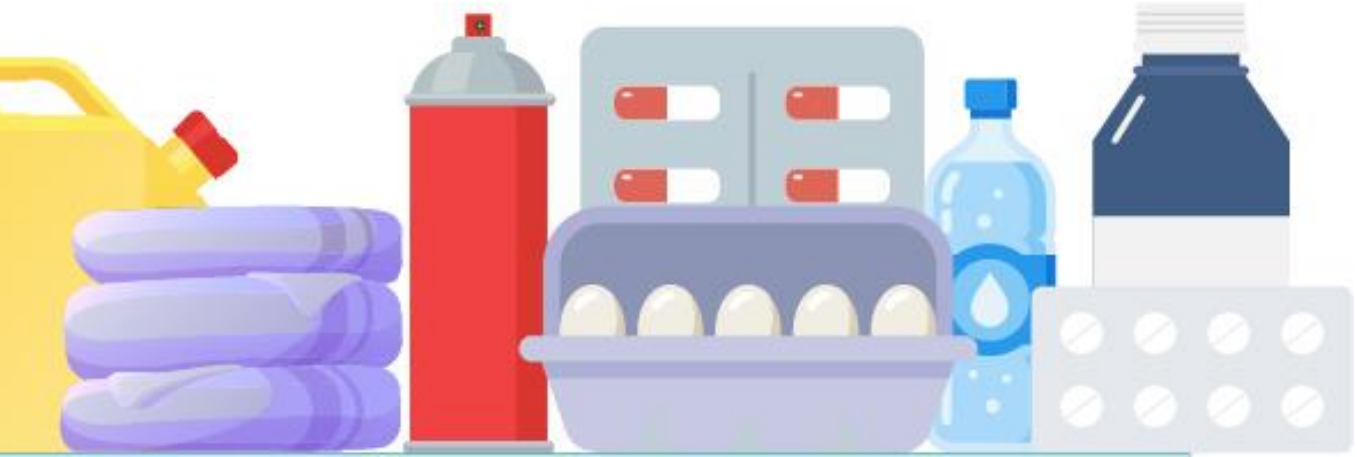
NHS
North East and North Cumbria

Decarbonising general practice

Darlington, Stockton on Tees, Middlesbrough, Hartlepool, Redcar, Cleveland

Your guide to a net-zero action plan for non-clinical emissions

Goods and services



Introduction

To achieve net-zero carbon emissions means decarbonising both clinical and non-clinical carbon. This guide covers non-clinical carbon for general practice.

Warning – do not read from cover to cover!

The guide is designed to be picked up; read the section you want to act on and put in place one key action today. Then find another action tomorrow...

- Over time, the number of actions taken will build.
- Make the actions part of a bigger practice wide strategy - they can be ticked off cumulatively.

You are in great company. Other GP practices are:

- becoming carbon literate;
- having their carbon footprint measured;
- already greening their estates;
- increasingly designing green action plans for their own practice;
- signing up to become active practices or already designing active travel plans.

The Green Impact for Health toolkit – a sustainability accreditation scheme for GP practices – has over 1,000 practices taking part. This means more than 15% of all GP practices are using the toolkit!

We can do this!

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Going net-zero

Let’s join the healthcare net-zero movement and decarbonise primary care

Along with the UK government and other businesses and organisations, the NHS in the UK has been proactive in implementing sustainability in healthcare by setting targets and developing the ‘Delivering a Net Zero NHS’ published in Oct 2020. Wales has a decarbonisation plan, Scotland is process of developing a plan, NI has yet to endorse their targets.

The carbon footprint of the health service is notoriously large – the NHS produces 5.4% of the UK’s greenhouse gas emissions. The NHS is also responsible for 3.5% of all road travel in England, producing significant air pollution.

This means all aspects of the NHS are required to take action and this guide is designed to make it easy for you to start taking action on your non-clinical carbon impacts with the target of reducing your impacts by 2045. Although the Greener NHS has a 2045 ambition, the quicker we can reduce our emissions, the greater chance to limit any climate change catastrophe, so aiming for a more ambitious 2025 or 2030 target is ideal!

In each section this guide highlights:

- The quick and easy wins and longer-term changes
- How to take action
- How to monitor and measure your improvements

Dr Matthew Sawyer,
GP and founder of SEE Sustainability

CO_2 The NHS contributes to 5.4% of the UK’s carbon emissions.

*The NHS has committed to decarbonising by 2045, however, to prevent the worst impacts of the climate crisis, we should be aiming to decarbonise as rapidly as achievable - by 2025 if possible - and not delay starting to take action.

What could a net-zero practice in 2030 look like?

Imagine your practice with low or no energy bills, fewer asthma patients, healthy staff members who cycle to work daily...

This may sound like a big ask for your organisation, but practices around the country are already taking steps by:

- Reducing their energy use
- Having travel initiatives for staff and patients alike
- Setting up 'green teams' to encourage and inspire behaviour change
- Working with suppliers to look for low carbon and environmentally responsible options

This guide will support you on your journey to make a net-zero practice by 2030 less of a dream and more of a reality.

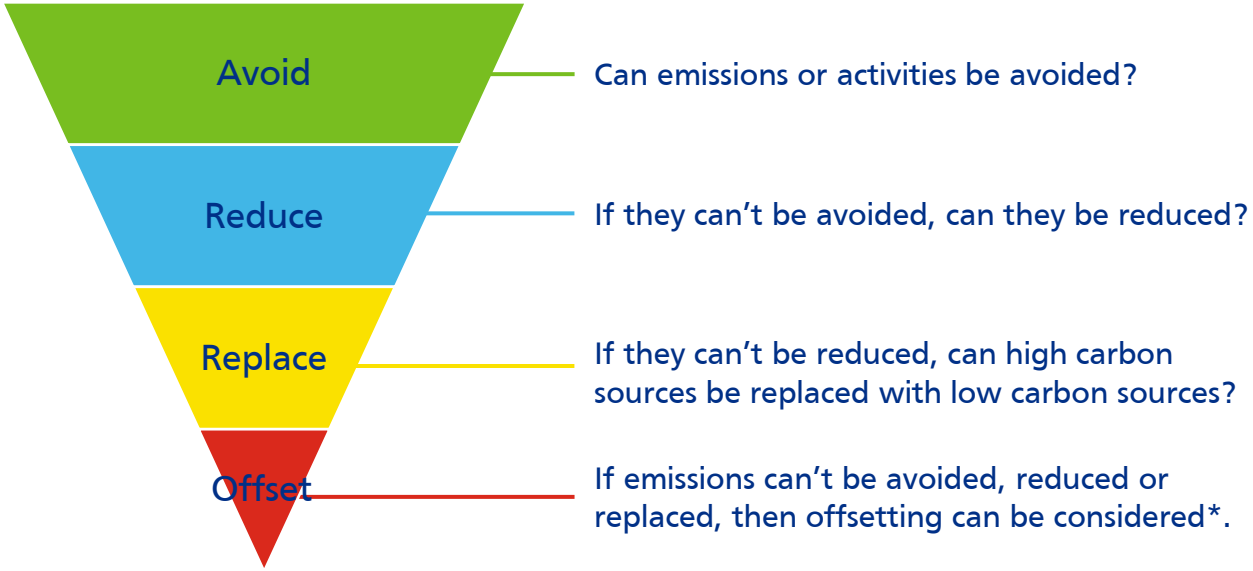
125,000 lives
could be saved each year by 2040 by meeting the minimum climate emissions, according to a study by the Lancet*.

*Source: The public health implications of the Paris Agreement: a modelling study, The Lancet, February 2021, www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30249-7/fulltext#seccestitle10

What does net zero mean?

Along with the UK government and other businesses and organisations, the NHS has committed to be net-zero by 2045 and decarbonise its direct emissions from its operation by 80% by 2028-2032. The NENC ICS 2030 vision to be the greenest region in England

Working to net-zero means measuring and reducing as many emissions as possible with offsetting being the last resort. Using a carbon-reduction hierarchy can help:



*Offsetting is controversial and should not be relied upon in a carbon reduction strategy.

GLOSSARY

- Carbon footprint

The total amount of greenhouse gas emissions released into the atmosphere that is produced directly or indirectly by human activities. The standard unit of measurement for carbon footprints is carbon dioxide equivalents (CO_2e).

- Net-zero

A "net-zero" target refers to reaching net-zero carbon emissions by a selected date where carbon emissions are balanced with those being absorbed.

- Zero emissions

Zero emissions are when no carbon is emitted resulting in no net release of carbon dioxide into the atmosphere.

- Carbon negative

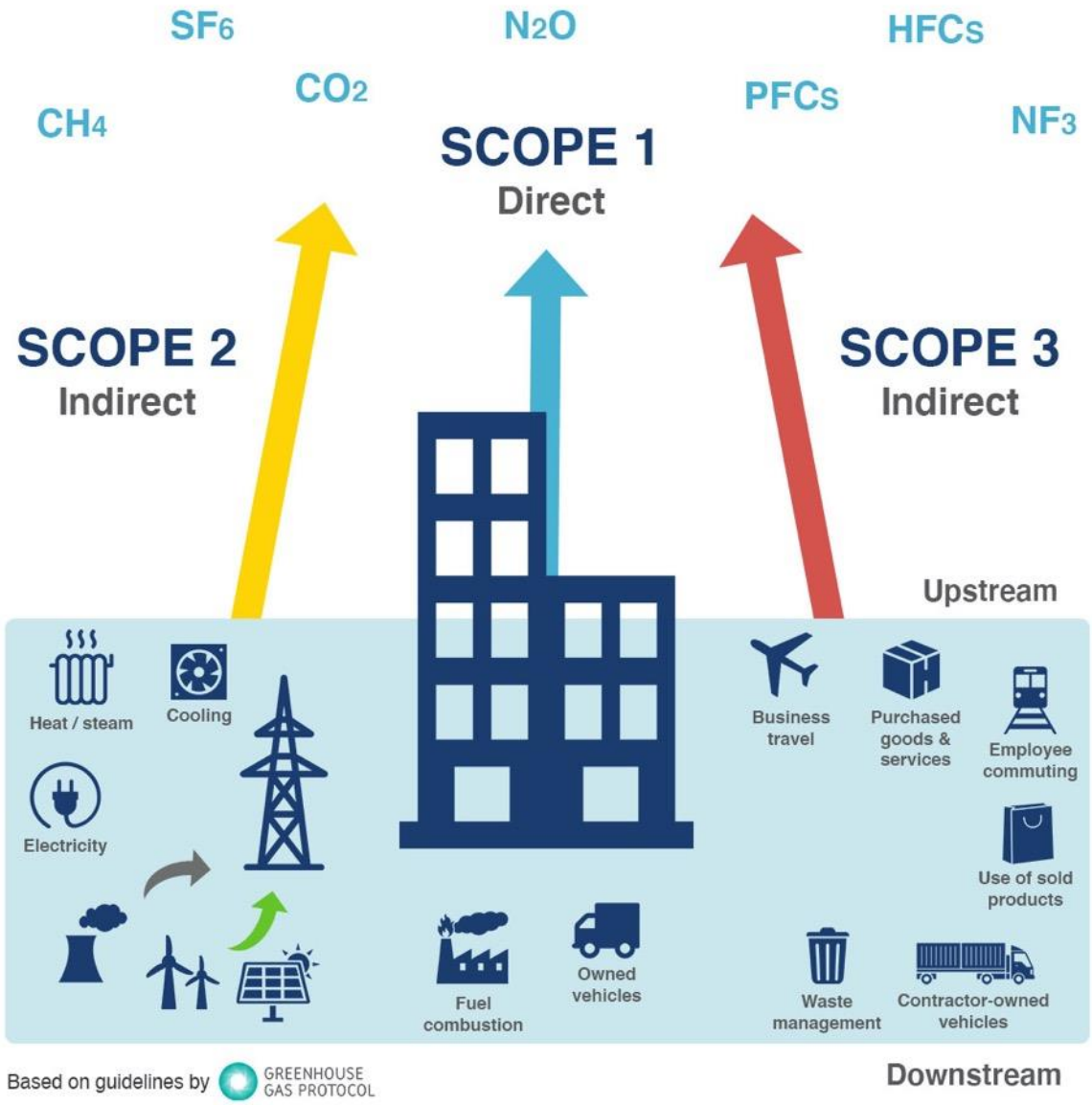
The reduction of an entity's carbon footprint to less than neutral, so that the entity has a net effect of removing carbon dioxide from the atmosphere rather than adding it.

What are scopes 1, 2 and 3?

Carbon emissions can be grouped into categories depending on where they arise and where they are used by a business.

The Greenhouse Gas Protocol has categorised emissions in the following way:

- Scope 1 – direct emissions created by an organisation through fuel combustion and owned vehicles. For primary care, the scope 1 emissions relate to heating and cooling of buildings and any practice owned vehicles.
- Scope 2 – indirect emissions from electricity and energy production.
- Scope 3 – all the indirect emissions from suppliers, purchases, transport. For a practice, this includes medicines and chemicals (the biggest impact for primary care), medical and office equipment and consumables plus staff and patient travel and all the services we use to run our practices.



