role in achieving UK's Net Zero target. However, the main focus of policy and regulation has been on larger companies, leaving micro and small businesses with limited support and consideration.

Businesses with less than 250 employees account for about half of the emissions of the British business sector and a third of all UK's carbon emissions (BBB, 2022). Micro and small businesses are thought to be responsible for a larger percentage of energy demand (33%) in comparison with medium-sized enterprises (22%).

## ***Limited national support and regulation***

Currently there is no regulation requiring micro or small businesses to set a path to Net Zero. There are no specific decarbonisation plans or strategies for micro and small businesses on how they will begin their transition to Net Zero.

Existing policies are fragmented and uncoordinated across a range of parties, strategies, frameworks and even across national and international funding bodies.

## ***Slow pace of engagement with Net Zero***

In the run up to COP26 the UK government launched the Business Climate Hub in May 2021 - an online platform with guides, training and calculation tools to support SMEs in their Net Zero journey. By the end of March 2023, 4000 businesses had registered on the platform (180 new registrations per month since the launch). At this rate the remaining 5.6 million of SMEs in the UK would finish signing up in 2,582 years.

**More needs to be done to help engage micro and small businesses with Net Zero, quicker and in greater numbers.**

This report and the embedded Guide (pages 15-25) aim to help this shift in scale and pace.

# Mind the gap: Understanding Net Zero

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## Hearing and understanding are not the same thing

The majority of surveyed SMEs in 2021 (BBB, 2022) responded that they have “heard a lot/a fair amount” about the UK government’s target to reach Net Zero by 2050 and the impacts of climate change on their businesses.

However, as engagement with businesses in this project illustrated, there is a significant gap between hearing about and understanding Net Zero.

While most businesses we spoke to have heard about Net Zero and were aware of the target, and that it is linked to their business activities, many lacked “understanding” of what Net Zero implied or how it could be translated into action.

What needed to be reported and how, was one of the big unknowns for micro and small businesses.

- *What are the different scopes?*
- *How to take an inventory of business activities and associated emissions and allocate them in different scopes?*
- *What activities are the most important for each scope?*

**““Hearing” about Net Zero does not equal [“high” or even “reasonable”] understanding of key Net Zero concepts to the level required to develop a Net Zero plan.”**

(Micro business owner, 2022)

The gap is even bigger for micro and small businesses. Whilst all participating businesses were comfortable with understanding and discussing climate change, only a couple knew that Net Zero referred to a zero balance between carbon reductions and offsetting, and the need to develop inventories according to scopes 1, 2 and 3 groupings.

Micro and small businesses need active support and guidance to bridge the gap between hearing about Net Zero and understanding what they need and can do to take action. The majority of micro and small businesses are not currently able to take this step in understanding by themselves.



## Limited understanding without regulation

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Unlike other required changes of business practices introduced by the government recently (such as GDPR standards and Brexit), the Net Zero is not an everyday term of discussion for micro and small businesses.

Although the importance of the Net Zero target for business activities varies depending on the sector, even sectors with stringent environmental standards might not be engaging with the Net Zero agenda.

For example, although the construction sector is identified as key for decarbonisation (lowering the amount of carbon emissions used to deliver services and products in the sector) and observes multiple environmental standards, discussions of Net Zero are limited. Participants believed that lower levels of engagement with Net Zero are due to the lack of mandatory regulations about Net Zero.

**“... I’ve been a member of ... loads of [business] chambers... and at none... have delivered training on what net zero is for micro businesses because there are no regulations making us do it.”**

(Digital agency owner, 2022)

In comparison, GDPR standards were quickly adopted because of their mandatory character and the distinct strategy of “fine threats” adopted by the UK Government. While many of the participating micro and small businesses did not like that the threat of fines was used to achieve compliance, it was considered by all a success, in terms of how widely it was discussed within business circles and how quickly it pushed businesses towards learning, training and understanding what was required to be compliant.

For many of the participating businesses, the lack of training and understanding Net Zero are consequences of the lack of regulation. A coffee shop owner compared their knowledge of hygiene requirements to their knowledge of Net Zero. While hygiene requirements are seen by many micro and small businesses in the hospitality sector as part and parcel of being able to operate as a business, Net Zero is seen as a nice “add on” if the business can afford it.

**“The thing that worries me is there’s so many people that just aren’t gonna do this. And I think until the top line value is actually legislation, like you have to do this, then so many people won’t”**

(Coffee shop owner, 2022)

## No clear business case for micro and small businesses

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Only a small number of micro and small businesses interviewed for the project saw engaging with Net Zero as an opportunity for business growth, for example, by developing new monitoring products and services to support other companies in reporting their carbon emissions.

Rather than as a business opportunity, most micro and small businesses saw engaging with Net Zero as an additional cost to the business: acquisition of new equipment, such as electric vehicles, or 'green' products and services, such as plastic-free packaging (see also Green Effort on page 12).

Many businesses believe that the lack of clear business case for Net Zero is another key reason for the lack of understanding of what Net Zero means for the business and what action needs to be taken. Participating businesses felt that unlike larger companies, they would only allocate resources for Net Zero if it was of a financial benefit for the company.

