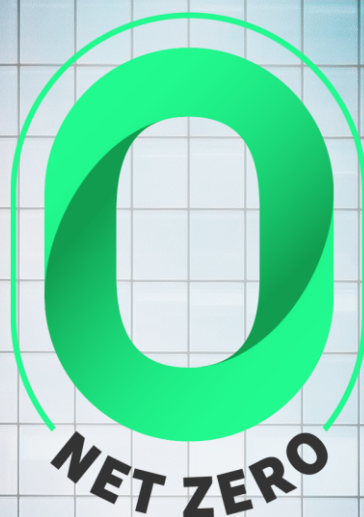


ACCOUNTANCY



CLIMATE ACTION PLAYBOOK

Introduction.

The UK Government has made a commitment to becoming Net Zero by 2050 at the latest¹. The accounting sector is part of the broader professional services industry and accounts for 8.5% of UK employment. It is essential that accountancy businesses engage with the challenge of measuring and reducing their carbon footprints, across their entire value chain.

Plenty of good work has been done previously on exploring action that can be taken to address key emissions sources within the value chain, but these have not been brought together before into a coherent and comprehensive guide.

This guidance document aims to do this and to document actions that you can take to help mitigate and reduce emissions simply, effectively and affordably. Reducing emissions can be challenging, so all recommendations in this guide are designed to be achievable. Accountancy businesses are also well known for being innovative, creative and ready to take on a challenge - this guide aims to provide the tools to allow these attributes to flourish.

The past year has been exceedingly challenging for businesses as we have fought to keep doors open through the Covid crisis and multiple lockdowns. This uncertainty has meant that addressing issues like carbon emission may have been put on the back burner. Similarly, many businesses have been hesitant to engage with net zero activities as solutions can seem complex and challenging.

However, the return to 'normal' business provides great opportunities to rethink the way we do business, to benefit our customers, the economy and the planet alike.

A renewed focus on efficiency is not only great for cutting emissions, but also improves the bottom line - by cutting core expenses you can increase profitability without increasing sales revenue. Win-win.

Likewise, building environmental criteria into supplier selection can bring new suppliers and products to your attention, while promoting low carbon staff travel can improve employee welfare.

The first step towards net zero success is working out how carbon intensive your accountancy business currently is. By calculating what your actual emissions are and where they are coming from, you will get a baseline understanding of where you are currently at compared to average levels in the UK.

From there, it is possible to implement mitigation strategies that target specific areas that need improvement. By understanding where we can improve the most, we can take actions that generate the most significant reductions.

This guidance document will help you to take simple and affordable steps to reduce your emissions, saving you money and helping you work towards becoming a Net Zero accountancy.

1. <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law>

Why should I care?

With all the time-sensitive challenges that come with operating an accountancy business, it is easy to understand how addressing Net Zero can get pushed down the list of work to be done.

Between balancing the budget, finding staff, staying on top of clients needs and the multitude of other administrative tasks, it is worth asking the question - why should I care about becoming Net Zero?

The UK Government has made it a goal - with the UK government making a strong commitment to Net Zero, they will be looking to every industry to do their part. That means that Accountancy practices will be required to reduce their emissions, either through support or through possible regulation that penalizes businesses for not doing enough. The Department for Business, Energy and Industrial Strategy (BEIS) have created a Net Zero SME working group that aims to raise awareness of Net Zero targets and encourage action ahead of COP26 in November.²

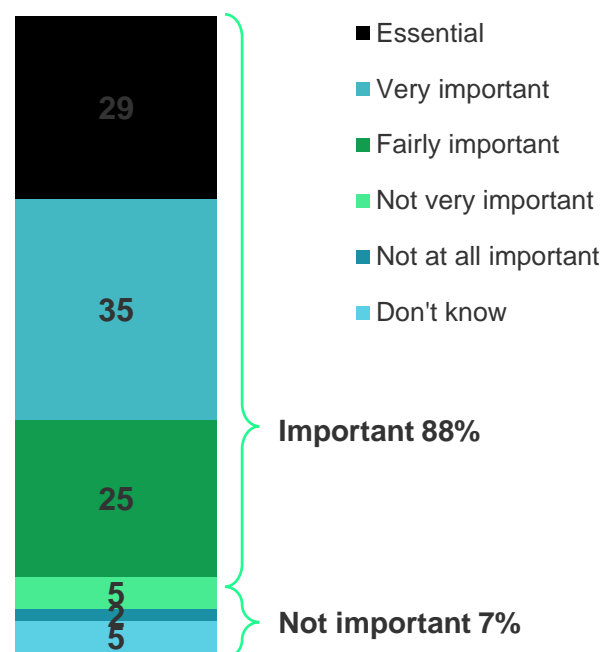
Similarly, the government has stated that they will be looking to help businesses not just survive through the COVID-19 pandemic, but also to be a central part in positive economic revival, bouncing back stronger and greener.³

Because it can improve your business - there is now a wealth of information, research and anecdotal evidence that has found that reducing your carbon footprint can save your business money. Between reducing your energy bill, getting more from

your equipment and appliances, and attracting new environmentally-conscious customers, working towards Net Zero can improve your bottom line while contributing positively.

Customers are demanding it - of people who have heard of Net Zero, 88% think that it is essential that the UK meet this target⁴. Younger generations in particular see reducing the impacts of climate change as a significant and important challenge, and see Net Zero as a key part of that strategy.⁵

How important is it for the UK to reach Net Zero by 2050?