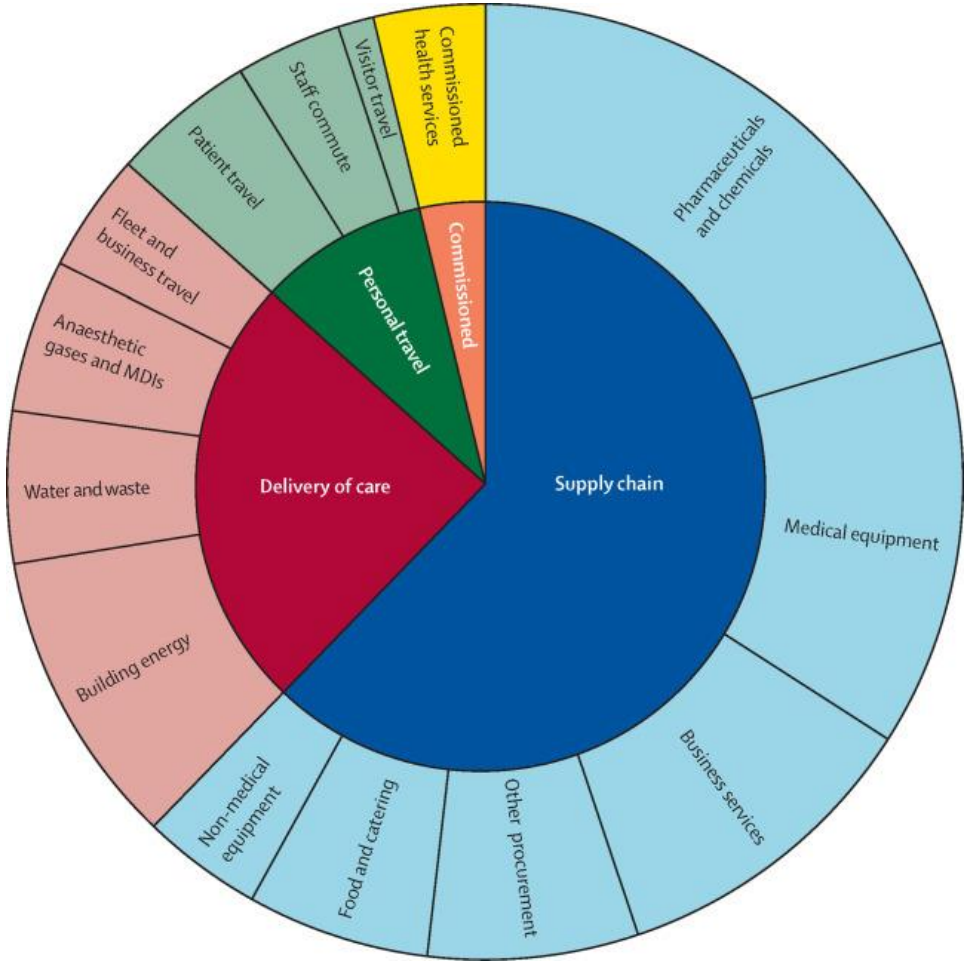
The biggest carbon impacts from healthcare

Healthcare has an environmental impact and generates carbon emissions.

In 2020, the Lancet* calculated the whole of the NHS generated 25 megatons of CO_2e, with primary care being responsible for nearly 25% of the emissions.

Globally, the healthcare sector causes a substantial share of the world's emissions of greenhouse gases and air pollutants:

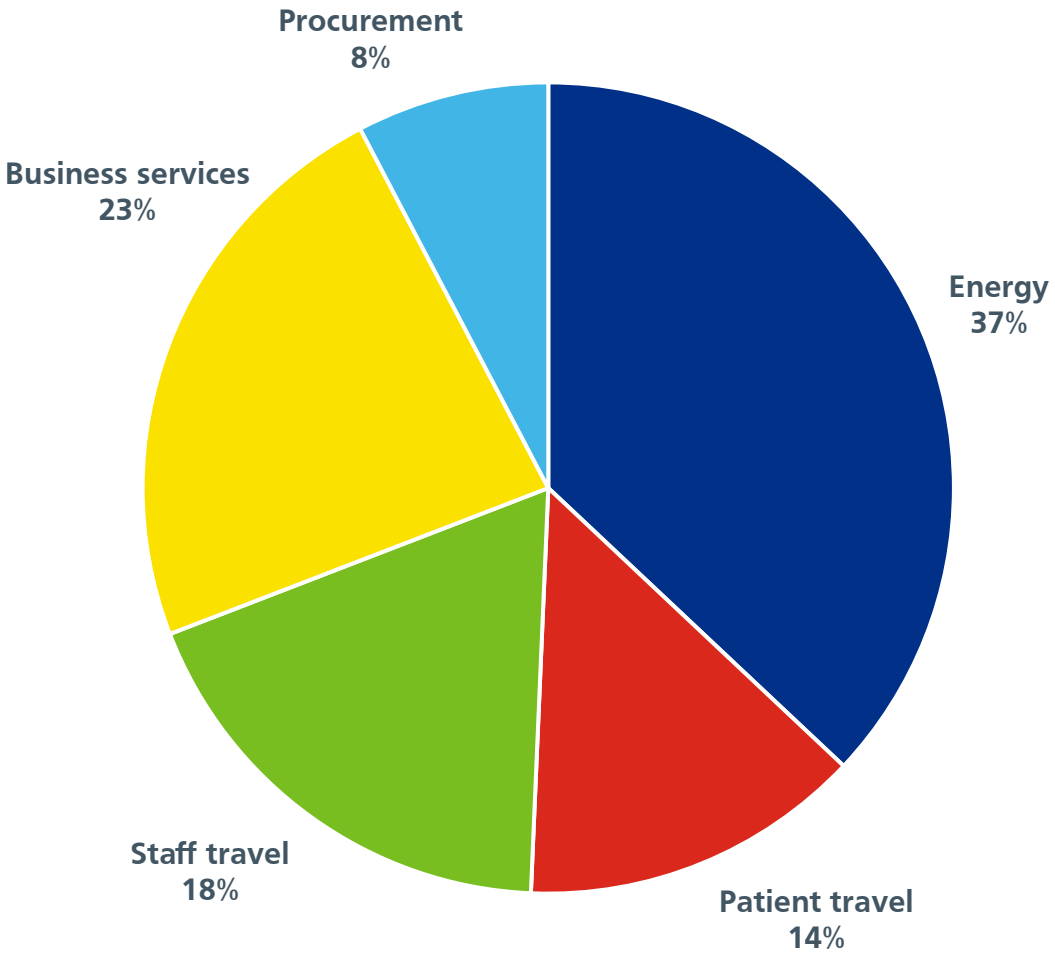
- 4.4% of greenhouse gases
- 2.8% of harmful particulate matter (air particles)
- 3.4% of nitrogen oxides
- 3.6% of sulphur dioxide



Contribution of different sectors to the greenhouse gas emissions of the NHS England, 2019**

*Source: www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30121-2/fulltext

**Source: www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30271-0/fulltext



Non-clinical emission hotspots from primary care

In primary care:

- 40% of the emission footprint is due to non-clinical carbon from the running of the practice including energy use, transport of staff and patients, business services and procurement.

- 60% is due to pharmaceuticals and chemicals and gases from inhalers.

The hotspots in primary care for non-clinical carbon emissions depend on the practice list size, location, building type and services provided.

The major emission hotspots will include:

- Energy use – for both gas and electricity
- Travel – for both patients and staff*
- Business services – covering accountancy, IT, waste services etc.
- Procurement – covering medical and non-medical equipment and consumables

Other areas – such as water, food and drink and recycling are responsible for smaller proportions of emissions but can be included in your practice plans.

*pre Covid19

Getting started doesn't necessarily mean tackling the biggest areas. It's a combination of addressing the biggest areas and the easy-wins.

The easy wins also motivate your team and build momentum.

5 benefits of climate action for practices

Taking action has lots of additional co-benefits. If you need to develop a business case for your organisation, these are some aspects to focus on:

1. Positive physical and mental health impacts

on staff and patients

2. Business continuity and resilience

allowing us to continue to provide care to our patients

3. Financial savings

by improving efficiency, reducing waste and changing service delivery models

4. Minimised reputational risk

by demonstrating that we recognise the impact healthcare has on the planet

5. Safer and fairer communities

by recognising and addressing the health impacts of climate change, which exacerbate existing inequalities

> "Healthier populations will prove more resilient to future health threats, thus reducing economic consequences. Finally, whole societies profit when disparities between the most privileged and those most vulnerable to the impacts of climate change and disease are reduced."
>
> The Lancet, February 2021

Getting started with net-zero

To get started...

Audit your impacts by establishing your carbon footprint.

If you have not already done so, the first step is to audit your carbon footprint so you know what the big issues are and you can monitor the improvements from your actions and interventions.

There are plenty of carbon calculators and tools to use, for example SEE Sustainability, Compare Your Footprint or Smart Carbon who offers a simple and cost-effective way for you to measure the carbon footprint of your operations.

You can use external consultants like SEE Sustainability, use a guide to rough calculation can be found here, or head to each section of this guide monitoring and measuring suggestions.

Examples of carbon footprints conducted at a range of services in Salford CCG are available here.

Developing a business case

Making an ethical case for sustainable business practices is easy. For the good of our species and our planet, we all need to come together to reduce our environmental impact, because the ramifications of failing to do so are dire.

Making a financial case for sustainable business practices is easy. There are many financial benefits for a practice in the long term from taking action to reduce our resource or energy use. Energy savings are recurring so worth a huge amount over the years to come.

Sustainable practices are those that:

1. at minimum do not harm people or the planet and
2. create better outcomes for patients by focusing on improving environmental, social, and governance (ESG) performance of the practice.

Building a business case isn't a one-and-done endeavour, but rather a living and breathing process in which we should position ourselves to be nimble and proactive.

Through regular dialogue with staff and patient, a practice with a sustainability agenda is better positioned to anticipate and react to economic, social, environmental, and regulatory changes as they arise.

Managing risks therefore requires making investment decisions today for longer-term benefits of our patients and staff.

Embedded sustainability efforts clearly result in a positive impact on business performance.

1. Write a simple narrative to demonstrate how providing more environmentally sustainable healthcare benefits the practice.

2. Estimate quantifiable savings and benefits. Identify a process to regularly capture these savings.

3. Intangible benefits – record but don't quantify – yet! Include reputation, staff morale and motivation, productivity, future proofing.

4. Balance against costs of proposed changes.

How to bring your stakeholders on your net-zero journey

1. Get to know what your team cares about and look at where sustainability comes into it. It could be small things like a recycling bin or tea bags to big things like procurement and medication.

2. Set up a green team or green community with representatives from across the practice.

3. Discuss the findings of your carbon footprint audit with the green team or your whole team.

4. Develop your existing green action plan or create a net-zero action plan with targets for each impact area. For inspiration use this guide and the resources within it.

5. Engage your supply chain – and patients – in setting targets, asking for their input, and creating a sense that 'we are in it together'.

6. Meet regularly to feedback on progress and troubleshoot challenges.

7. Celebrate and acknowledge incremental improvements throughout the year. Human brains need short-term rewards to keep motivated for long-term goals.

Engaging your team

Green communities rather than green champions

Change comes when people across the organisation are taking action and feel empowered and motivated. It means collaborating with engaged members from each department to identify ways to reduce your footprint and improve your processes. This does not mean everyone has to become environmentalists overnight.

Start with engaged people from a range of departments and as momentum increases and change happens, others will adopt the new social norms.

People are more likely to act if they feel part of the process and they know there is commitment at a senior level. In the 2020 Edelman Trust survey 73% of workers expected CEOs to take action. And likewise, senior leadership are more likely to act if they know it will improve staff retention and commitment to their organisation.

"We're very good at taking a team approach. We have a group of people that really care and are all working on different areas, and that's starting to gather momentum. I think that's been one of the key things."

Karen Creffield,
Frome Practice and Primary Network Care Manager

A study from Unily on the 'Future of the Sustainable Workplace' report showed that:

- 65% of new staff are more likely to work for a company with a strong environmental record
- 64% would definitely or possibly turn down a job from a company with a bad environmental track record
- 63% want to learn more green skills to become more valuable in the workplace
- 57% of employees said they need more info. on their company's environmental goals
- 46% said they need more training on environmental goals

TRAINING STAFF
Train and educate your organisation so that they can ensure the net-zero strategy is sustained and considered for all future decisions.

Tips to engage your team

- We are the champions

Who are the people in your workplace who are passionate about seeing plastics eliminated? These are the champions. They can help engage work colleagues – the message is far more powerful when it comes from a team-mate.

Give them a support in their role - they could be responsible for making that initial list, regular updates to staff, and generally inspiring others to take the small steps needed.

- Start small

All the small actions add up to make a big difference, so make a note of these initial steps you can help staff to get involved in.

Be transparent with your staff about the environmental impact of the products or service they're offered/using, the majority will seek the most sustainable options available (making your decisions even easier!).

- Communication is key

The more people involved, the greater the impact. Make sure that staff know what's happening, why it's happening and what you're going to do to make it easy for them to join in.

Take pictures of staff travelling to work, or switching off equipment or recycling before and after, have posters around staff and communal areas with reminders of hints and tips on what they can do.