In trying to find a business case for engaging with Net Zero smaller businesses are looking to larger businesses (such as banks) and the government for inspiration and motivation. Micro and small businesses are looking up to supply chains and government procurement as key stakeholders to help them identify and develop a business case for Net Zero.



**Supply chains and government procurement are well positioned to help micro and small businesses identify new business opportunities by engaging with Net Zero. A proactive approach can balance regulation with incentives where multiple values drive action towards Net Zero.**

## Values driving Net Zero in micro and small businesses

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For micro and small businesses engagement with Net Zero is driven by **multiple values, including environmental protection, cooperation and solidarity**. Although many thought that environmental values should be of the highest importance, in fact, economic value is a top priority for many, because of financial precarity.

Many smaller businesses are interested in creating multiple values related to Net Zero but feel that such opportunities are facilitated by larger businesses and the government. Although some opportunities exist, they are often only available to Business-to-Business organisations, rather than smaller businesses servicing communities.

The geographic dispersion and diversity of smaller businesses means that **one-size fits all approach is unlikely to work**. For some businesses regulation is seen as key in ensuring sector-wide compliance and bringing everyone to the same level of service. Other businesses saw taking action on Net Zero as a way to differentiate the business from competitors.

Many businesses discussed the approach of providing evidence of “social value” (for example, through purposeful action such as hiring locally) as part of government contracts, as an effective way of forcing businesses to really think about how they contribute to society. If applied to Net Zero, it could provide a strong incentive for engagement, particularly for smaller businesses. However, at present, there is a lack of clarity on how Net Zero is weighted in government contracts as a form of value. Net Zero is not a common aspect of procurement with the private and third sectors, particularly in relation to micro and small businesses.

Identifying and developing multiple values driving engagement with Net Zero can act as powerful ‘carrots’, especially if **they are specifically tailored for micro and small businesses**. Many businesses expect that such incentives would be developed from bottom-up and place-based initiatives.

Participants were unanimous that both: **a regulative ‘stick’ approach and a range of ‘carrots’ incentive are needed** to push micro and small businesses towards Net Zero action.

### “Carrots for all, but more carrots for smaller businesses”

Developing both top-down regulation and value-based incentives for Net Zero are needed to avoid Net Zero becoming a “pointless paperwork and.... box ticking exercise”, with little potential for growth.

**Many businesses called for a bottom-up approach of proactive intervention by local authorities, as well as within sectors and business themselves to allow for development and pursuit of different ‘routes’ to Net Zero.**

## Green efforts are harder for smaller businesses

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Micro and small businesses lack the human, capital and time resources that larger businesses have to find the right information and take action on Net Zero. In the lack of regulation, incentives and a business case for Net Zero, most micro and small businesses can dedicate very limited resources on starting to think and plan about Net Zero.

***In addition, micro and small businesses face more and steeper barriers and costs to engagement with Net Zero than larger companies.***

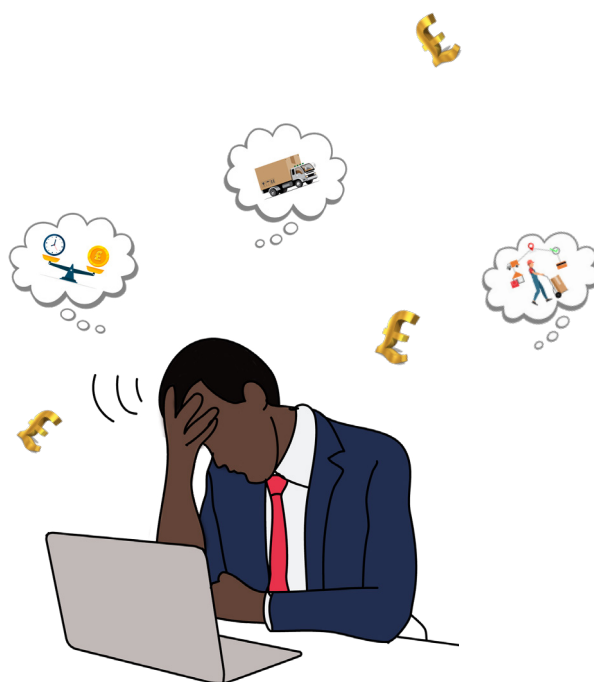
Key concerns for smaller businesses are procuring green materials, services or technologies at accessible prices. Our evidence points that some of the biggest barriers facing micro and small businesses are ***the lack of cheaper and accessible green packaging and transport options for smaller scale operations.***

Often, investment in Net Zero resources for smaller businesses is weighted against remaining affordable for the communities they serve and with whom they have close links with. Few can afford to absorb the cost of greener products and production without passing some of it to consumers.

Some of the businesses see the premium cost of green products as a threat to being able to keep their prices down and fulfil their social missions: "to serve the community and to keep the business afloat".

Engaging with Net Zero and working towards the development of a strategy is often associated with the need to employ specialist consultants and/ or pay for training and tools for owners or managers to understand, calculate and put in action necessary activities such as monitoring and evaluation of carbon emissions. Many shared that even trying to identify useful and easy to use tools or specialised companies can be time and resource intensive, and something that they need help with.