Source: https://energysavingtrust.org.uk/wp-content/uploads/2021/05/Net-Zero-Consumer-Research_Energy-Saving-Trust.pdf

2. <https://www.ukhospitality.org.uk/page/sustainability/>

3. <https://www.foodmadegood.org/hospitality-central-to-helping-uk-reach-net-zero-targets-says-minister/>

4. <https://energysavingtrust.org.uk/what-do-your-customers-think-about-net-zero/>

5. https://energysavingtrust.org.uk/wp-content/uploads/2021/05/Net-Zero-Consumer-Research_Energy-Saving-Trust.pdf

Addressing the barriers.

While we know many businesses would like to become more energy efficient, there are a range of barriers to achieving your Net Zero goals. These include:

Financial - choosing where to invest your time and money is important. Without clear return on investment, investing in emission saving technologies and techniques can be difficult.

Time – Business owners and managers are often time poor. With so many moving parts to running a business, it can be challenging to find the time to research and implement emission saving strategies.

Lack of expertise – understanding how to reduce emissions and where to start can be complex and most people have not had any training in this area. While considering the environmental impact of business is becoming more mainstream, it is still not commonplace to receive formal or on-site education in this area.

Limited awareness - many businesses have not fully realised the importance of becoming Net Zero, and therefore have not sought to engage with the topic. With the plethora of details that business owners need to have awareness over, it is understandable that Net Zero has not been front and centre for many.

Doing enough - while many businesses do make positive steps towards sustainable practices, it is easy to overestimate the impact. For example, while recycling is admirable, it will not make a huge difference if other parts of the business are carbon intensive. It is easy to assume that doing

something small is enough, but in order for us to reach Net Zero we need to dig deeper and find bigger solutions.

Existing assets - the government wants the UK to become Net Zero by 2050, but 80% of the buildings that will be around in 2050 have already been built⁶. It does not make good economic or environmental sense to remove existing buildings in favour of more energy efficient ones, so we must seek to work to decarbonise what we currently have in place.

It is important to acknowledge and address these challenges head on, and that the solutions and strategies proposed take them into consideration. It is not helpful to propose an entire venue retrofit without considering the financial implications and deciding to scrap existing assets may cause more carbon emissions than save them.

As mentioned above, the next most important step after considering challenges is to understand how well your venue is doing with energy efficiency and identifying opportunities for improvement. All of that comes through measurement and calculation.

6. https://gb.gleeds.com/globalassets/news--media/publications/net-zero-hotels/gleeds_nzc-existing-hotels_final.pdf

Measuring for success.

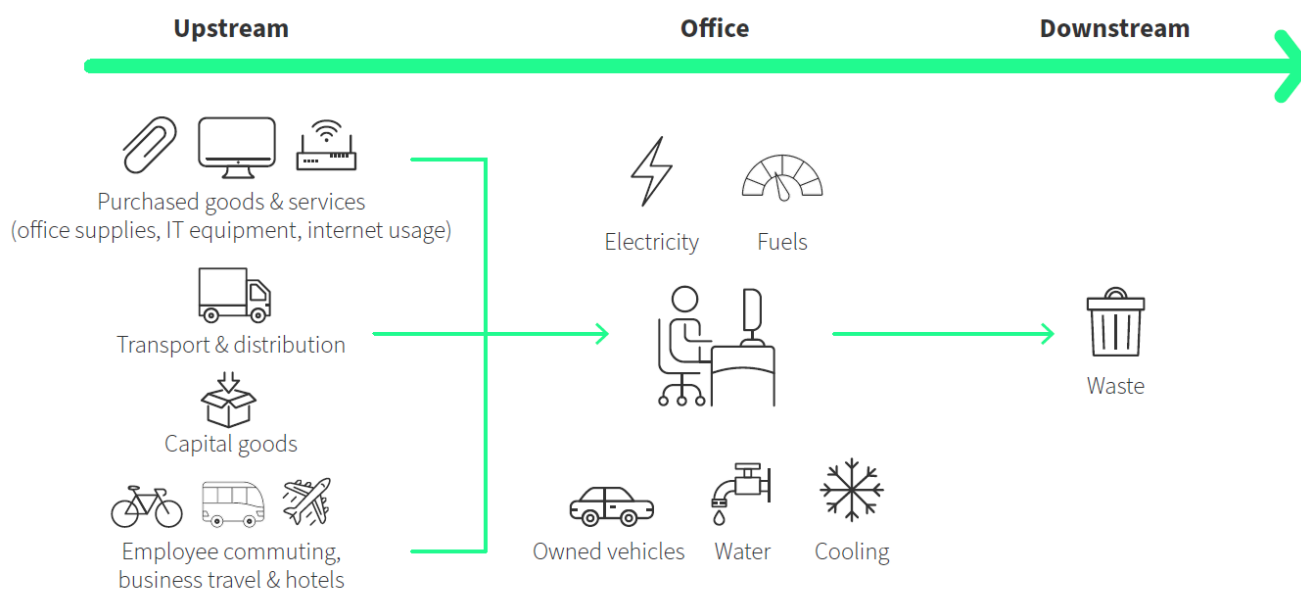
As experts in climate strategy, we recommend that reduction activities are evidence-based, using insights derived from robust and effective best practice measures.

Without a clear understanding of which parts of your businesses have the greatest climate impact, it is difficult to know where to focus attention or whether action you've already taken has been effective.