You do not have to win over all the hearts and minds within your organisation to care about the environment.

You can still engage people with environmental issues without talking about the environment!

Talk about the health benefits of an initiative or the financial savings.

- Emphasise the benefits of a decarbonised practice

Decarbonising can also have financial benefits although there may be some initial investment required. Often savings in one area can be used to fund other areas.

Furthermore, there are a wealth of wellbeing and job satisfaction benefits leading to a happier and healthier workforce.

- Lack of staff engagement?

Why is your team reluctant to participate? E.g., concerns over extra work, disillusion with green initiatives, not sure how they can get involved...

How can you ensure they have the right support, training and capacity?

Ask the staff!

Engaging your patients

While the pandemic was the centre of conversations in 2020-2021, the climate emergency remains a vital issue that more and more people want to act on.

You don't need to turn everyone 'green'. You can communicate the family, community and individual benefits of low-carbon lifestyles to your patients and work with local stakeholders to transform the infrastructure to make those choices easier for people.

Making Every Contact Count have lots of useful resources for patients- www.meccgateway.co.uk/nenc/new

48%
of people are more concerned about the planet's health as a consequence of the pandemic*

80%
are willing to make lifestyle changes to stop climate change as big as those they've made for coronavirus**

What steps can people take?

Eat more plant-based food

Cycle or walk short journeys

Switch to renewable energy

Plant trees

*Kearney study, April 2020
**Futerra Sustainable Lifestyle Survey, May 2020

Business services

Addressing your business services footprint

Business services cover all the professional services we use such as telephony, computers and IT, accountancy and finance and payroll and insurance and many others.

Each service a practice uses has a carbon footprint from running their business. Part of their footprint forms part of our footprint. We can lower our footprint by influencing those around us and those whose services we use to start their own net-zero or decarbonisation journey.

We have financial influence over our suppliers and can use this to improve their environmental behaviour.

Rather than switching to a new more ‘sustainable’ supplier, giving existing suppliers a chance to improve will improve the supply chain.

You won't be the only one asking them to change, and the more that request, the better.

Top actions you can take

- Identify your expenditure and hotspots on services.
- Cancel services you no longer need.
- Identify and substitute for low-carbon alternatives and less environmentally harmful services for the services you use.
- Ask your suppliers about their plans to tackle their carbon emissions.
- Set them deadlines to improve by.

Essential business services

GP practices need to abide by certain minimum legal standards. These include providing services for patients which includes telephone access or well-trained staff with up-to-date mandatory training such as first aid, CPR or safeguarding.

The CQC require a number of policies which may involve additional or external business services e.g., infection control, health and safety, preparing a business continuity plan, equipment calibration and PAT testing, checking staff on the DBS register.

The premises need to be well maintained and hazard free – waste providers and fire safety is paramount.

Other services are highly desirable such as independent accountants analysing the books for tax payments.

These services can continue to be provided but questions asked about the impact they are having wither their own carbon emissions footprint.

"Every time you spend money, you're casting a vote for the kind of world you want"

Anna Lappe

WHY ADDRESS YOUR BUSINESS SERVICES FOOTPRINT?

Every service and purchase has a carbon footprint from travel, production, cleaning and waste impacts.

The message from the Greener NHS report is clear: suppliers must meet or exceed their commitment on net zero emissions.

AUDIT OF BUSINESS SERVICES

Use your invoice information to calculate the amount of spend in each of categories (see next page).

Having your carbon footprint calculated will help identify which services are the highest contributors to the practice's overall footprint.

See here for more details.

Calculating your impacts with spend-based data

There are many services used by practices. These tend to fall into one of the following categories.

Category	Examples	Our practice spend (£)
Financial	Accountancy, payroll, banking/bank charges	
Communication	Telephones, IT, websites, broadband, software licences	
Membership services	Defence unions, DBS checks, music performance	
Insurance and legal services	Building insurance, liability insurance, ICO (information commissioners office), CQC and medical levies/membership fees	
Servicing	Lifts, oxygen, fire alarms, medical equipment, boilers and heating equipment, sterilisation of equipment services	
Maintenance	Building fabric, facilities management, building service charges	
Waste	Confidential, shredding, recycling, clinical and non-clinical waste	
Recruitment costs	Advertising, screening, occupational health assessments	
Postage and carriage	Letter, parcels, Docman, scanning	
Water and sewerage		
Education and training		

Conduct an audit

Using the IT services approach as a template, the other business services can be audited and examined in a similar manner.

Calculate the total spend by category. This can give a rough carbon footprint although some business types have a higher average carbon footprint per £ spent than others.

You can use spend-based figures against your annual accounts and the categories your services and purchases fall under.

Contact SEE Sustainability for more details.

The practice accountant may have all this information already available.

Spend-based figures provide an average for different services. They have limitations – for example if services become cheaper - but are an easy way to monitor, measure and demonstrate progress.

Setting targets

Setting targets can help you deliver the strategic changes that are needed to reduce carbon emissions from all business services.

Regarding business services, the practice can set their own targets to achieve their goal such as

- Reduced service use by identifying legacy or historic services which are no longer needed,
- Identify less environmentally harmful services for the services contributing most to your footprint,
- Have carbon along side financial cost as metrics when contracting with services,
- Number (%) of services contacted to ask about their emissions footprint.

Route to reduce		Aim/target					
Area	Current footprint (this year)	3 years time		6 years time		9 years time	
		Total % reduction	How	Total % reduction	How	Total % reduction	How
Business services	E.g. 110,000 kg CO_2e	20% in service use 25% reduction in carbon	Identify services which are no longer needed. Use lower carbon services in the biggest hotspots.	50% reduction in carbon	Actively identify further low carbon services. Use only services with a decarbonisation plan in place.	At least 75% reduction in carbon	Use only carbon neutral suppliers for all new suppliers. Audit and press current suppliers to achieve carbon neutrality.

More actions you can take

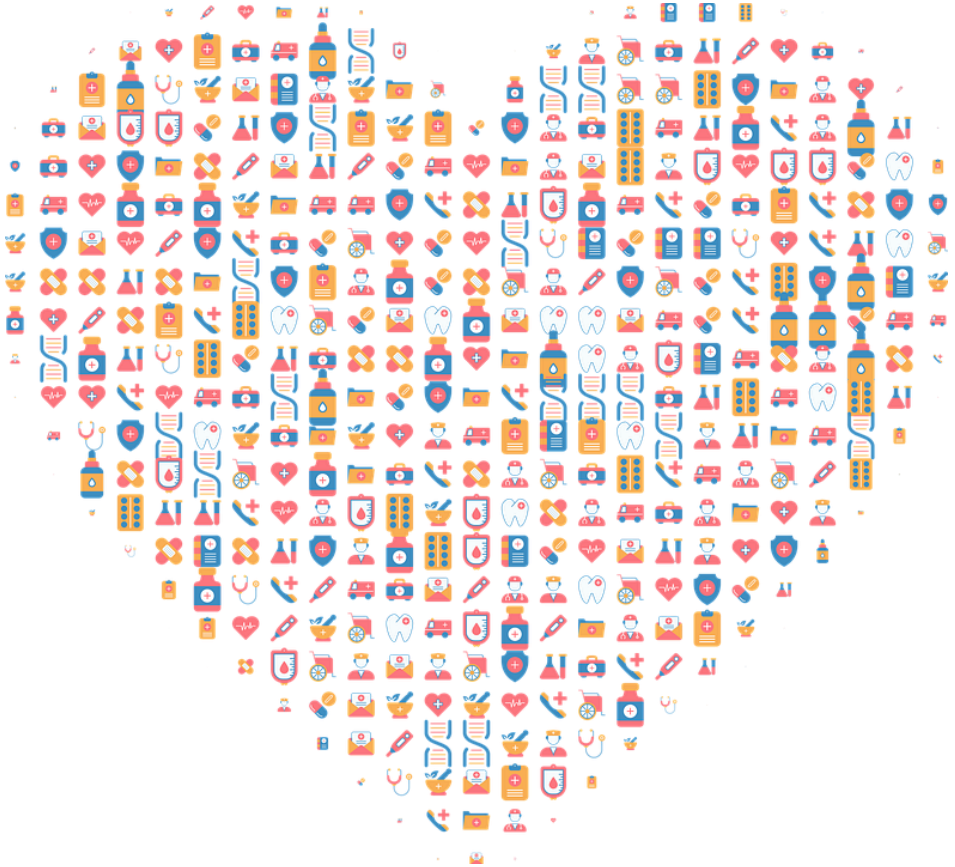
For the business services you use, can you

- use resources more efficiently?
- substitute for low-carbon alternatives?
- ensure that suppliers are decarbonising their own processes?
- request services have had their carbon footprint calculated?

Identify low carbon alternatives using the Carbon Trust, green directories and regional low carbon networks (see Resources).

Influencing change
When engaging new suppliers for tenders and new contracts include questions about their sustainability and carbon reduction commitments. This can also be done with existing suppliers.

Start with your biggest providers first or the ones with the highest figures in your audit.



A letter can be sent to suppliers asking what they are doing regarding their carbon emissions footprint and the actions they are taking to reduce it.

Resources

Green business directories and suppliers

- Carbon Trust Accredited Suppliers and installers of energy efficiency and renewable energy technology
- UK's most comprehensive Green Business directory
- Directory to find like-minded businesses committed to environmental best practices
- edie's suppliers directory
- For help from construction professionals e.g., for intelligent heating control specialist
- Accredited supplier registry
- Future Fit Business Benchmark provide a comprehensive scheme to assess and address the environmental and social impact of your business, but doesn't currently support benchmarking.
- International Chamber of Commerce has set up a pledge scheme for SME leaders future-proof their business by committing to halve greenhouse gas emissions before 2030 and reach net-zero emissions before 2050.

Regional low carbon business networks

- Derby / Notts
- Oxfordshire
- Kent

Accountancy

- How to create a greener accountancy practice
- Kung Fu - Low Carbon Accountant (B-Corp)

Examples of providers

Accountants

Green Accountancy
National
info@greenaccountancy.com
01865582064
https://www.greenaccountancy.com

Green and Moore
National
info@greenandmoore.co.uk
07422650034
https://greenandmoore.co.uk

Kung Fu Accounting
National
hello@kungfuaccounting.com
https://kungfuaccounting.com

Banking

Triodos
National
03303550355
https://www.triodos.co.uk

Starling Bank
National
help@starlingbank.com
https://www.starlingbank.com

Co-operative Bank
National
03457 213 213
https://www.co-operativebank.co.uk

Charity Bank
National
enquiries@charitybank.org
01732 441900
https://www.charitybank.org

Ecology BS
National
info@ecology.co.uk
01535 650770
https://www.ecology.co.uk

Find out which banks invest in fossil fuels:

Bank Green
https://bank.green

Web hosting

Eco Web Hosting
National
sales@ecowebhosting.co.uk
03300430712
https://www.ecowebhosting.co.uk

Eco Hosting
National
02920003338
https://www.ecohosting.co.uk

Green Web Host
National
service@greenwebhost.net
01422303506
https://www.greenwebhost.net

GreenNet
National
info@gn.apc.org
03303554011
https://www.greennet.org.uk

Kualo
National
sales@kualo.com
0800 138 3235
https://www.kualo.co.uk/webhosting/green-web-hosting

Insurance

Naturesave Insurance
National
mail@naturesave.co.uk
01803864390
https://www.naturesave.co.uk

Water cooler services

The Water Delivery Company
National
quotations@thewaterdeliverycompany.com
03301233309
www.thewaterdeliverycompany.com

MIW Water Cooler Experts
National
sales@miw.co.uk
01207572000
https://www.miw.co.uk

Water Logic
National
03330600214
https://www.waterlogic.com/en-gb

This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Examples of providers

Broadband

Green ISP
National
service@greenisp.net
01422303506
https://www.greenisp.net

GreenNet
National
info@gn.apc.org
03303554011
https://www.greennet.org.uk

Printing services

The Green Office
National
info@thegreenoffice.co.uk
0800 038 5744
https://www.thegreenoffice.co.uk/carbon-neutral-printers

Mobile network

Honest Mobile
National
sales@honestmobile.co.uk
02045255578
https://honestmobile.co.uk

Ecotalk
National
home@ecotalk.co.uk
03338005500
https://www.ecotalk.co.uk

Waste

Darlington Borough Council
Darlington
https://www.darlington.gov.uk/bins-waste-and-recycling/

Middlesbrough Council
Middlesbrough
https://www.middlesbrough.gov.uk/recycling-and-rubbish/recycling

Stockton-on-Tees Borough Council
Stockton
https://www.stockton.gov.uk/bins-rubbish-and-recycling

Hartlepool Borough Council
Redcar
https://www.redcar-cleveland.gov.uk/resident/bins-waste-and-recycling/Pages/bins-waste-and-recycling.aspx

Business Waste
National
customers@businesswaste.co.uk
0800 211 83 90
https://www.businesswaste.co.uk/waste-management-carlisle

This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Example: Net zero IT services

The impact of IT services

IT can fall into two sections – both business services and procurement of goods. Services include telephone services and broadband suppliers; procurement of goods include new computers and peripherals.

Information technology (IT) is increasingly a place where companies can save money and energy, while reducing their carbon footprint and preserving the environment.