***Shifting towards sustainable technologies and equipment is also often out of the control of micro and small businesses. Many merely rent the premises they operate from and have limited agency to change their built environment or in some cases, even the type of fuel supply.***



Far from doing nothing, we found *appetite for both individual and collective action on Net Zero*. Micro and small businesses are interested in working with other companies in their respective sectors and within their places of operation to self-organise, identify good practices and look for ways of lowering the costs of green packaging, transport and financing. *There is an expectation that local authorities and industry organisations will also be proactive in taking action at the local level, by identifying and lowering barriers to Net Zero* (for example by improving waste collection and disposal practices).

Another idea which had strong support from participating businesses is the introduction of *one-stop-shops for Net Zero*, to support businesses in their Net Zero journey, through the provision of front-line advice and subsidised services, such as decarbonisation advisory audits.

The idea of Net Zero one-stop-shops for micro and small businesses, operating within sectors or different regions was welcomed by businesses as a much-needed way of supporting higher levels of engagement across different sectors. While many looked to local authorities and local enterprise partnerships as natural hosts for such Net Zero one-stop-shop support, longer term businesses spoke about Government-funded small business support platform, such as the Business Link which could act at a national level. Business link (1992-2012) was a Government-funded network of 89 one stop shops providing online resource for business, containing essential information, support and services for business.

**“Business link..... they were around when I started my business and it was so beautiful. I used to go to local workshops and things I used to meet loads of small businessmen. I could literally have an advisor or allowed free, one hour mentoring sessions with somebody if you had a challenge. It was so good, really. I got loads out of it and that closed down.... There is FSB, there’s a lot you can’t access unless you pay to join which annoys me a little bit.”**

(Small business owner, 2022)



# Recommendations

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for policy-makers, local authorities, industry organisations & micro and small businesses

Based on our research and the options for engagement discussed with participating micro and small businesses, we recommend a combined approach for supporting smaller businesses to engage with Net Zero. A combined approach would involve:

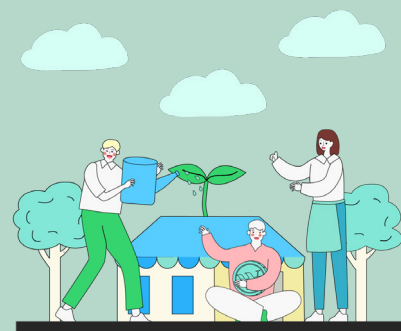
## ***National proactive action in:***

- Introducing Net Zero regulation tailored to the needs and capacities of micro and small businesses (not just SMEs), and clear guidelines and standards to signal the value of Net Zero action through government procurement.
- Closing the gap between hearing and understanding about Net Zero through the provision of free or subsidised training, monitoring and reporting. Net Zero one-stop-shop platform for micro and small businesses could provide advice on relevant information and best practices, as well as subsidised key activities (such as audits) to help businesses develop Net Zero strategies.
- Identifying and acting upon big systemic barriers outside of the control of micro and small businesses.

- Supporting supply chain innovation for Net Zero, which could deliver cheaper and accessible green packaging and transport for smaller businesses.
- Developing incentives (“carrots”) for micro and small businesses to support multiple values in the pursuit of Net Zero and multiple routes to Net Zero action.

## ***Collective and place-based action through:***

- Self-organisation of micro and small business through local collectives and hubs, to share experiences, find inspiration and motivation for Net Zero action in their communities.
- Proactive place-based action by local authorities, NGOs and organisations to provide lower cost, accessible Net Zero options (e.g. waste collection infrastructure and low emissions transport) and local one-stop-shop points of support.





# A Guide to developing your business' Net Zero Pathways Map

In the absence of targeted national level and place-based support for micro and small businesses to engage with Net Zero, the second part of this report provides an accessible and free method for engaging with Net Zero as a business through the development of a Net Zero Pathways Map.

The Guide which follows provides a step-by-step guidance on creating a Net Zero Pathways Map for any micro or small business. The Guide was developed with input from 12 micro and small businesses, who took part in the research and was designed to respond to some of the barriers and challenges encountered by smaller businesses in this space. No prior understanding or knowledge of Net Zero is required to use it.

This guide has been developed to support your small business' journey to Net Zero, by guiding you through 4 simple steps of analysing your business.

This process aims to help guide your business towards beginning to categorise and estimate any carbon emissions generated from business activities, in the past, present and the future.

Each Step guides you to explore different aspect of the business, from current greenhouse gas emissions to what shaped business activities and emissions in the past. By taking into account past and present emissions, you can build an understanding of your current pathway. You are then prompted to imagine the business operating in a Net Zero future and the pathways towards achieving it.

You can type your answers in Tables 1 and 2 on pages 20 and 21.

A detailed explanation of what is Net Zero is included on page 6 of the report.

