NET ZERO
GUIDANCE FOR SMES IN THE TELECOMS SECTOR
THE WHAT, WHY & HOW

Telecoms in the UK connects 97% of homes, is used by 44.6 million customers daily, and is essential to our lives. As we increasingly see the effects of climate change across our world, it remains a critical time for the sector in meeting challenges towards the 2050 Net Zero target. Doing this will require a transparent and coordinated approach across industry and it will be essential that all play their part in committing to creating a sustainable future for all.

Here’s what this document will cover – Skip to the sections most relevant to you.

Why should you take action?
Turn to pages 3-4 to see real life examples of SMEs turning climate action into business opportunity.

How do you start?
Page 5 outlines how to calculate your carbon footprint, set a credible carbon reduction goal aligned with the industry, and access funding.

How do you continue?
Pages 6-7 outline the most impactful steps SME’s in the telecoms sector can take to reduce their carbon footprint.

Who are we, why are we doing this, and what is net zero anyway?
Turn to pages 8-9 to find out more about this initiative.
WHY SHOULD YOU TAKE ACTION AND WHAT ARE THE BENEFITS?

Beyond the benefit to our environment of adopting a climate change target, going through the processes set out in this document can benefit businesses in many important commercial ways, whether that is through unlocking capital, making your public sector bids more appealing or meeting increasing consumer demand for the social values of their providers aligning with their own – read on to find out more.

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<th>Accessing Capital?</th>
<th>Selling connectivity into public sector?</th>
<th>Working with major corporates?</th>
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<td>Keep insurance and lending fees affordable and stay attractive to investors by reducing your exposure to climate-related risks.</td>
<td>PPN/0621 requires a plan to reduce emissions, and other public sector tenders increasingly have social &amp; environment scoring.</td>
<td>Many, including Digital Connectivity Forum members, are asking their suppliers to calculate their emissions and take steps to reduce them.</td>
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<th>Want to give your reputation a boost?</th>
<th>Concerned about staff recruitment and retention?</th>
<th>Worried about bills?</th>
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<td>Increasingly we are seeing that consumers are paying closer attention to the social values of the products they consume. Climate action can attract end customers.</td>
<td>Climate action underpins the reputation of the sector, helps to attract new talent and helps to secure staff loyalty, particularly among GenZ.</td>
<td>Understanding your emissions helps to give a good view on heating, electricity and travel costs. It could also help with any funding schemes or applications for further business improvements.</td>
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Research showed that over 80% of millennial age workers place a high level of value on their workplaces social values and the ability to do good in their role.
WHY SHOULD YOU TAKE ACTION AND WHAT ARE THE BENEFITS?

Read on to hear from SMEs who have seen the positive impact that setting and following good carbon practices can bring.

“Since we became a carbon neutral organisation in 2020, we have continuously been working toward improving our ESG efforts, and are now in the process of becoming a certified B Corp. In our last fundraising round, we found that this had a direct impact on our conversations and ultimate choice of lender. Over aligned values, we have partnered with Triple Point, who wants to work with and support businesses like Redsquid who takes an active part in improving local communities and our planet.”

Camilla Karm
Director of Sales & Marketing
at Redsquid

“JET Connectivity has a significant internal and external focus on impact and sustainability, this has not only driven employee engagement and retention, but it’s also helped us raise venture capital funding.”

James Thomas
CEO and founder
of JET Connectivity

“Finchetto is developing revolutionary photonic processors and network switches to mitigate the exponentially increasing energy consumption in global data centres and telecommunications networks.”

Mark Rushford
Co-founder
of Finchetto

90% of the world’s GDP committed to net zero.
HOW DO YOU SET TARGETS AND ACCESS FUNDING?

We’ve established why we should set a climate change target but what about the how? Setting targets can feel daunting but there is a wealth of resources out there to help you with the process.