Green IT (green information technology) is the practice of environmentally sustainable computing.

Green IT aims to minimise the negative impact of IT operations on the environment by designing, manufacturing, operating and disposing of computers and computer-related products in an environmentally-friendly manner.

Action

Audit current expenditure on services including telephone systems, IT, websites, broadband contracts, software licences etc using the table below.

Service	Supplier (s)	Cost
Telephone systems		
IT		
Website hosting		
Broadband contracts		
Software licences		
Data storage		
New computers		
New peripherals (e.g., monitors, printers)		
Other		

Addressing your IT and online carbon footprint

The motives behind green IT practices include reducing the use of hazardous materials, maximizing energy efficiency during the product's lifetime and promoting the biodegradability of unused and outdated products.

Green IT covers the purchase on new equipment through to the disposal at the end of its useful life, alongside the software and energy when in use.

E-waste — the obsolete technology that winds up in landfills and incinerators, often in developing nations — is an increasingly serious global environmental problem, so it is important to maximize the lifespan of IT products.

Whilst storing data in the cloud may seem like it doesn't have an impact, the reality is it is actually stored on the ground in huge data servers that are run on energy and often fall back on diesel generators. Regularly deleting emails, unnecessary files and reducing the need for sending unnecessary data or files is another way to reduce your carbon footprint.

Life cycle of a computer	
Mining	A computer has over 30 different minerals including silica, iron, aluminium, copper, nickel, arsenic and cadmium
Manufacturing	Often energy intensive and included processing of minerals and transportation
Packaging	Often involving cardboard and plastics for protection and include its disposal
Shipping	From factory to store and to homes /businesses
Use	Using software and electricity
End of life	Including recycling or waste disposal

Dell calculated each desk top computer emitted 720kg CO_2e over an average lifespan of 4 years.

Top actions you can take

- Identify your expenditure and hotspots on IT.
- Request services and products which have their carbon footprint calculated.
- Discuss with IT regarding procuring and using low-carbon/low environmental impact equipment and services.

Carry out an IT audit

Perform an audit of your current IT systems – both equipment and use

Audit what services and tools are being used. This could identify items that do not need to be powered on or refreshed as part of a cycle, leading to a reduction in energy usage and costs.

The audit can examine:

- What is being used and when?
- What is being left on when not used?
- All plugged in IT equipment including hard drives, monitors, printers, fax and franking machines,
- All consumables including toners/print cartridges,
- Reuse and recycling options end of life.

Can the power management of the essential devices be improved?

A study in 2016 showed an office using 50 computers (exclusive of the monitor) used 171 watts of electricity. If permanently left on, this generates about 35,000 kg CO_2e per annum.

To absorb this amount of carbon dioxide – using an average amount of carbon dioxide absorbed per hectare of UK woodland at 5.4 tonnes per year, this equates planting over 6 hectares of woodland each and every year.

The most sustainable solution for a computer is taking care of the one you have.

Tips for greener IT - Equipment

Lifetime of equipment
It can be tempting to purchase new, more efficient computers every couple of years, but the amount of energy and hazardous materials used to produce new equipment can be far more environmentally damaging than the extra electricity consumed by older systems.

Circular procurement
PCs can be leased or rented rather than bought. By considering hardware as a 'service', the supplier ensures it is the optimal system and longevity including repairing and maintaining rather than replacing

How much equipment?
Recording the amount of IT and peripherals can help practices reduce their purchases. Are there extra monitors, headphones or tones in the backs of cupboards that have been forgotten about and could be used rather than buying another one?

Do I need more?
When you do make new purchases, look for hardware than can easily be upgraded and consider sourcing from suppliers that guarantee they will take back and recycle all equipment at the end of its useful life.

REDUCING THE REFRESH RATE OF DEVICES
Whilst it may be natural to look for the lowest cost options when purchasing new kit, if the lifespan of a device is considered, a more expensive upfront device may become cheaper over time if it is expected to last longer. This also reduces the amount of equipment that needs to be recycled or disposed of.

CARBON EMISSIONS AND IT OPTIONS
Sending an email

0.3g	Sending a short email from laptop to laptop
17g	Sending a long email (10mins to write, 3mins to read)
280g	Sending same long email as a letter on recycled paper
350g	Sending same long email as a letter on virgin paper

Video consulting or meetings – per hour

2g	on 13' Mac book
10g	on laptop
50g	on desk top

Holding an online video conferencing meeting for 10 people on laptops for an hour would generate a total of 100g CO_2e. If the meeting was face to face, average travel was 2 miles and all attendees drove average cars, the footprint would be 5,300g CO_2e.

Data from Mike Berners-Lee in 'How Bad Are Bananas?'

Tips for greener IT – Use and end of life

During use

Energy consumption
- See Energy section
- Reduce energy use - switch off when not in use; buy products with low energy consumption.
- As part of the energy audit, map energy consumption across the practice for IT/electronic equipment.
- Set energy efficiency settings for all computers, printers and monitors.

Digital transformation
Practices and patients are far more familiar with digital working including video and phone consultations, e-consults, remote access of information etc. This includes online meetings both internally and externally of the practice

Software
- Set requirements for sustainable design to be incorporated into software applications – ask the IT department when it comes to installing or upgrading software.
- Switch to Ecosia as web browser – a tree is planted for every 45 searches made.

Maintain and reuse
Upcycling and repairing at the right time makes equipment last longer. Local repair shops or the IT department can help. A guide from Norton is here.

After use

- Take back programs - Dell has emerged as an industry leader with its takeback service.
- Recycle 'Anything with a plug, battery or cable can be recycled' – Recycle Your Electricals.
- Reduce e-Waste with Recycle Now.

recyclenow

recycle your electricals

Setting targets

Setting targets can help you deliver the strategic changes that are needed to reduce carbon emissions from IT.

Regarding IT, the practice can set their own targets to achieve their goal such as:

- Three yearly audit of equipment and services
- Reduced the number of pieces of equipment or the frequency they are replaced
- Reduce energy consumption while in use
- Look at extending the life of equipment through maintenance.

Route to reduce		Aim/target					
Area	Current footprint (this year)	3 years time		6 years time		9 years time	
		Total % reduction	How	Total % reduction	How	Total % reduction	How
IT equipment and services	5,000 kg CO_2e	Reduce by 25%	Repair and maintain all computer equipment rather than replace. Reduce number of printers to a few in a central location.	50%	Change procurement policy for new equipment to only those with lower impact.	75%	Have zero emission IT online services for data storage with green supplier. Commit to 100% repairable and upgradable equipment.

Resources

Greener procurement of IT equipment and services

- Ethical Consumer's laptop shopping guide (subscription service)
- How to choose a sustainable and ethical laptop

Recycling toner and printer cartridges

- What to do with printer cartridges
- The Recycling Factory

Green webhosting

- Green Geeks

End of life

- What to do with electrical items
- Recycle Your Electricals

Useful articles

- 25 vital computer maintenance tips and checklist to protect your device
- Why your internet habits are not as clean as you think

Example: Net zero waste

Addressing your waste footprint

Waste contributes to the overall carbon footprint of a practice.

The management of healthcare waste is an essential part of ensuring that General Practice activities do not pose a risk or potential risk of infection and are appropriately managed. A small minority of waste is potentially hazardous and if not disposed of correctly can result in injury or infection.

All staff are responsible for the safe management and disposal of waste and should understand how waste should be segregated and stored prior to collection or disposal.

This is driven by the need to reduce environmental impact, comply with waste regulations and other national guidance such as the Health and Social Care Act 2008: Code of practice and guidance on the prevention and control of infections and related guidance, and reduce costs associated with waste management.

While the carbon emissions from our waste are relatively small, we cannot recycle our way out of the climate crisis, but we can reduce wasted resources.

Infectious or offensive waste?

Infectious waste contaminated with body fluids from a patient with a known or suspected infection with a proven infection risk and there are also medicines or chemicals present. ->Yellow bag.

Examples – Contaminated PPE • Medicated dressings • Contaminated dressings

Non-contaminated infectious waste -> Orange bag

Offensive (non-hazardous) waste from patients with no known or suspected infection which may be contaminated with body fluids. -> Yellow and Black Tiger stripe bag

Examples: Gloves, aprons • Dressings (including blood stained) • Stoma or catheter bags • Cardboard vomit/urine bowls • Incontinence pads • Female hygiene waste, nappies.

WHY ADDRESS YOUR WASTE FOOTPRINT?

Following the Waste Hierarchy is not only law to reduce resource usage and to prevent pollution, but it also reduces the carbon footprint.
It is the legal responsibility of the General Practice, not the waste contractor, to ensure full compliance with environmental waste regulations.
BMA advice is here.

Top actions you can take

- Don’t use clinical waste bags for non-clinical waste.
- Identify the main items in waste and remove at source.
- Segregate the waste correctly.

Monitoring and measuring

Carrying out a waste audit (see box)

- Current waste collection systems
- Volume of waste generated
- Composition of waste and detailed analysis of key waste streams e.g., quantity of avoidable waste and causative factors, composition of waste packaging etc.
- Seasonality or demand peaks
- System constraints (e.g., infection control)

WASTE AUDIT

Over a week:

1. Record the number and type of waste bags collected within the practice
2. Examine the contents of each bag by colour e.g., tiger stripe bag/black bag, recycling bag
3. Separate into categories and weigh totals e.g.
    - Plastic
    - Metal (e.g., aluminium)
    - Paper
    - Mixed/contaminated waste
    - Food waste
4. Return waste to (correct) waste stream
5. Repeat for other waste streams
6. Consider if waste has been appropriately disposed of and whether it was avoidable by comparing against the waste hierarchy

Download a waste audit form here

Where do I put healthcare waste?

General practice waste management categories

It is easy to overlook the duty of care and legal responsibilities placed upon us personally to dispose of healthcare waste appropriately.

Correct segregation of waste ensures compliance with law and means it will be processed in the safest & cost-effective way, minimise any environmental impact; the colour of the container indicates its disposal route.

Improper segregation of waste and mis-use of waste bag types creates a significant challenge for the NHS.

Offensive waste (tiger-striped bags):

- All clinical rooms should have this as main waste stream for GP practices.
- Used for non-infectious healthcare waste, e.g., items contaminated with blood or body fluids, PPE, speculums etc.
- All healthcare waste should be considered non-infectious unless proven otherwise?

Infectious waste (orange bags):

- Used for infectious waste only – typically solely needed in treatment rooms for dressings (e.g., leg ulcers), minor ops products etc.
- Should not be used routinely in GP practices as majority of patients and procedures are not infectious.

Sharps waste (yellow lidded):

- Used for all needles, syringes and vials contaminated by anything given to the patient, e.g., pharmaceuticals and most vaccines.

Sharps waste (purple lidded):

- Used for all needles, syringes and vials contaminated with cytotoxic and/or cytostatic medicinal products and their residues (e.g., BCG, Leuprorelin, Testosterone, Progesterone, Goserelin).

Sharps waste (orange lidded):

- Used for needles, vacutainers and waste from phlebotomy/podiatry (contaminated by blood or body fluids taken from the patient) that are not contaminated with pharmaceuticals.

General & recycling waste:

- General waste includes couch roll and paper towels.
- Not all clinical rooms should have a recycling bin – it is better having one in a central location. Recyclable waste may include packaging, papers, plastics etc.

Confidential waste:

- For all patient identifiable papers and sensitive information.
- This should be shredded and recycled (whether on site or via appointed third party).