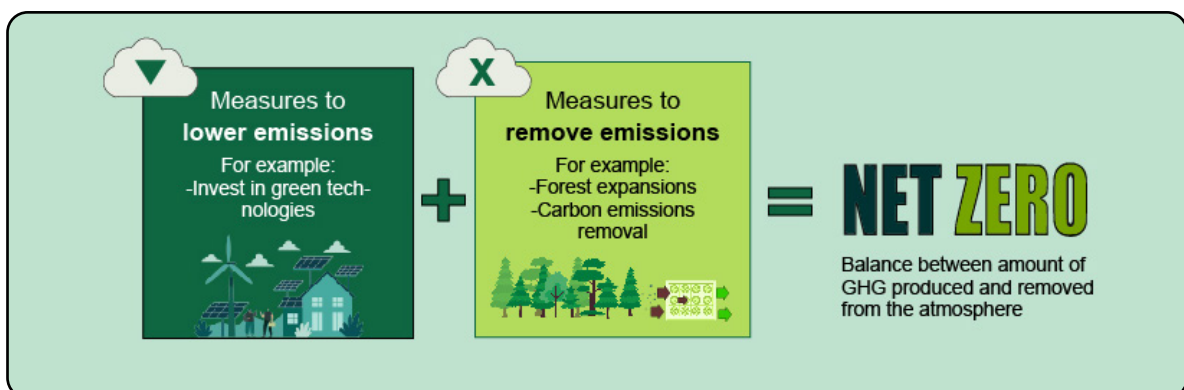


Figure 3

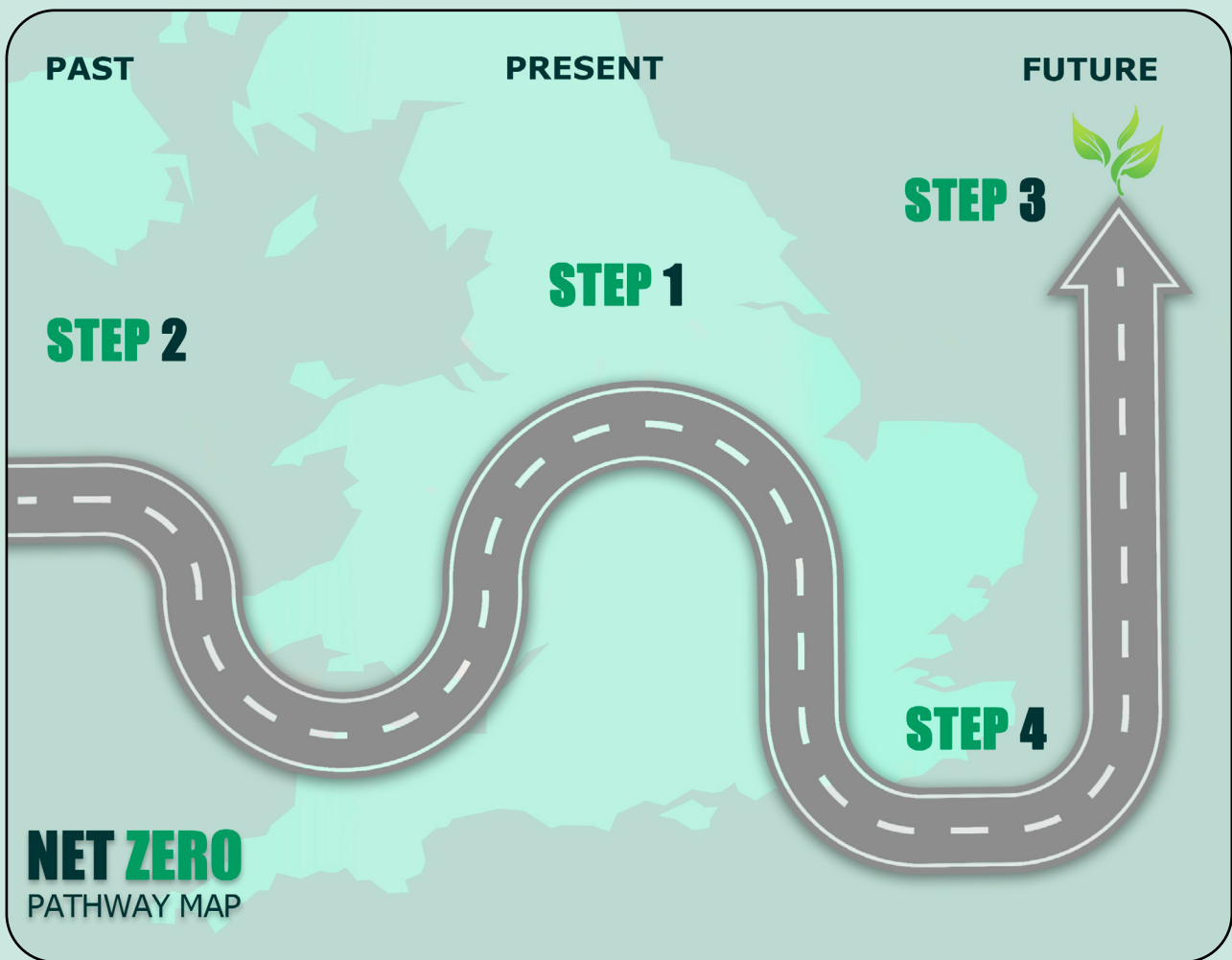


Figure 4

- STEP 1** will take between **20 and 40 minutes** to identify the present sources of emissions in the business. Calculating the business emissions may take longer depending on which calculating approach is selected.
- STEP 2** will take you about **20 minutes** to discuss the past and recollect all the decisions and factors that shaped current business activities and the levels of emissions.
- STEP 3** can take up to **30 minutes** and involves imagining how the business would operate in a Net Zero future.
- STEP 4** can take up to **30 minutes** and involves identifying the steps back that the business will need to take from that Net Zero future to the present - establishing a pathway to your Net Zero vision of the business.