1. Identify which parts of the business emit greenhouse gases
   The main activities from your business which release carbon emissions include electricity/gas use, waste disposal and recycling, business travel, vehicles that you own or control, employee travel, staff commuting and the products and services you buy. The SME Climate Hub’s ClimateFit course can take you through what data is required and how to get started.

2. Collect data
   You should already have most of the information you need. Total kilowatt hours from energy bills, total water supplied from water bills, litres of fuel bought from invoices and receipts or mileage from logbooks, travel requests and tonnes of waste sent for disposal via your waste contractor. Collect data for a 12-month period and record it in a spreadsheet. SME Climate Hub’s Calculator tool can help you create your carbon footprint.

3. Develop a strategy to meet your target
   Your data will help you understand where your biggest impact lies be it travel, office energy use or things that you buy. The quick wins section below identifies some specific steps you could take.

4. Set your target
   Pledge to halve emissions by 2030, achieve net zero by 2050, and report on your progress yearly.
   The SME Climate Commitment on the SME Climate Hub is endorsed by the DCF members. By committing to reduce your emissions through the SME Climate Hub, you will be included in the United Nation’s Race to Zero campaign.

Where can I access funding?
The Business Climate Hub has links to many finance and support opportunities across the UK. Visit their website to read the comprehensive, and expanding, list.

The SME Climate Commitment has been signed by thousands of businesses worldwide.
HOW DO YOU CONTINUE?

You’ve set your targets, but where do you go from here? There are lots of ways, both large and small, to create change. Below are some tips and quick wins for telco.

01 Switch to clean energy
If your business does not own or long-term lease its premises but you still want to cut your carbon footprint, switching to a green energy supplier might be the best option for you. REGOs – or Renewable Energy Guarantees of Origin – assures that the origin of the energy supplied to you is 100% renewably sourced.

02 Optimise your heating and cooling
Install temperature controls such as smart thermostats or building energy management systems to help ensuring heating and air conditioning is timed correctly and adjusts according to outside air temperatures. This can minimise over heating or cooling. Make sure your boiler is regularly serviced to ensure it is operating as efficiently as possible. In addition, regularly clean fins on heating and cooling appliances.

03 Change your lighting
LED lighting is one of the most energy efficient forms of lighting a business can use, other than natural daylight of course. LED bulbs use approximately 15 times less electricity than halogen lighting and can significantly reduce your energy use. There is also an array of technology available, such as motion sensors which will automatically ensure lights are switched off if rooms are not in use. Consider installing window film, that allows light in but reflects the heat back out during the summer. This gives you the benefit of natural light without causing increased need for air conditioning. This film can be reversed in winter so that heat is reflected.

04 Review your fleet
Do you have any company cars or fleet of vehicle? If so, are they leased? Mark out when the lease ends and consider electric vehicles (EVs) for your next company car. Note that there are currently long waiting lists for EVs, so it’s worth planning a year in advance and researching the range you will need and charging facilities.

05 Work smart
If it is appropriate for your business, flexible working options can help you recruit and retain staff and cut carbon at the same time. Enabling staff to work from home cuts out several journeys altogether. Transport remains the largest source of UK emissions, although bear in mind there are other working from home emissions such as home heating to consider. All you need to do is make sure homeworkers have the tools they need to do the job properly away from the office. A cloud-based productivity and collaboration solution may be all it takes.

Time and effort are precious resources and different wins require different levels of input.

So, how do these quick wins measure up when it comes to effort vs. impact? Each suggestions is marked with an effort vs. impact indicator which measures them against low, medium and high.

- Low effort
- Medium Impact
- Low Impact
- Medium effort
- Medium Impact
- High effort
- High Impact
Think about what you buy
As a small business you have considerable buying power. Use it for the good of the planet. Ask your suppliers about their own green credentials and how they source their products. Buy energy efficient printers, laptops and consider buying remanufactured office furniture, and ask your data centres and cloud providers whether they have set carbon reduction targets.