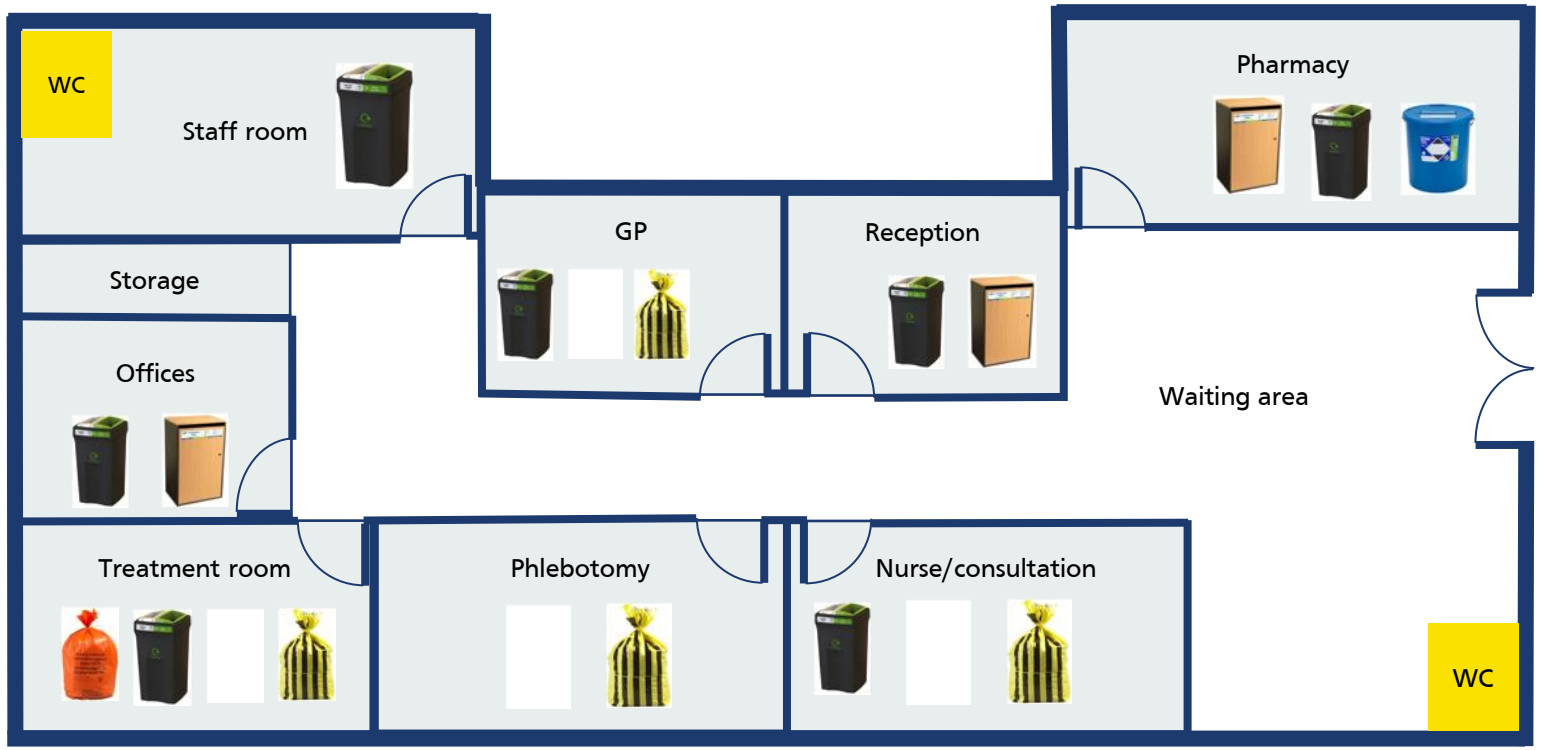
Medicinal waste (blue or purple lidded):

- All expired or patient returned medicines should be placed in blue-lidded containers, with exception of cytotoxic/cytostatic medicines which is placed in purple lidded containers.

How to configure waste bins on site?

General Practice Energy Management Floorplan

This waste management floorplan should be used as a guide for ensuring that all rooms/areas have the correct waste containers available. Sites should apply this as practically as possible noting different estates types may allow for different configurations.



GP consultation rooms
- Tiger waste
- General waste
- Sharps bin

Offices, reception
- Paper recycling
- Confidential waste

Treatment room
- Tiger waste
- Sharps bin
- Infectious waste
- Recycling

Phlebotomy
- Tiger waste
- Sharps bin
- Recycling

Nurse consultation rooms
- Tiger waste
- General waste
- Sharps bin

Pharmacy
- Medical waste
- Recycling
- Confidential waste

Sources of waste

Tissues and couch roll, gloves (and other PPE), paper and packaging are the most commonly disposed of item and biggest sources of waste in practices.

The most frequent materials in waste are:

1. Paper (including as tissues).
2. Nitrile, from which the gloves are made.
3. Plastic e.g., sterile wrapping and aprons.
4. Separatable paper and plastic (as packaging).

What is meant by ‘zero waste’?
The aim is that zero waste produced by the practice is sent to landfill sites or for incineration.

This requires a total re-think of the concept of waste, to be thought of as a ‘potential resource’, which can be returned via recycling firms to become an input in making the next item.

Progress towards this goal requires creative thinking to see how ‘waste’ can be reduced, reused within the practice or recycled.

The carbon footprint of recycling is lower than landfill, but waste avoidance has no carbon footprint at all.

Preventing waste through purchasing choices will reduce the carbon associated with the production of new goods and the impacts of waste or recycling.

The waste hierarchy

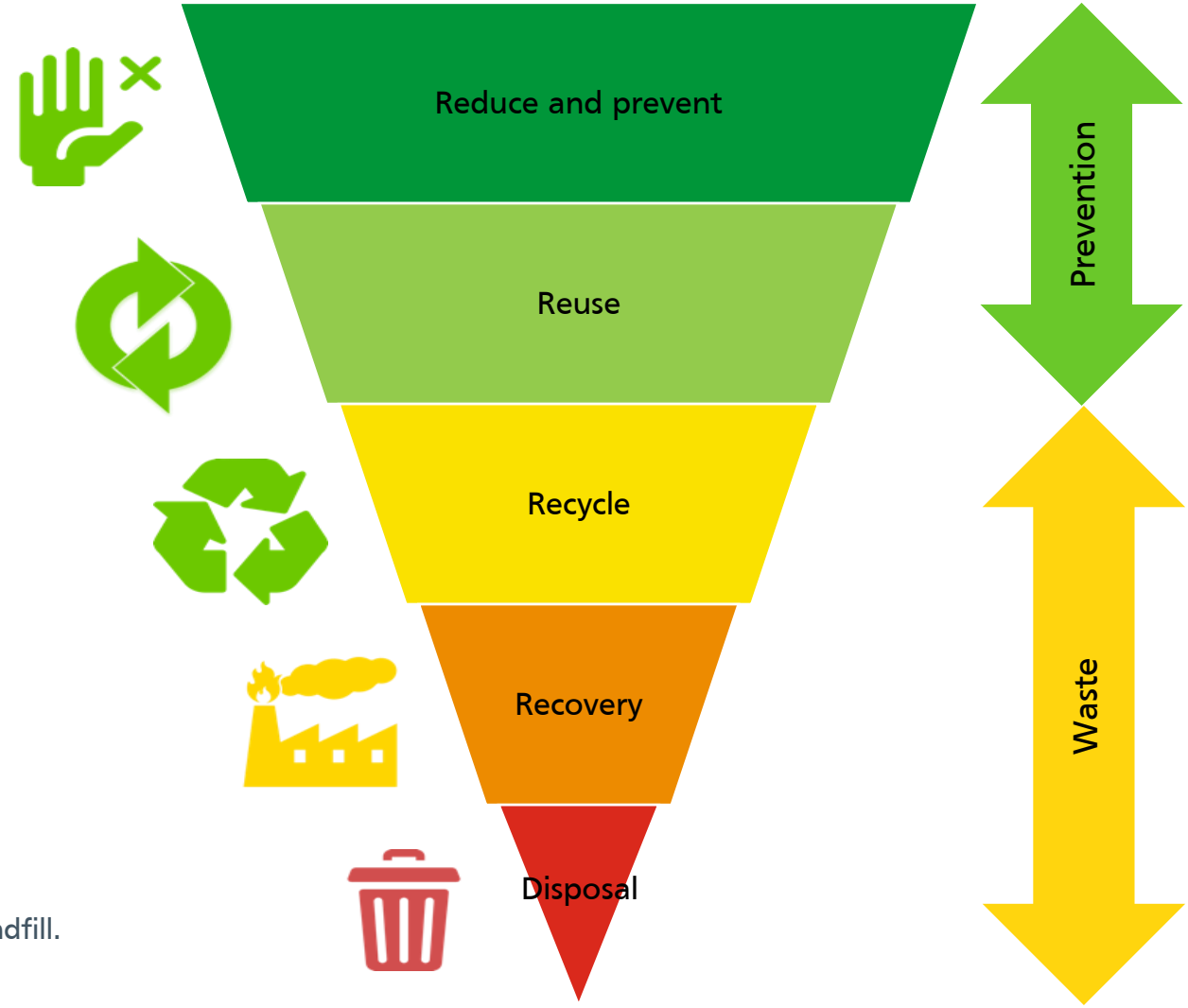
Reduce and prevent
Biggest reduction in waste is be preventing it from being generated in the first place. For example, less packaging, less new products, repairing, products designed for a longer life.

Reuse
Products and components that are used for the same purpose again, e.g., reusable PPE masks.

Recycle
Waste materials that are reprocessed into products and materials that can be used for the same or different purposes.

Recovery
Energy is recovered but the loss of resources occurs e.g., waste to energy incineration plants.

Disposal
Last resort. Either sent to incineration without energy recovery or sent to landfill.



What about plastic?

Plastics are incredibly useful and have changed the way we live our lives. The versatility of the material – to be moulded and shaped makes them suitable for many applications. There is increasing concern about how many are used and how they are disposed. Because they generally don't degrade or corrode, they persist for many hundreds of years.

Plastics are useful for packaging goods. Plastics is versatile, hygienic, lightweight, flexible and highly durable and accounts for the largest usage of plastics worldwide. It is used in numerous packaging applications including containers, bottles, drums, trays, boxes, cups and protection packaging.

Primary care rely on flexible plastics for packaging. When it comes to plastics, the softer they get the harder they are to recycle.

The UK government has set a target of eliminating avoidable plastic waste by end of 2042.

A useful guide from WRAP is here.

In the UK, it is estimated we use five million tonnes of plastic every year, nearly half of which is packaging.

	Durable, high strength and can be used in low weight applications	Recyclable?
Non-biodegradable	Lasts for years, can fracture into smaller pieces/ microplastics.	Yes, if collected and sorted into separate material reprocessing streams.
Biodegradable	Breaks down in a defined period of time.	Yes, if separated from nonbiodegradable plastic streams and dealt with separately. Cannot be recycled in the same way as non-biodegradable plastic.
Compostable	Material decomposes/ biodegrades in industrial composting conditions. Materials that meet an appropriate home composting standard can be composted in home composting systems.	Separated and sent to industrial composting facilities. Not suitable for sending to recycling with other plastics.

Any plastic that evades appropriate collection and treatment that escapes into the environment has the potential to have a long-lasting impact on the environment.

Types of plastic

Plastic can be made from fossil-based or bio-based materials. The nature of the material used to make a plastic, or the term used to describe it does not necessarily dictate the way it will behave at the end of its life e.g., a bio-based plastic or bioplastic does not automatically mean it will biodegrade.

Important characteristics can include strength, thermo-stability, gas barrier properties, transparency, lightweight, shatter-resistant and recyclability.

Name	Polymer name	Symbol	Uses	Recyclable
PET (or PETE)	Polyethylene terephthalate		Used in bottles, food trays, tote bags, carpet.	Yes
PE – HDPE	polyethylene		High density PE is used for milk bottles, bleach, cleaners, toys and most shampoo bottles.	Yes
PVC	Polyvinyl Chloride		Plumbing pipes. Tiles, shoes, gutters, window frames	In some places, yes
PE - LDPE			Low density PE is used for carrier bags, food bags, bin liners and packaging films	Harder to do, but yes in some places
PP	Polypropylene		Commonly used for margarine tubs, microwaveable meal trays, kitchenware, yogurt containers	Yes
PS	Polystyrene		Take-out containers and disposable cups and plates, ‘packaging peanuts’	No
Other			Includes CDs, baby bottles, spectacles, exterior light fittings	Not usually

Source: wrap.org.uk/resources/guide/understanding-plastic-packaging-and-language-we-use-describe-it

Monitoring and measuring

Understanding a ‘current state map’ at each site includes:

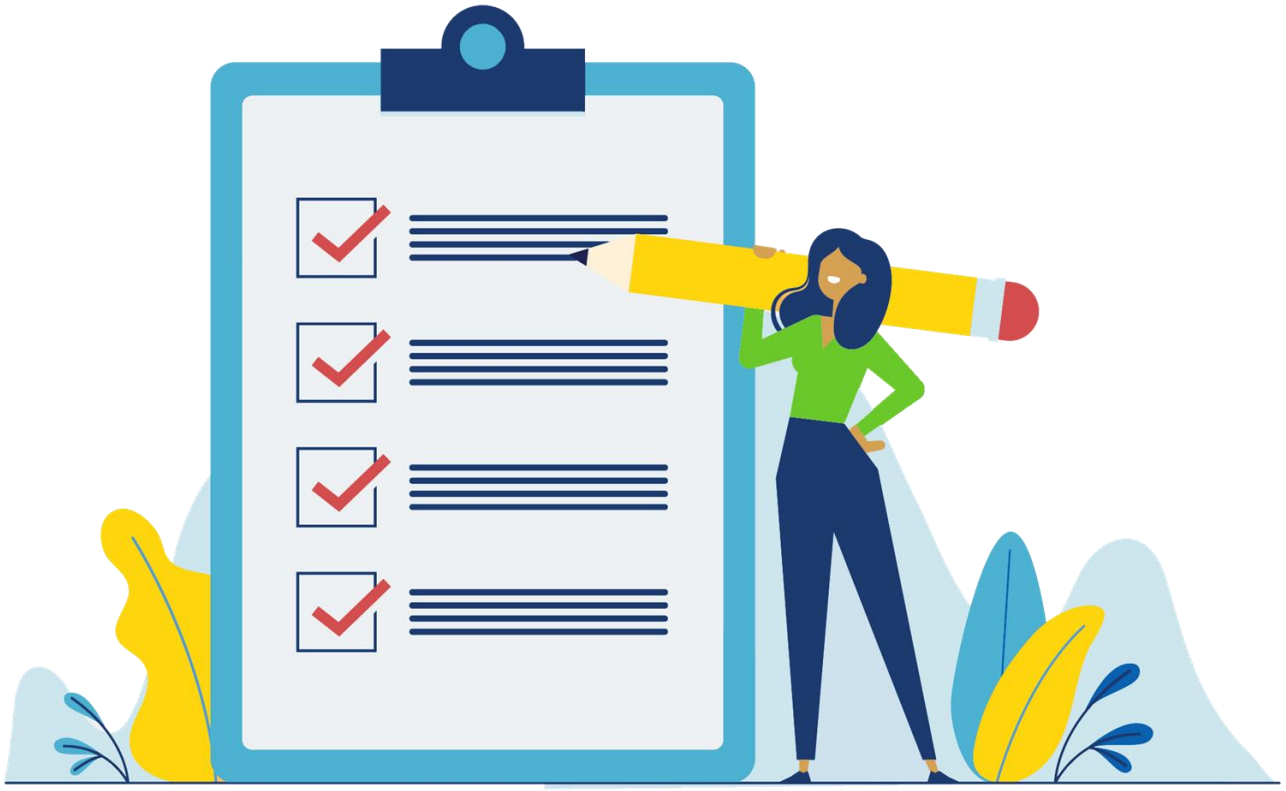
- Carrying out a plastic audit (see box)
- Considering actions to reduce unnecessary use

PLASTIC AUDIT

Start from the beginning and make a list of all the single-use plastics that exist in your practice: getting a better understanding on what actually gets thrown away will give a great starting point on what to eliminate altogether.