Calculating emissions can seem like a daunting task at first, but the team at Net Zero Now have created a practical tool to help you which can be found at www.netzero.org. When considering the emissions of your business, it is important to consider not just your on-site impact, but also upstream and downstream emissions. The diagram below demonstrates the different types of emissions a typical accountancy business might create.

It is only through effective measurement that a proper plan can be established, priorities identified, targets set and progress towards meeting them tracked.

Professional Services Emission Sources



Source: Net Zero Now, Net Zero Accountancy Protocol, 2022

Key recommendations.

This document will present practical actions for multiple themes relevant to business operations, but there are three high level recommendations that cut across all themes. The actions below are a great place to start to lay the foundation for an effective net zero strategy.

1. Start with data

It can be tempting to leap straight into taking action to reduce your emissions but in our experience, this often leads to short lived enthusiasm and confusion about whether the action taken has been effective.

The choice of reduction activities you take should always be evidence-based; using insights derived from robust and effective assessment of climate impact. This will provide a clear understanding of which parts of your businesses have the greatest climate impact, and where the greatest opportunities for reduction therefore exist.

Regular collection of data will also allow you to set reduction goals and track progress towards achieving them. This is essential to ensure action being taken is effective and to provide a sense of progress and achievement to the team.

2. Share enthusiasm and systematize processes

Employees take their cues from management and need to know that this is an important part of the business's values and a key focus area. By sharing your enthusiasm for addressing the climate challenge with all staff, you can empower them with the license to see their job through the climate lens.

Building climate impact considerations into everyday processes systematizes this approach. Your management team are the ones that will enforce policies and evidence shows that engaged and well trained management is essential for sustainability implementation. Providing on site training will see managers and senior staff engage more with Net Zero which will naturally trickle down to all staff. Providing information as part of all employee induction packs will ensure that everyone has the right tools to contribute and demonstrate your commitment to becoming Net Zero. Encouraging and rewarding staff by revealing their energy-saving achievements can also be an effective tool.

Key recommendations.

3. Maximise value

While some activities will improve efficiency and cut costs, there may be some investment required for others. Look out for government and council initiatives and discounts - the UK Government has made a commitment to become Net Zero by 2050 and there are a range of funding opportunities in planning that will help industries reduce their emissions. See for example this source [here](#). Getting funding for infrastructure like on-site solar can help offset initial costs, while saving your business money in the long term.

Leverage client engagement by communicating with them about your Net Zero initiatives - clients are being more carbon-savvy and are increasingly looking to work with companies that are acting sustainably. Although paper, for example, doesn't have significant carbon emissions, by offering Net Zero alternatives to clients, such as digital documents, they can see actions that are tangible and familiar, which can lead to more significant behaviour change in the future. When they see your business making efforts in these areas, they know that you are taking steps to reduce your carbon footprint. Small steps such as removing paper or encouraging a cycle to work scheme can have significant knock-on benefits through future behaviour change, which demonstrate your commitment to Net Zero.

Engage with the community and collaborate with other Net Zero businesses - by communicating with other accountancy businesses on the same sustainability journey, you can share ideas and trial solutions. It is very difficult for one single person or business to have all the answers, so collaborating with others is a fantastic way to get the best information and practices.



Guidance by theme.

This guide covers nine of the core operational themes of running an accountancy in the UK:

-  1. Building materials and fitouts
-  2. Heating and cooling
-  3. Lighting
-  4. Purchased goods and services
-  5. Capital Goods
-  6. Travel and Transportation
-  7. Electricity generation
-  8. Water
-  9. Waste and recycling

Across each of these themes, this guide will provide you with an overview of the theme and why it's important, practical actions that can be taken, and case studies of best practice in the industry.

All aspects, practical actions and case studies have been researched with barriers to implementing energy efficiency in mind. Our goal is to avoid lofty aspirational thinking, but instead to consider common barriers and provide sensible and achievable actions that can be taken by accountancy firms in the UK.

Guidance by theme.



1. Building materials and fitouts

What your building is made from has a significant impact on how energy efficient your venue is.

It is estimated that up to 60% of heat in a typical building is lost through walls, floors, roofs and windows⁷. This is particularly the case in the UK where a lot of businesses occupy older buildings that have poor building insulation, and little draught or damp proofing. Many older buildings have a high U-value, a measurement that describes how effective a material is as an insulator⁸. That means that buildings are not very well insulated and can become overly hot in the summer and cold in the winter, meaning more energy is required to create comfortable conditions for guests.

Investment in improving your building's use of energy and resources can not only help to reduce operating costs and improve comfort for staff and guests, but also increase the value of the building itself and make it more attractive to future investors.

Similarly, how you choose to fit out your office will have implications for carbon emissions. Selecting low carbon and reused furniture and building materials means less waste and contributes to the circular embedded carbon cycle.

Practical Actions:

- When building or remodelling, using materials that are already on site will reduce landfill and recapture embedded carbon. Similarly, adding insulation at fit-out is far more cost effective than retro-fitting
- Select furniture made from recycled or low carbon materials
- Another growing trend is to lease furniture instead of purchasing directly - this means that furniture is built to last and is less likely to end up in landfill. This 'product-as-a-service' model means that products are refurbished instead of thrown away.
- Choose building materials that are highly insulating - this will help lower energy costs and also create a more consistent and comfortable temperature range in your venue
- Swap your light bulbs to lower energy alternatives, such as LEDs.