Please follow the steps below to start the Net Zero Pathways Map journey.

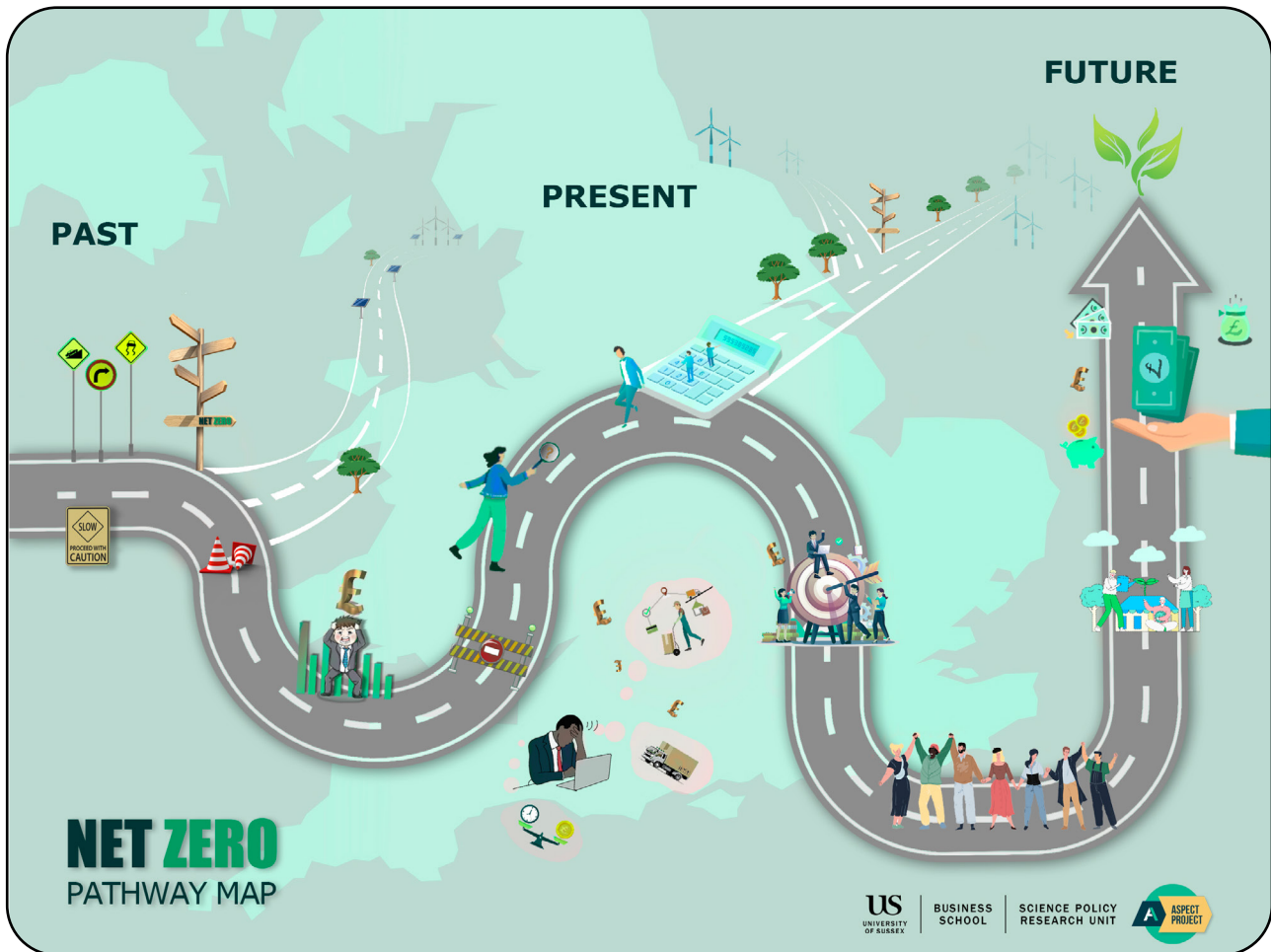


Figure 5

## STEP 1

(20 - 40 minutes)

### *Building A Life Map of the businesses: the PRESENT*

Look at the **PRESENT** section of the map (STEP 1), what do you see? A person with a magnifying glass and a person with a calculator. This represents the tasks you will conduct in this step: identifying the activities that produce carbon emissions in your businesses and then calculate how much carbon emissions each activity emits.