Identify the different types of plastic (where possible) – see previous page for types.

Identify if reusable or recyclable options are possible e.g. changing from polystyrene cups to reusable (glass, metal, rigid plastic) or recyclable (e.g. Type 5 Polypropylene) ones.



Tips to reduce plastic

Think long term

- Getting into good habits with the small steps is not the only thing you can do.
- Thinking longer term to change the culture of using single-use plastics is essential.

Plastic free office

- Pointless plastic – identify and avoid unnecessary plastic e.g., plastic folders, folder dividers, plastic coated paper clips.
- Paperless office – as offices transition to becoming paperless, start phasing out plastic (biro) pens and use pencils or metal pens instead.
- Laminating – laminating posters will take hundreds of years to biodegrade. Choose alternatives like printing on card.
- Create a central supplies library – for stationery and equipment , and ask staff to check there before purchasing anything new.
- Stationery orders – order eco-friendly stationery and ask the supplier to use paper or cardboard packing materials instead of bubble-wrap, polystyrene or plastic wrapping.

Food and drink

- Kitchen and staff room – provide reusable crockery and cutlery e.g., glass jugs and glasses for water and metal spoons for stirring drinks. Avoid disposable plastic cutlery.
- Encourage homemade lunches – having good food storage and preparation facilities will encourage and enable staff to bring in homemade lunches which inevitably reduces single-use plastic packaging.
- Office snacks and shop – a great way to influence what snacks are eaten in the office, and what packaging is left behind. For example, replacing bottles for cans, and plastic packaged sweets and crisps with healthy fruit and other alternatives.
- Provide staff with reusable mugs and bottles.
- Plastic-free events – use paper decorations for practice parties and birthdays. Avoid cards and wrapping paper with glitter which is micro-plastic.

ENCOURAGE GOOD RECYCLING OR GO COMPOSTABLE

Sometimes using a single-use item is unavoidable. Even with the best effort, there are going to be times when you do have plastic waste in your office, but the key is to make sure staff are encouraged to recycle all appropriate materials, and correct usage of bins.

Setting targets

Setting targets can help you deliver the strategic changes that are needed to reduce carbon emissions from waste and plastics.

Regarding waste and plastics, the practice can set their own targets to achieve their goal such as:

- % volume reduction.
- % increase in recycling.
- % reduction in financial costs.

Route to reduce		Aim/target					
Area	Current footprint (this year)	3 years time		6 years time		9 years time	
		Total % reduction	How	Total % reduction	How	Total % reduction	How
Waste	40 bags a week	25%	Audit current use, aim to increase recycling to all recyclable material.	50%	Identified excess packaging, unused resources, change suppliers.	75% - 10 bags in total	Aim for fully reusable medical equipment, so eliminating waste at source.
Plastics	5 bags a week	20%	Audit current use. Identify plastic hotspots. Single use plastic free kitchen.	50%	Identified excess packaging, use circular loops where packaging returns to seller.	80%	No single use plastics used at all. Only plastic from essential single use medical equipment.

Top actions you can take

Recycle

- Send printer cartridges for recycling.
- Set up a food waste collection for kitchen waste.
- Look for a closed- loop paper recycling supplier e.g. Paper Round collect paper in London and then resell it as office paper.

Best practice recycling set-up

- No under-desk bins.
- All waste and recycling bins in the same place.
- Clear visual signage with images on them that reflect the waste streams people have in your office. Words like Mixed Recycling or General waste are meaningless as different waste collectors accept different items so include images. WRAP has some good examples of clear signage.
- Ensuring clinical waste bins are not used for ‘general waste’ with clear signage.

Resources

UK government guidance

- Guidance on applying the waste hierarchy in England
- Guides to understanding your waste responsibilities
- Environmental guidance for your business in Northern Ireland & Scotland

Waste and recycling guidance

- WRAP (the Waste & Resources Action Programme)
- Zero Waste Scotland
- Recycle Now

Useful articles

- BMA ‘Disposing of clinical waste’
- CQC ‘GP mythbuster’: Health care waste
- IPC Waste management Policy for General Practice

Procurement of goods

Addressing your procurement footprint

“Procurement holds the key to the majority of impacts. It has a vital role to influence the supply chain, in your own operations and the distribution of your products and services” according to Hugh Jones, managing director of The Carbon Trust.

Procurement of goods in practice includes medical consumables (PPE to uniforms), office consumables (printing, paper, postage), medical equipment (BP machines to oximeters) and office equipment. Being aware of what we buy, how it is used and how it is disposed of is vital.

Practices are part of the global supply chains as these extend around the world. They are vulnerable to natural disasters and civil conflict. Climate change, water scarcity, and poor labour conditions in much of the world increase the risk to our ability to have the tools, equipment and staff to deliver great healthcare.

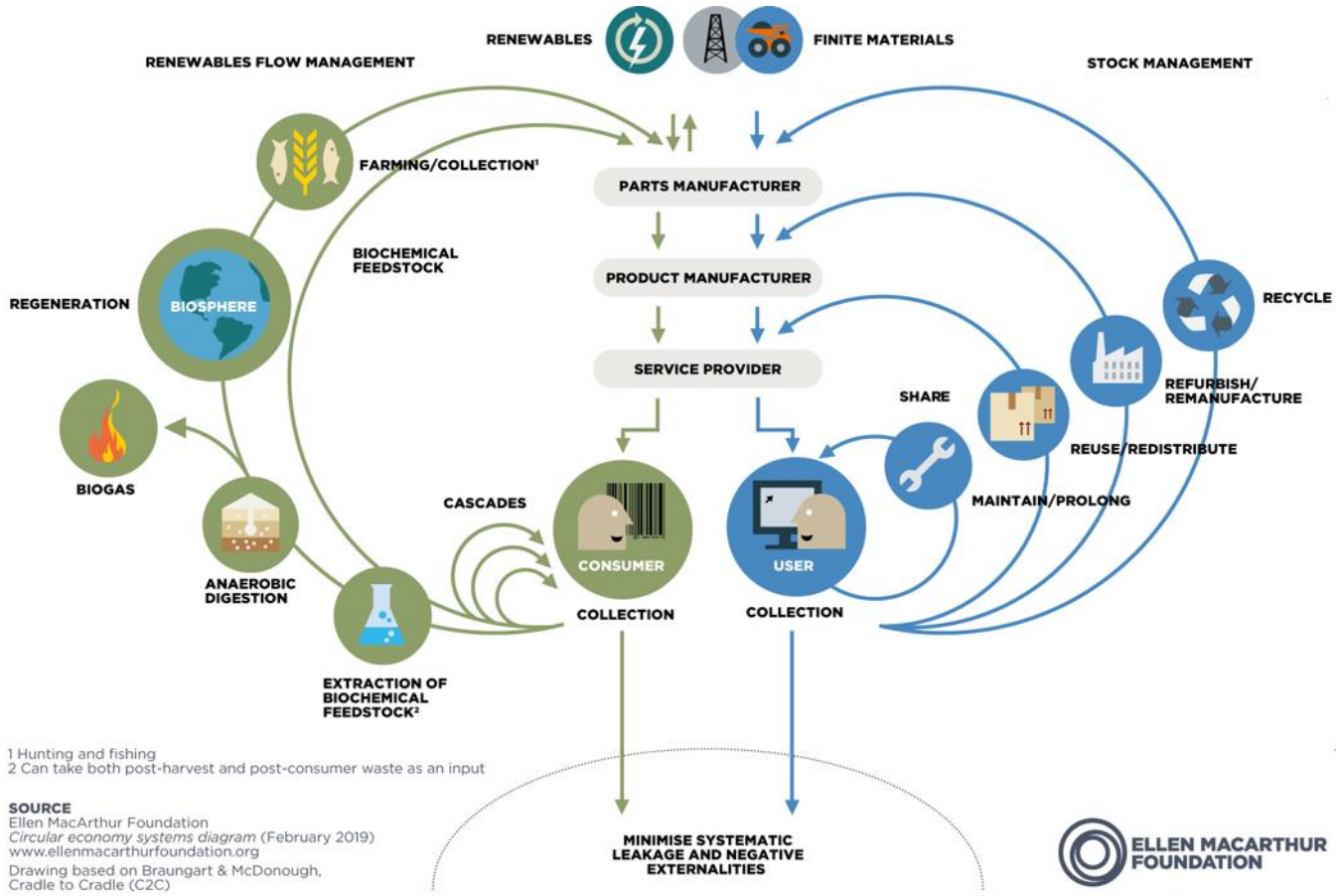
Procurement can make a real difference when cutting carbon emissions as carbon is associated with the assembly, packaging, transport, storage and handling of products and materials which account for a significant proportion of an organisations carbon footprint.

The NHS aims to reduce emissions under its influence, including travel and suppliers, to net-zero by 2045. This also includes an 80% reduction in emissions by 2036.

The message from the Greener NHS report is clear: suppliers must meet or exceed their commitment on net zero emissions.

Top actions you can take

- Reduced the number of products used by extending their lifespan e.g., frequency of replacing practice uniforms.
- Identify less environmentally harmful services for the services contributing most to your footprint – e.g. request products which have their carbon footprint calculated.
- Think through the whole lifecycle of the services being provided and the equipment and products used.



The circular economy for procurement*

*Source: https://www.ellenmacarthurfoundation.org/explore/the-circular-economy-in-detail

Medical procurement – equipment

Medical equipment

There are two reasons that medical equipment has a high carbon footprint. Firstly, it is the high carbon impacts associated with the materials and the production of them, and secondly it is end-of-life disposal options.

For example, the carbon impacts of producing equipment made from metals has a large carbon and ecological footprint from mining to melting and moulding. For instance, the carbon footprint of an aluminium Zimmer frame and wheelchair are 24 and 168 kg CO_2e respectively. Which is similar to a train journey to Amsterdam (28 kg) or a one-way flight to Rome, respectively.

For medical equipment, redundancy feels built in, and there is a newer model with more features coming soon. By extending the lifespan of our equipment, making them multi-use rather than single use, investing in repairing and maintaining, we can reduce the environmental and carbon impact from our equipment.

Action

Audit all the medical equipment bought over the previous 12 months.

CASE STUDY : SEAL MEDICAL SUPPLIES
RECYCLING MEDICAL EQUIPMENT

Seal Medical Supplies are a retailer of medical equipment based in Nottingham. A team of field-based technicians carry out calibration, servicing and repairs to medical equipment across the UK in partnership with their sister company - Seal calibration Ltd.

In addition, they offer a medical equipment disposal service allowing medical establishments to responsibly dispose of old or broken equipment. Upon collecting your old medical equipment, a traceable waste transfer notice is provided for your records.

Once collected, the equipment will be assessed and working parts salvaged, recycled or refurbished. Items that can't be reused in any fashion are responsibly disposed of.

Send all those old stethoscopes, ECG machines, otoscopes or ophthalmoscope from your practices.
www.sealmedical.com
Tel: 0115 906 3000
Email: sales@sealmedical.com

Medical procurement – consumables

Medical consumables

There are many products which constitute 'medical consumables' – from PPE and masks to PV speculums, couch roll, venepuncture equipment, wound dressings and many more.

Many medical supply companies aim to produce single use disposable equipment for additional sales. However, reusable medical devices are available.

Any item that contacts intact skin but not mucous membranes – Intact skin acts as an effective barrier to most microorganisms – are considered low risk for causing infection and can be made reusable. They can be disinfected between use when required.

Action

Audit the medical equipment bought over the previous 12 months.

Optimise stock inventory to avoid products going out of date and being wasted.

CASE STUDIES

Carbon footprint of PPE

If, over a year, a practice used...