Case Studies:

- Co working space, Second Home, offer companies and workers an eco-friendly building from which to work. The building uses 100% green energy and environmentally friendly materials throughout. To help reduce its carbon footprint further, it reuses old buildings wherever possible to avoid the need for new buildings. Each space contains thousands of plants to purify the office air⁹.
- Bloomberg's London HQ achieved an 'Outstanding' rating against the BREEM sustainability assessment method, with a 98.5% score. The building itself harvests rain water to reduce water consumption by 73% and a 35% saving in energy consumption. They have designed the building to utilize waste products, adapt to its occupancy as well as recycle heat and power. Their combined Heat & Power system is expected to save 500-750 tonnes of CO₂e alone¹⁰.

7. <https://www.yuenergy.co.uk/news/energy-saving-hospitality-business-guide#ventilation-%20air-conditioning>

8. <https://www.thenbs.com/knowledge/what-is-a-u-value-heat-loss-thermal-mass-and-online-calculators-explained>

9. <https://www.pilcher.london/news/sustainable-offices-in-london/>

10. <https://www.bloomberg.com/company/press/bloomberg-most-sustainable-office-building/>

Guidance by theme.



2. Heating and cooling

Heating and hot water systems are essential for every office building and can account for up to 40% of total energy costs.

Using electronic timer switches is a great way to have your heating and cooling systems switch on and off just when you need it.

Natural ventilation is free! When possible, open windows and doors at opposite ends of the office to allow fresh air into the space.

Ventilation systems work up to 25% more efficiently when they are cleaned and maintained regularly. The energy savings far outstrip the costs, so it is worth the regular investment - plus your equipment will last longer and will not need to be replaced as quickly.

Coolant gases used in air conditioning systems have a very powerful impact on the climate. 1kg of R134A, a common refrigerant gas in AC units, is 1,300 times more damaging to the climate than the same amount of carbon dioxide. Maintenance of systems can identify leaks early and avoid large scale topping up to replace lost gas.

Sometimes heating and cooling can work against each other - if the systems aren't connected you might inadvertently have them both on at the same time. One way to avoid this is to establish a 'dead band' where neither heating or cooling is on, for example when the temperature is between 18 - 22°C.

Technology improves quickly, so consider upgrading your system. The return on investment for many of these purchases can be as little as 12-24 months.

Check out the [heating, ventilation and cooling guide](#) from the Carbon Trust.

Practical Actions:

Air conditioning

- Review leaks and gas types - having a professional come to assess your air conditioning system for leaks and gas types can identify inefficiencies and help solve problems before they become serious.
- Look for more energy efficient systems when replacing units - low-carbon technologies are becoming more efficient and cost effective all the time so it is worth looking into the latest systems when needed.

Insulation and windows

- Carry out a heating assessment to see where energy efficiency opportunities lie - while it is good to have professional support, it is also easy to conduct a self-assessment to identify any drafts as these can increase the heating energy requirement by 10—20%
- You can have great heat pumps and gas boiler efficiency, but if the building is poorly insulated then all that heat, money and emissions are literally flying out the window.

Gas boiler efficiency

- Keeping boiler pipes cleaned and insulated is a great way to ensure the system is running efficiently. Well serviced boilers can reduce your operating costs by up to 5% per year and there's less chance of it breaking down and disrupting service.

Heat pumps

- Heat pumps can be a more efficient form of heating than gas boilers and they can also be safer than LPG gas boiler systems, which require more safety measures in place to protect from incidents.
- Heat pumps can be integrated into existing hot water systems seamlessly.

Guidance by theme.



3. Lighting

Lighting is an important aspect of any office as it establishes the look and feel of your company and makes a comfortable space for employees.

LED lights are the most cost effective and energy efficient light bulbs on the market, making them a great option for office spaces. LED lights now come in a range of options, including filament bulbs, so you can still create great lighting in your office.

The Carbon Trust has created an extensive guide for lighting efficiency that can be found [here](https://www.carbontrust.com/resources/lighting-overview-guide). The guide demonstrates that LED lighting has a vastly longer life than other lighting alternatives, and a higher efficacy rate which describes the ratio of light emitted to power it consumes.

	Lamp Life	Colour Temperature	Colour Rendering	Efficacy
Standard Incandescent	2,000 - 3,000 Hours	2,500 - 3,000K	100 Ra	5 - 20 lm/W
Tungsten Halogen	2,000 Hours	3,200K	100 Ra	15 - 24 lm/W
Tubular Fluorescent	10,000 - 12,000 Hours	2,700 - 6,500K	>85 Ra	60 - 105 lm/W
Compact Fluorescent	6,000 - 15,000 Hours	2,700 - 4,000K	> 85 Ra	45 - 80 lm/W
High pressure sodium	12,000 - 30,000 Hours	2,000 - 2,700K	25 - 85 Ra	25 - 85 lm/W
Metal Halide	6,000 - 20,000 Hours	3,000 - 6,000K	65 - 93 Ra	50 - 113 lm/W
LED	25,000 - 75,000+ Hours	2,700 - 8,000K	65 - 97 Ra	70 - 150+ lm/W

Source: <https://www.carbontrust.com/resources/lighting-overview-guide>

Practical Actions:

- The first and simplest way to reduce lighting costs and emissions is to establish a 'lights off' policy for your staff to follow. If lights don't need to be on at certain times of the day, for example during the middle of the day. Of course, an office must always consider health and safety so it is important to keep emergency exit lights and high-risk areas such as staircases well lit for both staff and guests.
- Switching light bulbs to LED lights is a great way to reduce your carbon emissions and energy bills. Research has found that LED lights are 80% more efficient and last much longer than incandescent bulbs.
- Security lights are designed to provide a lot of light and can be very high energy consumers: A single 500W halogen light used for 6 hours per night will produce around 1/3 ton of CO₂e per year and cost over £100 in electricity. An LED light of equivalent brightness would cost £10 to run and produce 30kg of CO₂e.
- Putting lighting on a motion-sensor in places like bathrooms is a great way to ensure lights are only on when being used. This won't work in all spaces, as you wouldn't want a flickering light to distract from customer experience, but makes sense for places like bathrooms, storerooms or conference rooms.