At this point is important to understand what carbon emissions actually are. People use the term to refer to a group of gases produced through human activities. Look at the top line of the figure below, you will see a cloud with a group of circles with the following names:

- **CO<sub>2</sub>** (Carbon Dioxide) a gas produced when you burn fossil fuels like petrol in cars or heat your home by (e.g your boiler) and is absorbed by trees when they grow
- **CH<sub>4</sub>** (Methane) a gas most commonly produced in the production and transport of coal, natural gas, oil, by livestock and agricultural practices
- **N<sub>2</sub>O** (Nitrous oxide) a gas emitted during agricultural activities, land use, and industrial activities; combustion of fossil fuels and solid waste; and during treatment of wastewater
- **HFCs** and **PFCs** are synthetic, powerful greenhouse gases emitted from a variety of industrial processes. Most HFCs are contained within equipment and are the result of old equipment, leakage during maintenance, or escape at the end of the product's lifetime. PFCs are produced as a byproduct of aluminium production.

For the sake of simplicity the emissions of these greenhouse gases are often just called carbon emissions. In discussions about climate change and in the context of this report, when carbon emissions are mentioned, it refers to this group of gases.

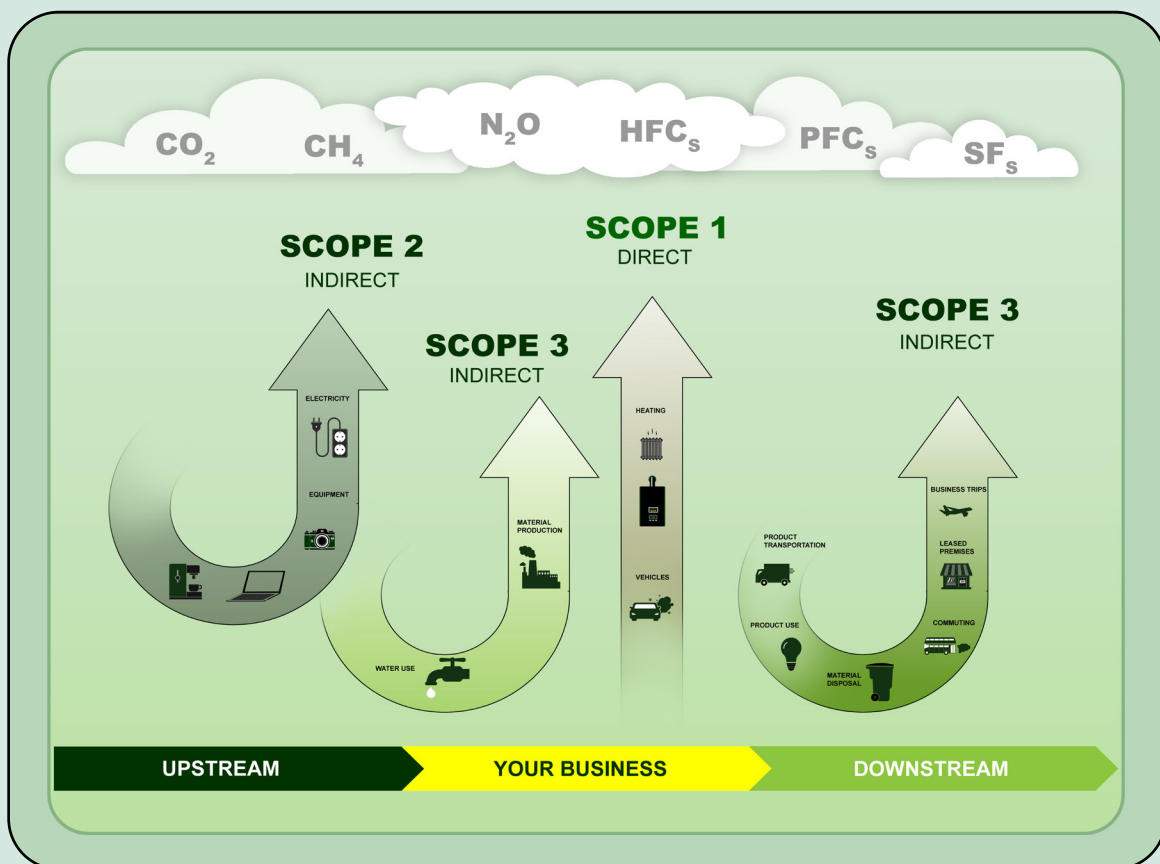


Figure 6

**Upstream** activities include any activities associated with the purchase of raw materials, transport services and production. **Downstream** activities cover the sale, use and disposal of any business products.

In this step you will learn how to categorise the carbon emissions of your business according to the Greenhouse Gas Protocol (GHG Protocol). This protocol sets the standards for measuring, managing, and reporting carbon emissions associated with the purchase of raw materials, transport services and production. It bundles your carbon emissions in three groups called “scopes” (shown in Fig 6 above).

1

**SCOPE ONE** includes **DIRECT** carbon emissions from equipment and vehicles your business owns.

2

**SCOPE TWO** includes **INDIRECT** carbon emissions from producing electricity, heat or cooling for the business from utilities or other companies.