- 20 rolls of aprons (200 per roll) = 4000 apron @ 65g CO_2e/apron = 260 kg
- 16 boxes of disposable masks (50 per box) = 800 masks @ 20g CO_2e /mask = 16 kg
- 175 boxes of gloves (100 per box) = 17,500 gloves @ 26g CO_2e /glove = 455 kg

Their total carbon would be 731 kg CO_2e (about 3/4 tonne CO_2e) annually.

Source: https://journals.sagepub.com/doi/full/10.1177/01410768211001583

Revolution Zero

During the first year of the coronavirus pandemic, NHS alone has disposed of 1.4 billion masks. Revolution-ZERO masks and other PPE target both zero carbon and zero waste by having a fully circular cradle-to-cradle service offering.

Sterile services and equipment reuse

Some practices are discussing with the Sterile Services Dept in their local acute trust about using reusable equipment and having it sterilised after use rather than using single-use equipment.

Office procurement – equipment

Office equipment

Office equipment covers personal electrical equipment (headsets, telephones, cables, webcams and microphones) to office electricals (fans, printers shredders, projectors) to furniture (desks, drawers, back rests, foot stools, standing desks) to new door locks and radiators.

Actions

- Audit the office equipment bought over the previous 12 months.
- Log stock inventory to know what resources and equipment are currently available in the practice.

CASE STUDY: WARP-IT

Warp-it helps businesses find, give away, or loan office furniture, equipment and other resources.

They help save money time and space.

- Reduce waste disposal and purchasing costs.
- No need to purchase new equipment and resources for your organisation.
- Find a new owner for your surplus kit in your organisation or beyond.

They are currently used nationwide by many healthcare and other organisations.

By 2021, they have saved 11,000,000 kg CO_2e and £25 million and diverted nearly 4 million kg of equipment from waste streams.

www.warp-it.co.uk
0800 0488755
General enquiries: info@warp-it.co.uk

Office procurement – consumables

Office consumables

This category includes stationary (paper, envelopes, pens, tape and appointment cards) to printer consumables (toners and printer cartridges) to staples and storage options (box files, poly pockets, filing trays) to books (training manuals, diaries, notebooks) to batteries to refuse sacks and cleaning products.

Action

Audit the office consumables bought over the previous 12 months.

Batteries have a footprint of 12.1kg CO_2e per kg of battery. A 4-pack of AA alkaline batteries weighs around 100g so their carbon footprint is 1.2kg CO_2e.

Recycling ink/toner cartridges saves nearly 9,600 kg of aluminium, 40 tons of plastic, and one million litres of oil for every 100,000 cartridges recycled.

Setting targets

Setting targets can help you deliver the strategic changes that are needed to reduce carbon emissions from procurement.

Regarding procurement, the practice can set their own targets to achieve their goal such as

- Reduced the number of products used e.g. frequency of replacing practice uniforms.
- Identify less environmentally harmful services for the services contributing most to your footprint.
- Think through the whole lifecycle of what you are doing/the service being provided.

"Public authorities have to regard economic, social and environmental well-being in connection with public services contracts and also taking into account wider social and environmental value when they choose suppliers."

Services (Social Value) Act 2012

Example

Route to reduce		Aim/target					
Area	Current footprint (this year)	3 years time		6 years time		9 years time	
		Total % reduction	How	Total % reduction	How	Total % reduction	How
Medical procurement	24,000 kg CO_2e	25%	Audit and identify medical equipment and consumables. Manage stock better.	50%	Identify alternative clinical pathways to reduce single use.	75%	Identify reusable medical equipment; remove single use; 100% at end of life to refurb service.
Office procurement	20,000 kg CO_2e	20% in use	Paper free with digital as default for communication.	50%	Use recycled equipment as default via Warp-it, etc.	100%	Remove all single use materials; only use suppliers with net zero policy.

More medical actions you can take

AVOIDING UNUSED ITEMS EXPIRING

- Have good stock management system
- Keep items that expire soon at the front of the cupboards to avoid items expiring before they are used.

INCREASING REUSE

- Where possible purchase products that can be decontaminated and reused, rather than single use items
- Charge a deposit on items, local practices charges £20 for hiring BP machines
- Hold an amnesty day for returned items
- Wash, autoclave and reuse items such as ring pessaries, metal scissors

SWITCHING MATERIAL CHOICES

- For items that are unavoidably single-use switching to a lower carbon alternative can be preferable.
- Rather than you having to become a carbon footprint expert on different materials here are some high and low carbon examples:

HIGH CARBON FOOTPRINTS

- Metals
- Cotton

LOWER CARBON FOOTPRINTS

- Plastic
- Recycled paper
- Bamboo

SIMPLE SWITCHES

- If they can’t be reused, switching from metal to plastics has a lower footprint or from virgin tissue roll to recycled or bamboo tissue.

More office-based actions you can take

AVOIDING UNUSED ITEMS EXPIRING

- By having a good stock management system and keeping items that expire at the front of the cupboards it can avoiding items expiring before they are used.
- Buying in bulk will save money by making the most of bulk purchase offers, and can consolidate the number of deliveries made, reducing carbon emissions.

REDUCE THE IMPACT OF YOUR PURCHASES

- Keep things in use for as long as possible
- Buying items to last or on a lease where they are kept in circulation for longer
- Working with a IT provider that responsibly manages the end of life of waste electrical items; ideally by refurbishing an making available within the local community
- Request take-back schemes for packaging or ask for ‘no packaging’ options
- Create a recommended purchase list for the low-carbon options so staff can buy from this list rather than having to evaluate themselves

SWITCHING MATERIAL CHOICES

- For items that are unavoidably single-use switching to a lower carbon alternative can be preferable. For example from virgin paper products to recycled

REDUCE:

PRINTING

- Changing printing settings so people have to press the printer to print
- Double-sided printing as a default setting

CLEANING PRODUCTS

- Switch to brands that sell soluble sachets that are diluted with water in trigger bottles or mop buckets

Resources

Companies who offer reusable equipment

- RB Medical

Reusable medical devices

- WFHSS
- Seal Medical
- Revolution Zero

Office equipment

- Warp-It

Examples of providers

Secondhand furniture

wantdontwant.com
National
hello@wantdontwant.com
020 7529 8180
https://www.wantdontwant.com/home/locations/index.cfm?town=Cumbria

Reyooz
National
hello@reyooz.com
https://www.reyooz.com

Kings Office Furniture
National
contact@kingsofficefurniture.co.uk
0845 521 9070
https://kingsofficefurniture.co.uk/pages/office-clearance

Office Resale
National
officeresale.uk@crownww.com
0208 9762 080
https://www.officeresale.co.uk

Repair furniture

The Chair Clinic
National
sales@chairclinic.co.uk
01384 480030
https://www.chairclinic.co.uk/office-chair-repairs/

Ace Repair Services
North East & Cumbria
acerepairs@hotmail.com
07969 388 151
www.acerepairservices.com/services

Renting furniture

City Furniture Hire
National
info@cityfurniturehireltd.com
01134508462
https://cityfurniturehireltd.com

Warp It
National
info@warp-it.co.uk
08000488755
https://www.warp-it.co.uk

Renting IT equipment

Hardsoft
National
info@hardsoft.co.uk
02071111643
https://www.hardsoftcomputers.co.uk

Refurbished IT equipment

Performance Computers
Darlington
Support@performancecomputers.co.uk
01325 267333
http://www.performancecomputers.co.uk

Central Media
Stockton
01642 652888
https://www.centralmedia.co.uk

Stone Refurb
National
support@stonegroup.co.uk
01785786786
https://www.stonerefurb.co.uk

Dell
National
DFS_Retail_Support@dell.com
03308082078
https://www.dellrefurbished.co.uk

Recycling IT equipment

Green IT Disposal
National
enquiries@greenitdisposal.co.uk
01619281144
https://www.greenitdisposal.co.uk

Dell
National
https://www.dell.com/learn/uk/en/ukcorp1/corp-comm/recycling-consumer-uk1

Revive IT
National
it@reviveit.co.uk
03332422545
https://www.reviveit.co.uk

More on how to dispose of electrical items:

Recycle Now
https://www.recyclenow.com/what-to-do-with/electrical-items-0

This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Examples of providers

Repairing IT equipment

Home Fix Computers
Middlesborough
contact@homefixcomputers.com
01642 712393
https://www.homefixcomputers.com

Eclipse ICT
Middlesbrough
info@eclipseict.co.uk
01642 688687
https://www.eclipseict.co.uk

Teesside Tek
Middlesbrough
teessidetek@gmail.com
07859 897698
http://www.teessidetek.co.uk

Aardvark Computer Repair
Darlington
07800 740505
http://www.aardvarkpcrepairs.co.uk

Performance Computers
Darlington
Support@performancecomputers.co.uk
01325 267333
http://www.performancecomputers.co.uk

Central Media
Stockton
01642 652888
https://www.centralmedia.co.uk

PC Tech Computers
Redcar
pctech.nigel@gmail.com
01642 481 888
http://www.pctechcomputers.com/

Kingfisher Computers
Hartlepool
https://www.kingfishercomputers.co.uk

The PC Guy
Regional
help@the-pcguy.co.uk
01642 564527
http://www.the-pcguy.co.uk

Reusable masks

Revolution Zero
National
https://www.revolution-zero.co.uk

Reusable medical equipment

RB Medical
National
01989 563958
https://www.rbmedical.co.uk

Re-sell medical equipment

Avensys Medical
National
info@avensysmedical.co.uk
01562 745 858
https://www.avensysmedical.co.uk/sales-storage/resale-service/

Outdoor furniture

Kedel
National
info@kedel.co.uk
01282 861325
https://www.kedel.co.uk

This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Examples of providers

Refurbished medical supplies

Seal Medical Supplies
National
sales@sealmedical.com
01159063000
https://www.sealmedical.com/collections/reconditioned-equipment

MC Medical
National
01482 620676
https://mcmedical.co.uk

GB Medical
National
sales@gbmedical.co.uk
01264 361578
https://www.gbmedical.co.uk

Avensys Medical
National
info@avensysmedical.co.uk
01562 745 858
https://www.avensysmedical.co.uk/product-category/pre-owned/

Medical equipment maintenance and repair

Avensys Medical
National
info@avensysmedical.co.uk
01562 745 858
https://www.avensysmedical.co.uk/engineering-services-repair-and-maintenance/

JD Medical
National
info@jdmedical.co.uk
0121 779 3741
http://www.jdmedical.co.uk/equipment-service-repair.html

NTH Solutions
National
enquiries@nthsolutions.co.uk
01642 383759
https://nthsolutions.co.uk/services/medical-equipment-servicing/

Williams Medical
National
01685 846666
https://www.wms.co.uk/Equipment_Repair

Stationery and office consumables

The Green Stationery Company
National
sales@greenstat.co.uk
01225480556
https://www.greenstat.co.uk

The Green Office
National
info@thegreenoffice.co.uk
0800 038 5744
https://www.thegreenoffice.co.uk

Paper

EnvoPAP
National
sales@envopap.com
020 8050 2725
https://envopap.com

Hot drinks

Steenbergs
National
01765 640088
https://steenbergs.co.uk

Bird and Wild
National
https://birdandwild.co.uk

Hampstead Tea
National
sales@hampsteadtea.com
01908583701
https://www.hampsteadtea.com

This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Examples of providers

Toiletries		Cleaning products	Donate medical goods
Cheeky Panda National alexandra.gros@cheekypanda.com (B2B enquiries) https://uk.cheekypanda.com	**Bumboo** National wecare@bumboo.eco https://www.bumboo.eco	**Smol** National help@smolproducts.com https://smolproducts.com	Donate surplus medical goods to rural health units in sub-Saharan Africa: **InterCare** https://intercare.org.uk
Who Gives a Crap National sales@whogivesacrap.org https://uk.whogivesacrap.org	**Bamboo Bobbi** National bobbi@bamboobobbi.co.uk https://www.bamboobobbi.com	**Biod** National info@biod.co.uk 01482 229950 www.biod.co.uk	
Naked Sprout National hello@nakedsprout.uk https://nakedsprout.uk			

This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Net-Zero Action Plan

What is a ‘Net-Zero Action Plan’?

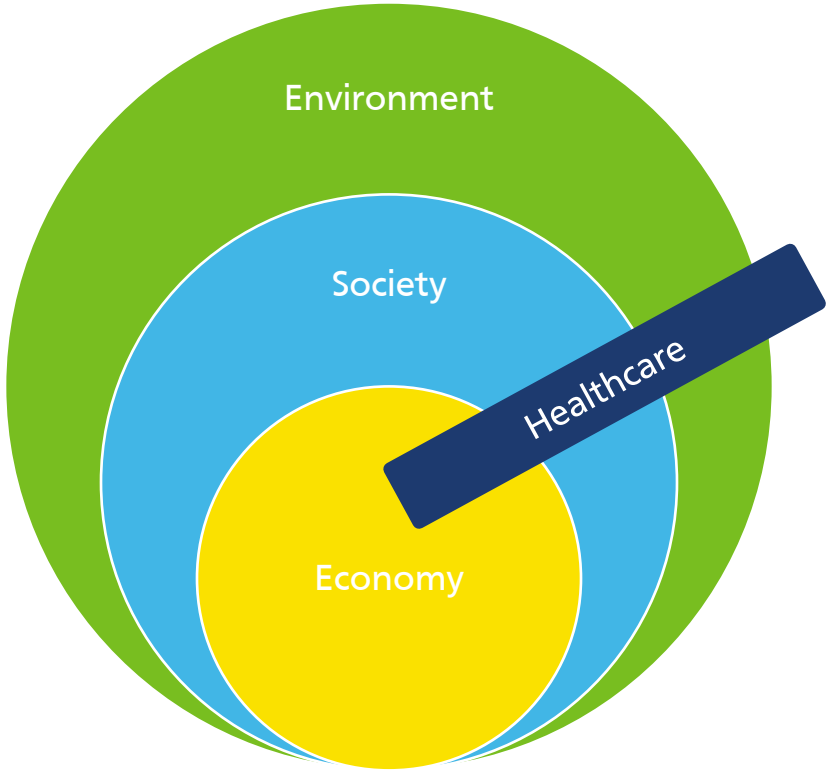
A Net-Zero Action Plan can cover as many areas as the practice wishes. However, the major hotspots for non-clinical emissions for primary care to include in their plan are:

- Energy,
- Travel for patients and staff,
- Business services including IT and waste,
- Procurement covering medical and office equipment and consumables.