Guidance by theme.



3. Lighting

Case Studies:

The Carbon Trust worked with a Leisure / Charity Centre to improve their lighting systems¹². The Centre is now set up to save £2,818 every year in energy savings alone. See the project summary below:

Lighting Project Summary

Existing system consisted of 134 fluorescent light fittings (T8, halogen, 2D) with no automated control

Best Proposal Summary

- Total Project Cost: £11,487
- Capital Contribution: £1,723
- Energy Savings: £2,818 p.a.
- Project Payback: 4.1 years
- Project Payback with capital contribution: 3.5

11. Source: <https://www.carbontrust.com/resources/hospitality-sector-energy-saving-guide>



Guidance by theme.



4. Purchased goods and services

The way we purchase goods and services can have a significant impact on our total emissions. Between Office supplies, internet usage, printing, furniture and cleaning products, there are lots of opportunities to work towards Net Zero.

Office Furniture

The furniture you use, and how it is produced, will impact the greenhouse gas emissions for which your office is responsible for. The FIRA report from 2011 highlighted that the production of many common office furnishings result in a sizable amount of CO₂e being produced.

If your office is going through a refurbishment, then buying just 10 desk chairs and a sofa is equivalent to releasing almost 1 tonne of CO₂e. On top of this are the emissions from the furniture being replaced if it is going to landfill or being incinerated. As they breakdown, the stored CO₂e in the materials is released into the atmosphere.

Around 8.5 millions tons of office furniture and tech gets dumped into landfills each year. A lot of this will end up overseas and pollute landfills, the ocean and leak toxic chemicals like lead, mercury and cadmium. Furthermore, it is a waste of valuable materials that could have been recycled¹².

Item	Estimated Average Carbon Footprint (kgCO ₂ e)	Equivalent Gallons of Gasoline Consumed (1kg = 0.133 Gallons)	Equivalent Miles Driven by an Average Passenger Vehicle (1kg = 2.4 Miles)
	90	10.1	220.0
	88	9.9	215.0
	72	8.1	176.0
	48	5.4	117.0
	43	4.8	105.0
	35	3.9	85.6
	31	3.5	75.8
	27	3.0	66.0
	25	2.8	61.1
	18	2.0	44.0
	17	1.9	41.6

<http://www.healthyworkstations.com/resources/Environment/FIRA-Carbon-Footprint.pdf>

Practical Actions:

Furniture

- Consider buying your furniture from an environmentally friendly supplier. If your furniture contains parts that can't be recycled this will be damaging in the long run.
- Have a plan for how you are going to dispose of your furniture in a way that avoids landfill.
- Think about leasing your office furniture, rather than buying. By leasing the furniture, you do not need to worry about maintenance or end of life costs. It is in the best interest of the leasing company to keep the furniture in good condition, meaning it will be used for longer and properly cared for.

12. <https://www.forbes.com/sites/kyocera/2018/11/29/how-to-make-your-office-equipment-procurement-greener/>

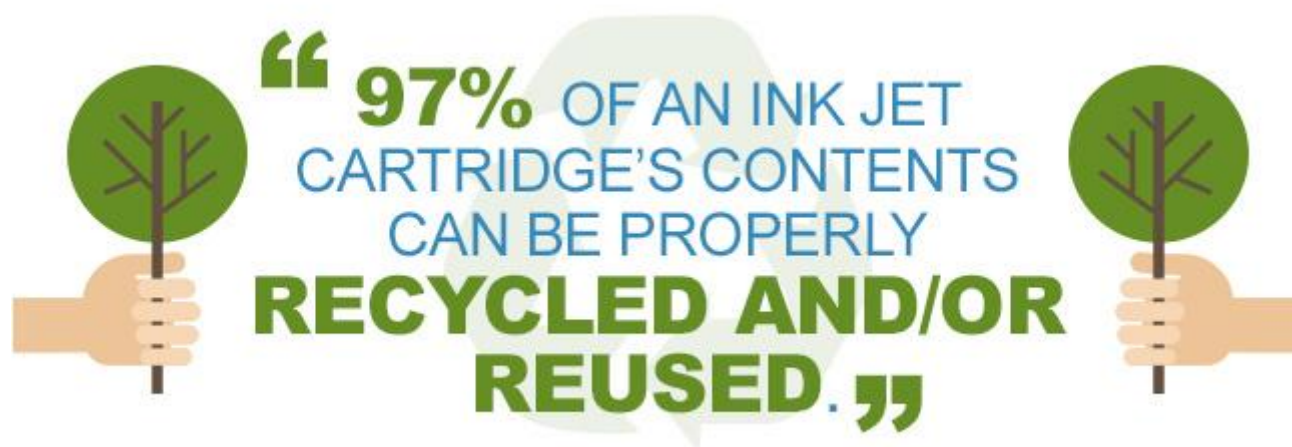
Guidance by theme.