3

**SCOPE THREE** includes all other **INDIRECT** emissions that occur in the value chain of your business, both upstream and downstream, such as materials procured, material waste disposal, waste transportation, employee commuting and business travelling, product and material transportation among others.

Now it is time to take out your magnifying glass and identify the carbon emissions in your business. Use Table 1 below to tick the list of activities that apply to your business in each of the scopes.

It might be difficult to judge whether your emissions are low, high or average, if you have no point of reference.

Think about what aspect of your business is likely to generate most carbon emissions, and why? You might end up with a long list of processes, services and products that you suspect are emissions intensive. We have compiled Table 1 to assist you in this process.

# Identifying the carbon emissions in your business.

---

Tick the activities that are more carbon emissions intense in your business.

Table 1

## Scope 1

**My business produces directly carbon emissions in:**

- ◆ Heating with a gas boiler [ ]
- ◆ Using refrigerators that may leak flour gases [ ]
- ◆ I own vehicles that burn fossil fuels [ ]
- ◆ I am a small farmer with livestock [ ]
- ◆ I am a small farmer that uses nitrogen fertilisers [ ]
- ◆ I have an electricity generator that burns fossil fuels [ ]

## Scope 2

**My business consumes energy which was produced by burning some amount of fossil fuels. Particularly my business uses:**

- ◆ Electricity produced from fossil fuels [ ]
- ◆ Heating produced from fossil fuels [ ]
- ◆ Cooling powered with electricity produced from fossil fuels [ ]

## Scope 3 Upstream

**My business uses:**

- ◆ Materials whose manufacturing and transportation to my business generate carbon emissions. This includes any non-manually produced material. If they are delivered by engine vehicles they produce emissions in transportation [ ]
- ◆ I use water in my businesses. Your water utility used energy produced most likely with fossil fuels to pump the water to your business. [ ]
- ◆ I use equipment and/or furniture in my businesses. [ ]

## Scope 3 Downstream

- ◆ When my clients/customers use my products they generate carbon emissions (ex. Houses, Cars, Appliances, Clothes that need washing) [ ]
- ◆ When my clients/customers dispose of my products they also generate emissions [ ]
- ◆ My employees commute to office, so the vehicles they use either burn fossil fuels or the electric vehicles they use are powered by electricity produced partially with fossil fuels (which are less vs petrol cars, but still non-zero) [ ]
- ◆ Even bicycle commuting produces some emissions [ ]
- ◆ My products are delivered to my clients/customers in carbon emitting vehicles [ ]
- ◆ My employees work from home [ ]
- ◆ Myself and/or my employees do business trips [ ]
- ◆ I outsource transportation services to move my products between two of my operation sites [ ]



Now that you have identified your carbon emission activities it is time to take out your calculator. There are four ways to calculate your carbon emissions. The first one: **activity based calculation** involves measuring the activities that produce greenhouse gases in your business and multiply the quantity of each one of these activities by a corresponding carbon factor for such activity which you can find in government and other organisations websites.

**Table 2**

| Scope 1 and 2 data required   | Scope 3 data required   |
|---|---|
| <p><b>Scope 1 (Approach 1)</b></p> <ul style="list-style-type: none"> <li>◆ your annual gas consumption from your last year energy bills (in kWh or m3).</li> <li>◆ petrol consumption of your business vehicles during last year (in gallons) or an estimated mileage, trip frequency and type of vehicles.</li> <li>◆ if you have an energy generator (a diesel genset for example), last year's fuel consumption (gallons)</li> <li>◆ if you have air conditioner and/or refrigerators, the volumes of refrigerants replenished when they are given periodic maintenance.</li> </ul> <p><b>Scope 2 (Approach 1)</b></p> <ul style="list-style-type: none"> <li>◆ your annual electricity consumption from your last year energy bills (in kWh)</li> </ul> <p>If you share utility bills (gas and electricity) with other businesses, calculate your proportional part using your percentage of floorspace.</p> | <p>For an initial scope 3 estimation (Approach 3).</p> <ul style="list-style-type: none"> <li>◆ list of last years' business trips and distances of all employees by flight, train or rented cars. Alternative money spent in trips.</li> <li>◆ commuting distances of your employees, type of transport and frequency of office trips.</li> <li>◆ number of employees-days working from home.</li> <li>◆ last year's water consumption in litters.</li> <li>◆ list of equipment used in your business during the last year and when they were acquired. TIP: focus on the ten largest or expensive equipment in use. Easier to use spend carbon emission factors.</li> <li>◆ list of materials you use in your business by type of material (example: paper, plastics, metals) TIP: focus on the top five materials that represent the largest quantities (in weight)</li> </ul> <p>For a more detailed scope 3 carbon emissions assessment also find the following information:</p> <ul style="list-style-type: none"> <li>◆ transport type and distances/petrol consumption travelled to bring the materials to your business and take your products to your clients.</li> <li>◆ quantity of materials and type of materials that are part of your product that end up in waste.</li> <li>◆ If an external transportation moves your products between two sites of your business, you need transport type, the travelling distances and or fuel consumption of the vehicles used.</li> </ul> |

### **Approach 1 (Activity based calculation):**

Activity measure X Quantitative Emission Factor (carbon emission/activity quantity) = Carbon Emission in activity.