BEFORE YOU START

What is already in place?
Look at the practice and identify good and great behaviour, ideas and systems that already exist.

Who needs to be involved?
Ultimately the aim is to involve all employees but at the start you need to decide who is best placed to lead the development of the practice plan.



Healthcare straddles all the above areas. It is influenced by the environment and impacts upon it; it is part of society, and it impacts on the economy both directly and indirectly.

Monitoring and measuring your impacts

As with all actions on a green action plan, you will need to build in a monitoring and measuring process to calculate how well your actions are leading towards your goals. This can fit with your annual QoF cycle.

Monitoring your actions is vital to make sure you are on the right trajectory and are on target to reach net zero as soon as feasible.

There are audit and other analysis tools available for each section of energy use, staff and patient travel, waste production, procurement and spend on business services.

There are plenty of carbon calculators and tools to use, such as SEE Sustainability, Compare Your Footprint or Smart Carbon – who offer a simple and cost-effective way for you to measure the carbon footprint of your practice. There is no need for external consultants or additional specialist knowledge.

TARGET SETTING

You can use SMART planning to have Specific, Measurable, Achievable, Realistic and Timely goals so you know the aims to achieve and by when.

IMPLEMENT YOUR PLAN

1. Use the audit tools to identify carbon emissions for each aspect of non-clinical emissions
2. Set a reduction strategy based on your priorities using SMART planning and
3. Complete the expandable guidance plan here.

See Frome Case Study as an example.

Visit SEE Sustainability for a downloadable action plan.

Develop your Net-Zero Action Plan

		Aim/target					
Area	Current footprint	3 years time		6 years time		9 years time	
		% reduction	How	% reduction	How	% reduction	How
Energy – electricity							
Energy – Gas							
Travel – staff							
Travel – patient							
Business services							
Procurement – Medical							
Procurement – Office							
Total							

Forms can be downloaded here.

Case study:
Frome Medical Practice Plan to reduce its footprint

Frome Medical practice have had its carbon footprint calculated and have worked on reducing their emission hotspots. An extract is below.

Area	Action
Measure Patient travel Staff travel (via travel survey completed in March) Energy Procurement	To work with SEE sustainability to measure our current carbon footprint, collate all data Spring 2021 and submit for analysis. To evaluate our report in summer 2021 and focus on any additional changes.
Staff travel	To look at plans to reduce carbon from travel to work through exploring alternatives, home working where appropriate. To measure NHS miles and reductions we can make through adoption of virtual meetings. Exploring electric bike and car options.
Patient travel	Promoting active transport. Encouraging less visits to the practice through telephone triage, video calls etc. Focusing on Chronic disease "one stop" clinics.
Procurement	Continued work to improve the knowledge of our supply chains and make improvements which reduce carbon.
Energy	To look at how we make the practice carbon neutral for energy. We currently have 100% renewable energy supplier and solar panels. The next step is look at alternatives with our landlord such as air source heat pumps.
Carbon literacy	To have a carbon literate workforce with 75% having completed training and working towards accreditation in this area so we maximise organisational impact and individual impact.

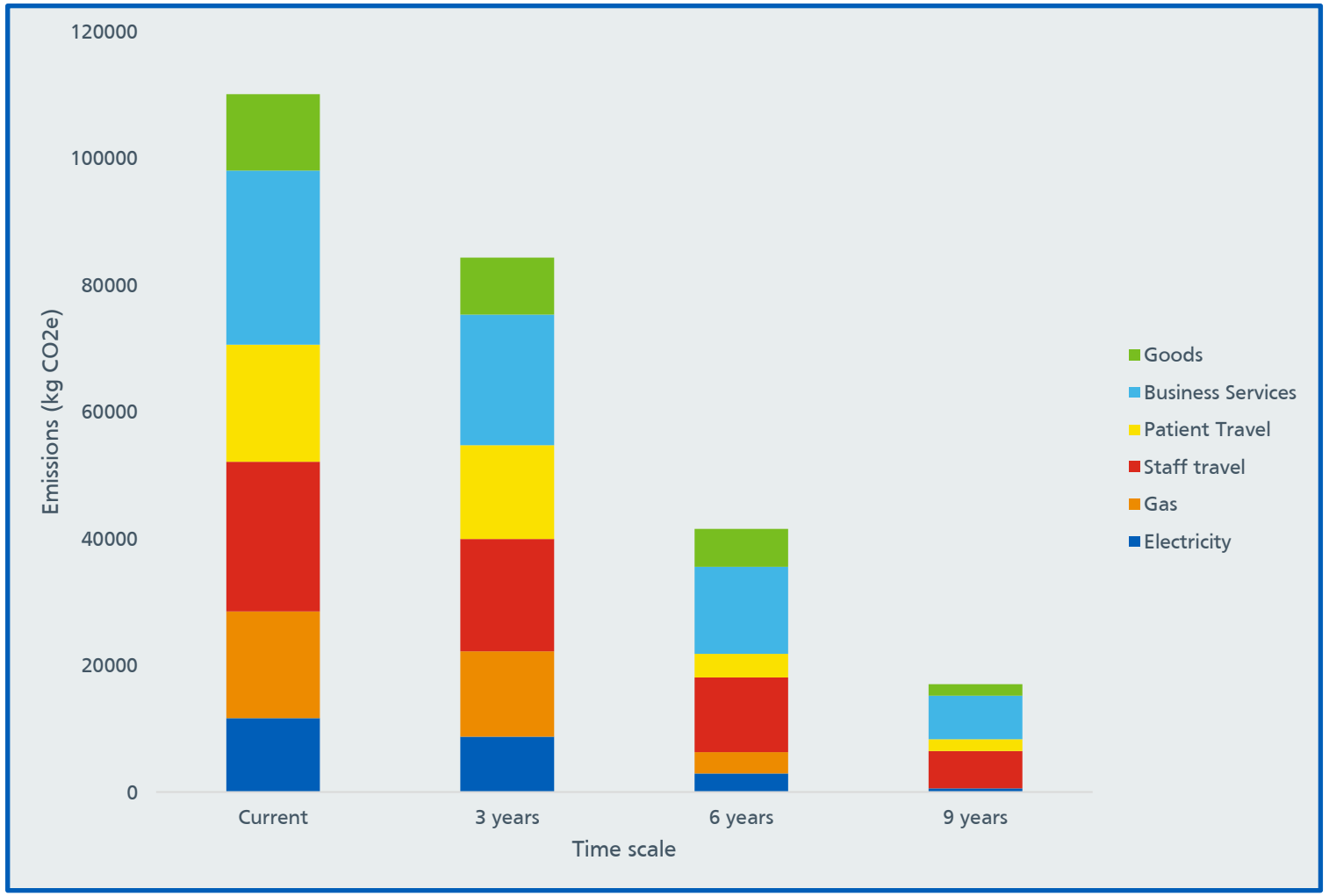
Source: www.fromemedicalpractice.co.uk/green-impact-policy

Example of a low carbon general practice

What could a practice look like in the process of decarbonising their non-clinical emissions?

		Aim/target					
Area	Current footprint (kg CO_2e)	3 years time		6 years time		9 years time	
		% reduction	How	% reduction	How	% reduction	How
Energy - Electricity	46,000 kg CO_2e	25% in use 100% green	Green team, behaviour change, energy audit. Change to 100% renewable.	50%	Install on site generation, more efficient equipment.	75%	Intelligent building management system for heating.
Energy – Gas	37,000 kg CO_2e	20% in use	Improved insulation, reduced losses.	80%	Replace with ASHP/GSHP.	100%	Gas free premises.
Travel – staff	46,000 kg CO_2e	25%	Incentivise those closest to walk or cycle.	50%	Actively encourage bike to work scheme, e-bikes, install facilities.	75%	Install EV charge point at surgery, encourage those who travel most to EV.
Travel – patient	24,000 kg CO_2e	20% in use	Promote walking scheme, actively push active travel.	80%	Look at practice boundary, install EV charge point for patients.	90%	Arrange with local bus service re requirements.
Business services	30,000 kg CO_2e	20% in service use 25% fall in carbon	Identify services which are no longer needed. Use lower carbon services in the biggest hotspots.	50% reduction in carbon	Actively identify further low carbon services; using only services with a decarbonisation plan in place.	At least 75% reduction in carbon	Use only carbon neutral suppliers for all new suppliers. Audit and press current suppliers to achieve carbon neutrality.
Medical procurement	24,000 kg CO_2e	25%	Audit and identify medical equipment and consumables. Manage stock better.	50%	Identify alternative clinical pathways to reduce single use.	75%	Identify reusable medical equipment; remove single use; 100% at end of life to refurb service.
Office procurement	20,000 kg CO_2e	20% in use	Paper free with digital as default for communication.	50%	Use recycled equipment as default via Warp-it etc.	100%	Remove all single use materials; only use suppliers with net zero policy.
Total	227,000 kg CO_2e						40,900 kg CO_2e – 82% reduction

Carbon reduction analysis



Implementing actions now leads to benefits both now and in the future.

Reducing non clinical carbon emissions as per the previous plan and using average practice emission data, a reduction at each 3 year review point is shown.

Over 9 years, a reduction of 80-90% is achievable while maintaining high quality patient care.

How to use your influence

Anna Lappe is quoted as saying "Every time you spend money, you're casting a vote for the kind of world you want". We can use our practice purchasing power for our energy, business services and procurement.

In addition to the power of our choices, we also have the power of our voices, and this is another one that we underestimate.

- Use your voice – ask your suppliers for better, demand change.
- Seek our suppliers who have measured their footprint and who have put in place positive changes
- Tweet brands and retailers to let them know if you're not happy with something (and indeed if you're really happy with something!).

We already influence our patients through our work, but we can use our trusted voices to help reduce carbon emissions for our practice, our staff, our patients and their families and the wider community we work in.

Tell others if you declare a climate emergency as a practice. Help to declare is here.

Climate change is 'odd' as a challenge as we are all the villains but also all are potentially the heroes.

It's why it can be such a hard sell as it requires everyone to look inward as well as outward.

Summary

What can I do first?

1. Measure your emissions
2. Set a decarbonisation target to zero
3. Make an action plan and take action

What could I prioritise?

1. Reduce energy use and decarbonise what is used
2. Make active travel default choice for staff and patients and decarbonise the rest
3. Reduce all procurement and use low carbon options for what is used

Further support

You are not alone in your journey! There are many others taking these steps and a lot of guidance is available on these issues.

- SEE Sustainability, Resources for primary healthcare: seesustainability.co.uk/blog/f/useful-sustainability-resources-for-primary-healthcare
- Carbon Literacy Project: carbonliteracy.com
- Centre for Sustainable Healthcare: sustainablehealthcare.org.uk/courses
- Doctors for Extinction Rebellion: doctorsforxr.com
- Green action plans: sap.sustainablehealthcare.org.uk
- Greener NHS: www.england.nhs.uk/greenernhs/
- Greener Practice: greenerpractice.co.uk
- Health Care Without Harm, Global road map for health care decarbonization: healthcareclimateaction.org/roadmap
- Health Declares: healthdeclares.org/
- The Lancet, The public health implications of the Paris Agreement: a modelling study: thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30249-7/fulltext
- UK Health Alliance on Climate Change, Carbon Literacy guide: ukhealthalliance.org/carbon-literacy-guide
- Green Impact for Health: www.greenimpact.org.uk/GIforHealth
- Clean Air Framework www.globalactionplan.org.uk/business-clean-air-taskforce/business-for-clean-air

Who are SEE Sustainability?

"My vision: for all GP practices to become carbon literate, have a green action plan in place and declare a climate emergency."

I'm Dr Matt Sawyer, a GP in the Northeast of England and the founder of SEE Sustainability, an environmental consultancy focusing on the decarbonisation of small and medium sized businesses with specific expertise in the health service and primary care.

I split my time between general practice and sustainability consultancy, working with primary care trusts and surgeries to develop their 'net zero plans' and help identify financial savings along the way.

I also deliver regular climate literacy training and have a host of on-demand training courses online.

Contact

info@seesustainability.co.uk

@SEESustainabil1

seesustainability.co.uk

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