4. Purchased goods and services

Printing

In the UK alone, 45 million non-biodegradable ink cartridges are thrown away each year. Some of the materials can take up to 1,000 years to fully decompose and the residual ink and other chemicals slowly leak into the soil and pollute the environment¹³.



Source: <http://blog.inkjetsuperstore.com/2017/06/environmental-benefits-recycling-ink-cartridges/>

Practical Actions:

Printing

- Recycle your ink cartridges. Recycling these cartridges can help create a more sustainable planet by recovering materials. The ink cartridges can either be re-filled and then used again, a process which reduces the environmental impact of an ink cartridge by 46%.
- A lot of printer providers have schemes that monitor how much you print and can provide replacement cartridges as and when they are needed. This helps to avoid unnecessary purchases. They will also collect your used cartridges so they can be recycled. Talk to your provider today and see what can be done.
- Even if the recycled cartridges are not refilled, the materials can be recycled and used in a multitude of other products.

13. <https://www.cashforcartridges.co.uk/news-category/the-impact-of-ink-cartridges-on-the-environment>

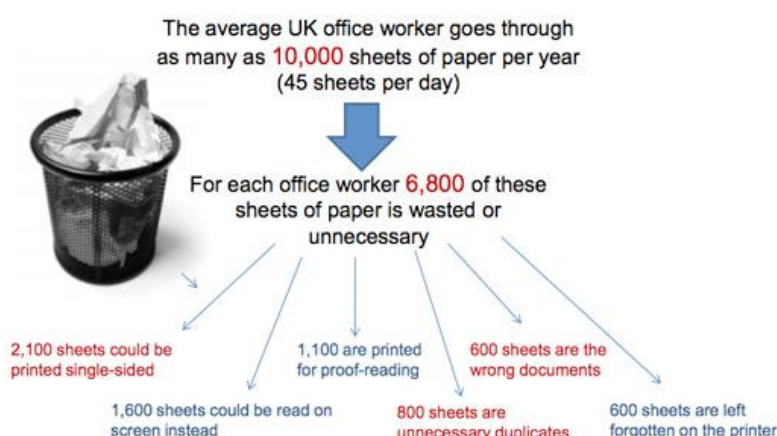
Guidance by theme.



4. Purchased goods and services

Office Supplies - Paper

Every year, the average office worker uses 10,000 sheets of copy paper. The shocking truth is that about two-thirds of that ends up wasted¹⁴. There are many reasons for this; printing emails unnecessarily, printing duplicates, leaving documents in the tray, etc.



Considering it takes around 5 litres of water to produce just one sheet of A4 paper, this means each employee is using around 50,000 litres of water per year on office paper. A small company of just 10 employees could be responsible for an additional half a million litres of water being used just to make paper, every year¹⁵.

Source: <https://www.greenbiz.com/article/uk-office-workers-addicted-paper>

Practical Actions:

Paper

- Go Digital! Promote digital tools to your employees, instead of using paper. This may be for simple day to day activities, such as note taking, through to emailing documents to clients, rather than printing them and sending in the post.
- Recycle your used paper. This may not reduce your usage, but at least the paper itself is being reused, rather than end up in landfill.
- Introduce printing quotas to ensure employees 'Think before they print'. If two-thirds of paper is wasted then this is a great way to reduce waste and paper costs in your office.

Case Study:

Citigroup determined that if each employee used double-sided copying to conserve just one sheet of paper each week, the firm would save around \$860,000 each year¹⁶.

14. <https://www.restore.co.uk/Digital/Insights/Blogs/paperless-office-paper-waste-statistics-for-the-average-uk-office>

15. <https://geerings.co.uk/blog/the-real-figures-of-paper-usage-in-the-uk/>

16. http://www.responsiblepurchasing.org/UserFiles/File/Paper/EDFandCitigroup_CopyThis_2004.pdf

Guidance by theme.



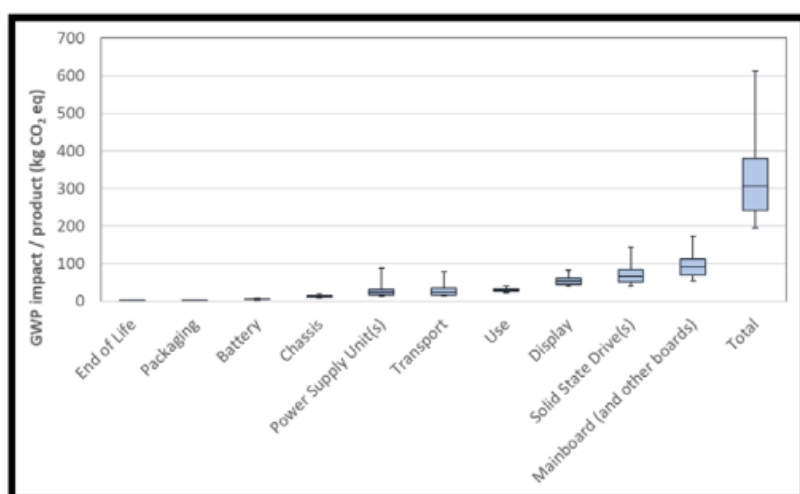
5. Capital Goods

Offices are typically full of electrical equipment, whether it's computers, monitors, TVs or printers, each of these can have a substantial carbon footprint.