Pros: More accurate

Cons: Need more detailed data of your activities

### **Approach 2 (Spending based calculation):**

Activity spending X Spending Emission Factor (carbon emissions/ £ spend) = Carbon Emission in activity.

Pros: You already know how much you spend in activities!

Cons: Less accurate as price increase/decrease inflate or underestimate emissions

### **Approach 3 (Hybrid of Approach 1 and 2 above):**

Use Approach 1 for activities you have data for. Use Approach 2 for activities that are harder to measure or are more complex.

### **Approach 4: Use a carbon calculator**

Many are available, some are better than others. Check the ones below:

- <https://businesscarboncalculator.normative.io/en/>
- <https://www.carbontrust.com/our-work-and-impact/guides-reports-and-tools/sme-carbon-footprint-calculator>
- <https://www.carbonfootprint.com/measure.html>

If you decide to use Approaches 1 to 3 you will need carbon emission factors. You will find them in the links below. To assist you in your data collection exercise of your activities we have developed Table 2.

#### **Quantity emission factors:**

- <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>

#### **Spending emission factors:**

- This link will take you to an online library of official statistics of UK and England's carbon footprint to 2020. Scroll down to a document titled: Table 13 – Indirect emissions from the supply chain – original data

<https://www.gov.uk/government/statistics/uks-carbon-footprint>

#### **Emission factor global databases**

Climati.io

<https://www.climatiq.io/data>

You might end up with a long list of unknowns. These would become knowns with time as you start thinking about your business emissions and continue to engage with Net Zero.

## STEP 2

(20 minutes)

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### *Building A Life Map of the businesses: the PAST*

Look at the *PAST* section of the map

Reflect on how the business was set up and what business decisions might have shaped current carbon and greenhouse emissions. These decisions may be related to internal changes to the business and/or changes related to external factors such as regulation.

Have a discussion with the team about what might be relevant and why, and create a list.

Tip: Make sure that you consider everything that might be relevant.

#### *Questions you might want to start with:*

- How did you come up with the idea to set up your business?
  
- What values drove how your business was set up?
  
- What resources (capital, human resources, equipment, vehicles, business location and infrastructure) did you have initially to start your business?
  
- What dictated how you have set up your operations and how you have selected your suppliers so far?
  
- Were there any environmental targets, considerations or restrictions when you set up the business? If so, what were they and have they changed over time?

### *Building A Life Map of the businesses: the Net Zero FUTURE*

Look at the *FUTURE* section of the map

This part of the mapping is inviting you to think about how you imagine your company in a Net Zero future (where you have managed to lower your carbon emissions to zero or offset the small amount you are not able to remove completely). This step entails imagining taking a very different path as a business from the one you are currently on.

Don't think about how your present business' set up, targets and infrastructure will get you there. Instead imagine what a Net Zero future for the business will involve: start from the future you desire and work backwards. Looking back to today, what do you think are the most strategic steps or actions necessary for achieving that future?

#### *Questions you might want to ask:*

- How do you imagine your business operating in a Net Zero future (emissions are zero and excess emissions removed)?
  
- Would living in a Net Zero world change the way you do business?
  
- How would your product be packaged?
  
- How would you get your products delivered?
  
- Where would the key resources that you need come from?
  
- Are there any factors specific to your type of business, sector or place of activities?

### *Building A Life Map of the businesses: your Net Zero Path*

Think about what are the main drivers that may motivate your business and your team to engage in a desired Net Zero pathway today. This process may involve acknowledging that your current business path will not take you to your future vision and it needs to change. There may be multiple pathways for your business to engage with and achieve Net Zero.

How ambitious would you like to be? And how long would you like to take on this journey? Consider the main obstacles in your way, and whether there are within your control or would require help and support externally? Is what you need best addressed at a national or sectoral level, or is it something local? Are there other business that could help you?

*Think about the following questions:*

- What are the challenges in the present that your business is facing in starting on this journey?
  
- What are the external and internal challenges in the present?
  
- What do you think the challenges in the next 5 years may be?
  
- Are they specific to your business, your geographic area or your supply chain?
  
- Are these challenges best addressed individually or as part of a bigger group of businesses like yours (same sector, same size, same location)?
  
- Would that group require the participation of larger businesses, landlords or local/national governments?

Building a Net Zero Pathways Map of the business through the 4 steps offers an opportunity for micro and small businesses to take their first steps in understanding what going towards Net Zero might entail and how they might have to operate in a Net Zero future.

Taking stock of the different activities that generate emissions and the decisions and drivers that have shaped these emissions is an important first step of developing a carbon management plan and vision for the future.

However, micro and small businesses could not and should not be left without support throughout their journey toward Net Zero. Policy makers, industry organisations and local authorities all have a role to play in providing continued and proactive support to micro and small businesses, as outlined in the recommendations on page 14 of this report.



### ***References***

British Business Bank (BBB) 2022, SME Finance Survey, accessible at:  
<https://www.british-business-bank.co.uk/wp-content/uploads/2022/02/SME-Finance-Survey-2021-Report.pdf>