Programme with energy efficiency in mind
Can you design your software in a way that minimises the energy needed to run it? Are approximate outputs from models enough? Does data need to be calculated to hundreds of decimal places? Can blockchain applications limit validation perhaps to just a trusted set of authorities? Or can proof of work move to proof of stake? Can you limit data movement? Or improve idle efficiency? Even small improvements when amplified across millions of systems can make a dramatic difference.

Consider generating your own renewable energy
Generating your own energy can help you cut energy bills and potentially earn money in the longer term. Heat pumps, solar and battery storage are all within reach for SMEs who own their own property and you may qualify for government support in installing and operating them.

Heating costs increase by around 8% for every 10°C increase. Turning it down 20°C would save £140 on a £1,000 bill

For a company with a 5% profit margin over 3 years, a £500-a-year saving from energy efficiency makes the same profit as £30,000 of extra sales.
WHO ARE WE, WHY ARE WE DOING THIS, AND WHAT IS NET ZERO ANYWAY?

The Digital Connectivity Forum (DCF) is the UK Government’s advisory group on digital connectivity issues. Its members collaborate, source evidence, provide expertise and make recommendations to Government, regulators and industry, with the aim of developing policies which deliver seamless digital connectivity across the UK. The Digital Connectivity Forum’s sponsors span the entire telecoms industry – you can learn more about them here.

In 2023, the Digital Connectivity Forum formed their Climate & Sustainability Work Group (CSWG). This work group provides a platform for the facilitation of UK Telecoms collaboration, enabling the acceleration of individual and industry path(s) towards net zero through collaboration, evidence sourcing and providing expert recommendations to Government, regulators and the industry.

So, why are we doing this?
The science is clear – the role climate change, caused by human activity, has had on recent extreme weather events such as global heatwaves, is overwhelming.
We all have a part to play in keeping emissions to below 1.5 degrees compared to pre-industrial levels. The 6 million small and medium enterprises, who represent 99% of British businesses, have a critical role to play in reducing our collective carbon footprint.

What is net zero?
A “net-zero” target refers to reaching net-zero carbon emissions by a selected date.
The focus on any net zero target is on reducing emissions. Net zero refers to balancing the amount of emitted greenhouse gases with the equivalent emissions that are either offset or sequestered.

Want to learn more?
Visit our website here.
WITH THANKS TO OUR CONTRIBUTORS

This document has been published by the members of the Digital Connectivity Forum (DCF) and is aimed specifically to help small and medium enterprises within the telecoms sector.

Additional thanks to the SMEs involved:

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James Thomas is the CEO and Founder of JET Connectivity. He has held a number of senior engineering positions across the R&D and delivery functions with global businesses involved in technology, advanced manufacturing and engineering consultancies. With board reporting responsibilities in each he brings both technical, operational and leadership skills expertise to bear in developing innovation.

Camilla Karm, Redsquid
Camilla Karm is the Sales & Marketing Director at Redsquid, where she has contributed her expertise for four successful years. In addition to her role in driving the company's sales and marketing strategies, Camilla has been a dedicated steward of Redsquid's sustainability journey. Under her leadership, Redsquid achieved carbon neutrality in 2020 and is currently in the process of obtaining certification as a B Corporation, reflecting her commitment to both business success and environmental responsibility. Camilla is a visionary leader who combines her passion for sales and marketing with a deep commitment to sustainability, making a positive impact on both her organisation and the planet.

Mark Rushford, Finchetto
Mark is an experienced entrepreneurial executive director with a successful track record of founding and building deep tech products and businesses that solve globally-important sustainability problems. He has specific expertise in the field of photonics and photonic integrated circuits.

He co-founded Finchetto Ltd, a thought- and IP-leader in frequency-based photonic computing, and prior to that, SageTech Medical Equipment Ltd., building it from a single concept to a double-digit million valued MedTech company.