Laptops

Making a laptop is an energy intensive process, both from the materials used and manufacturing the laptop itself. China manufactures nearly 70% of global laptops, with the materials that go into them being mined all over the world; cobalt from Congo, Silver from Peru, the list goes on. The mining process itself for precious metals is highly intensive itself, often resulting in huge amounts of land being cleared, which releases CO₂¹⁷.

GHG emissions [kg CO₂ eq]



The amount of CO₂e produced while manufacturing a laptop varies depending on its size, materials, etc. However, most sources agree that over 200kg CO₂e is produced to make a single laptop. The graph on the left was created by HP and demonstrates the emission sources throughout a laptop's lifecycle.

Source:
https://h22235.www2.hp.com/hpinfo/globalcitizenship/environment/productdata/Countries/_MultiCountry/productcarbonfootprint_notebo_20191028224718949.pdf

Practical Actions:

Laptops

- Buying refurbished laptops is a great idea as they are often less expensive, customisable, come with the latest software, tested extensively and come with a warranty. Not only this but they massively benefit the environment when compared to buying new as it reduces the production impact, prevents the laptop potentially going to landfill and leaking toxins and decreases demand for new parts¹⁸.
- Like above, you could decide to lease your laptops from a 3rd party. This will reduce your upfront costs and move all maintenance and replacement requirements on to your provider.
- If you do decide to purchase your own laptops, then ensure they are disposed of correctly at the end of their life. Either through proper recycling channels or even allowing them to be remanufactured and used again.

17. <https://www.cashforcartridges.co.uk/news-category/the-impact-of-ink-cartridges-on-the-environment>

18. <https://www.recompute.com.au/blog/top-5-environmental-benefits-of-buying-refurbished-computers/>

Guidance by theme.



6. Transportation

In the UK, transportation is the biggest contributor of carbon emissions, accounting for up to 34%¹⁹. Thinking through what transportation is associated with your business can help reduce upstream and downstream emissions.

One thing to consider is how employees are getting to and from work. Driving cars to work is the largest contributor. In places like London it is much easier to get around via public transport, but in more regional areas it may be more difficult to find practical solutions.

Another key area is business travel. Business Travel represents a shocking 2% of annual greenhouse gas emissions each year²⁰. 90% of which comes from business flights²¹. It is estimated that the pandemic prompted a 75% drop in aviation emissions at the peak of lockdown. The challenge now will be ensuring that the return to 'Business-as-usual' doesn't mean a surge in emissions from business travel.

Practical Actions:

Employees & Clients

- Encourage active transport from your staff with ride to work schemes, bike storage, lockers on site. This can be as simple as providing safe places out of the weather for employees to store their bikes, all the way up to providing shower facilities.
- Consider setting up the Ride to Work scheme for your employees. This scheme can save your employees between 29-35% savings on new bikes, including electric bikes - see the scheme here: www.cyclescheme.co.uk.
- Use virtual conferencing technology to increase virtual meetings. If the pandemic has shown us anything, it's that businesses can operate with reduced business travel.

Case Studies:

Around 180,000 people a year participate in the cycle to work scheme. The scheme has many benefits, including:

- Cost savings – Rising fuel prices, public transport costs and charges for parking cars makes commuting by bike very attractive.
- The Cycle to Work Alliance's report found that scheme users save 133,442 tonnes of CO₂e a year!²²
- Cycling to work can help your staff become healthier and can even improve their mood.²³

Mars has challenged themselves to cut business travel by at least 50% compared to 2019 levels. For meetings, Mars says they "must be purposeful" in the future and find "a sustainable balance between" collaboration in meetings – whether face-to-face or virtual – with time for focus. This could reduce Mars's airmiles by about 144 million, according to the Times²⁴.

19. <https://travel.zeelo.co/9-ways-to-reduce-your-workplace-carbon-footprint/>

20. <https://www.fastcompany.com/90632762/its-time-to-reassess-the-role-of-business-travel-in-global-warming>

21. <https://www.reuters.com/business/aerospace-defense/corporate-business-travel-carbon-budgets-loom-airlines-2021-10-10/>

22. <https://employeebenefits.co.uk/issues/april-2012-online/top-10-reasons-to-introduce-a-bikes-for-work-scheme/>

23. <https://www.northsomersettimes.co.uk/news/clevedon-pub-owner-delivers-beer-bike-7811446>

24. <https://corporatetravelcommunity.com/analysis/flying-for-purpose-rather-than-presence--confectionary-giant-mars-highlights-how-appetite-for-busine-587124>

Guidance by theme.



7. Electricity generation

Once again considering upstream impacts, the way in which electricity is generated will make a large difference to your businesses carbon footprint.

Using renewable energy is becoming more widespread and it is estimated that around 1 in 3 businesses now produce some of their own electricity on site²⁵. One of the main reasons for this is down to the ever-increasing cost of energy, with business leaders looking for ways to take back some control.

Practical Actions:

- Switch to a supplier that offers electricity generated from renewable sources like solar, wind or hydro. Opus Energy currently provides 355,000 businesses in the UK with renewable energy.
- Consider options for onsite energy generation through solar PV, solar hot water, wind, or geothermal - buy investing in renewable energy infrastructure, it can mean more stable cost of supply, lower operating costs and even create the opportunity to sell energy back to the grid²⁶

Case Studies:

Amazon

As part of Amazons commitment to reach Net Zero by 2040, they are on track to power their entire operations with 100% renewable energy by 2025. This is 5 years ahead of their original 2030 target.

In 2020 they became the world's largest corporate purchaser of renewable energy and are currently powering 65% of their business through renewable energy.

Amazon's current renewable energy projects generate 12,000 MW of electricity around the globe.

In 2024 Amazon's largest renewable project, a wind farm in the Netherlands, will have a 380 MW capacity and power their entire European operation.²⁷

25. <https://www.alphr.com/energy/1010075/third-of-uk-businesses-generating-renewable-energy/>

26. <https://www.gov.uk/government/publications/smart-export-guarantee-seg-earn-money-for-exporting-the-renewable-electricity-you-have-generated>

27. <https://sustainability.aboutamazon.com/environment/sustainable-operations/renewable-energy?energyType=true>

Guidance by theme.



8. Water

Although water is not often associated with carbon, the way water is used and served can have vast implications for emissions.

The first thing to understand is that even tap water has embedded carbon. Waste-water treatment facilities use large amounts of energy to provide clean drinking water to the UK. Luckily, the water industry in the UK is one of the most progressive for carbon reduction targets and has made a commitment to become Net Zero by 2030²⁸. The water industry has already taken significant steps and reduced their emissions by 43% since 2011.

Hot water is also important aspect as it is essential to maintaining health and safety. However, excessive heating of hot water can be wasteful and can cause burning injuries. The ideal temperature to set hot water is 60oC, hot enough to kill Legionella bacteria, but not so hot that it is wasting energy²⁹. Setting the correct temperature for hot water is a great and simple way to reduce electricity costs. Similarly, using spray taps and water efficient fixtures can help reduce the total amount of water being used, without reducing the effectiveness.

Practical Actions:

- Understand where water is used and set reduction targets - leaks and dripping taps are common and can cause unnecessary water use and costs. A single one-drip / second leak will cost £20 per year in water costs.
- Urinals/toilets - consider installing waterless urinals and low flush toilets to save on water and carbon emissions.
- Use filtered water systems instead of purchasing bottled water - filtered water and sparkling water systems are not commonplace in hospitality businesses. These can completely replace the need for bottled water in your business, saving the carbon embedded in the bottle, delivery and refrigeration needs.

Case Study :

In 2019, the worlds largest independent Coca-Cola bottler, Coca-Cola Europacific Partners (CCEP)'s GLACEAU Smartwater became the first bottled water range in Great Britain with bottles made from 100% recycled plastic (rPET). The brand is also made using 100% renewable energy at CCEP's site in Morpeth, Northumberland, helping the business to significantly reduce its carbon footprint.

In addition to this, water stewardship is key to CCEP's efforts to mitigate the environmental impact of its production processes. The business is working in partnership with The Rivers Trust to increase understanding of the local freshwater environments tied to its manufacturing sites, as it works to protect local water sources and replenish 100% of the water it uses in areas of water stress. Last year, in partnership with The Coca-Cola Company, CCEP replenished 275% of the water used in areas of water scarcity near its sites and continued to manage 15 community-based water replenishment projects in Western Europe.³⁰

28. <https://www.water.org.uk/news-item/water-industry-plans-to-reach-net-zero-carbon-by-2030/>

29. <https://www.greeneatz.com/1/post/2014/03/foods-water-footprint.html>

30. <https://www.cocacolaep.com/media/news/2021/2020-stakeholder-report/>

Guidance by theme.



9. Waste Prevention and Recycling

Office waste is one of the most significant contributors to emission as it can end up in landfill, release gasses and harmful chemical toxins.

The UK commercial and industrial sectors generated 43.9 million tonnes of waste in 2018, approximately 19% of the UK's total waste³¹. Of this approximately 50% is recycled and recovered, which means that 20 million tonnes of office waste still ends up in land fill, the ocean or incinerated.



Source: <https://www.roadrunnerwm.com/blog/office-worker-waste-generation>

There are more and more innovations in creating circular systems, where products are not simply put into landfill, but are instead inserted back into the system and have great ongoing value. For example, as mentioned previously, refilling ink cartridges or refurbishing computers and furniture.

Practical Actions:

- Depending on the size of your business you may want to consider moving to a dedicated waste collection service. The service will ensure all your waste is collected but often they will provide the various bins you will need. A more efficient waste management system will often save you money in the process as well as set a better example for your employees, customers or clients.
- Some simple things you can do are; purchase in bulk where possible, have clear recycling policies, provide purified drinking water and promote reusable drinking bottles, move to more eco-friendly suppliers.

31. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002246/UK_stats_on_waste_statistical_notice_July2021_accessible_FINAL.pdf

Conclusion.

While becoming Net Zero may seem like a daunting task at first, it is in fact a four-step process of Calculate, Mitigate, Compensate, Communicate.

This document has provided a range of practical actions that can help with the **Mitigate** part of your journey, simple and affordable steps that you can take to help reduce your emissions.

By digging down into each of the themes described above, you will be able to identify exactly what parts of your business are carbon intensive and take action.

The case studies in this document demonstrate that many other businesses of various sizes have already started taking action to become Net Zero. It is our hope that these examples will inspire others to start or continue on their journey to reduce their emissions.

This document has covered many topics and provided signposts and links to a range of excellent resources available online to help support you further in your Net Zero journey and we will update this resource as more information and case studies become available.