

Sustainability in Optical Practice

Nottinghamshire LOC Update



Why does my practice need to think about Sustainability?

- ❑ Your patients increasingly expect businesses that they frequent to be Green
- ❑ Reducing waste is good for the environment , and saves you money
- ❑ Future government legislation will come into effect – make a head start
- ❑ A more attractive workplace for colleagues and future recruits

How your LOC can help

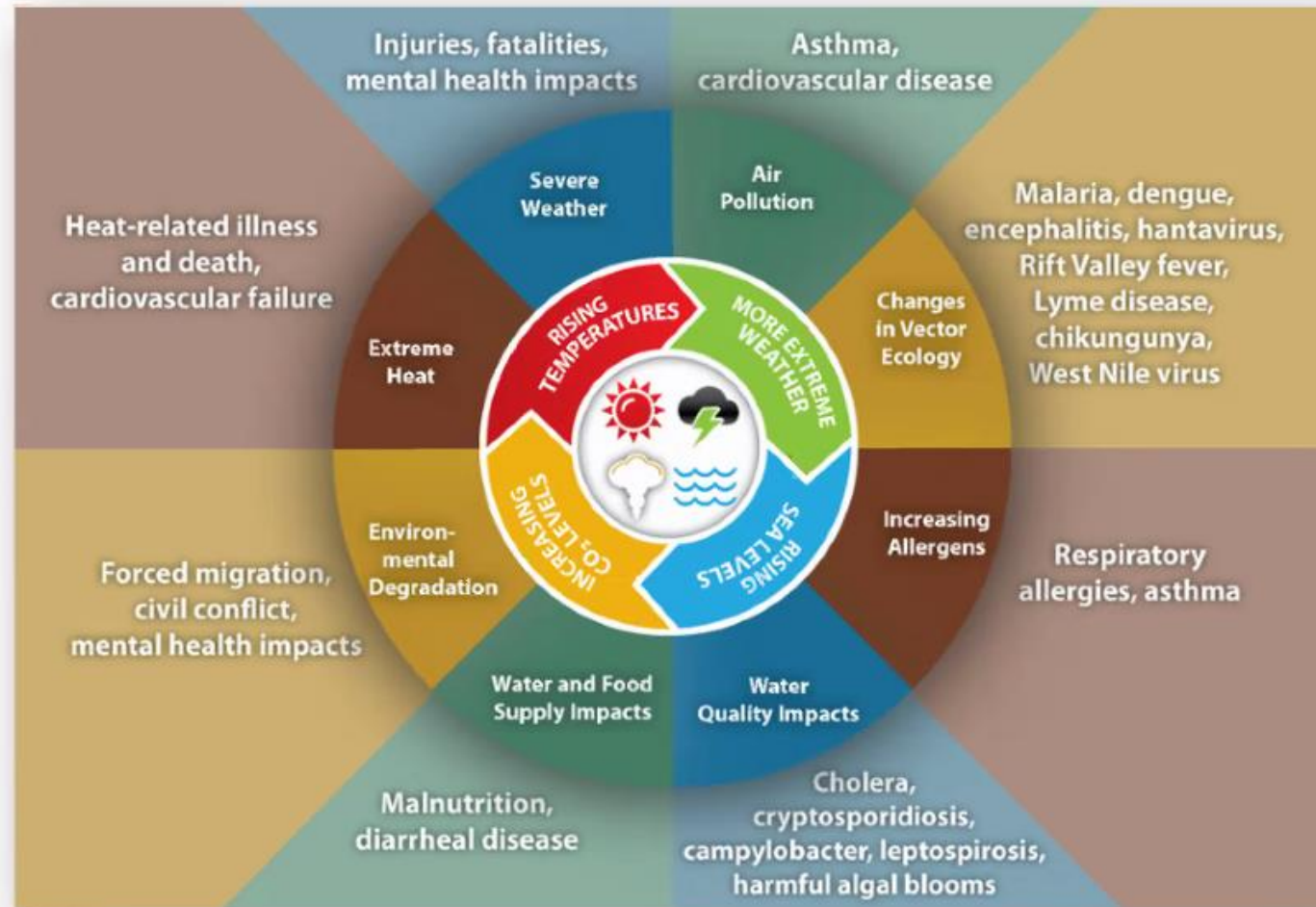
1. Created a new role : Sustainability Champion (Tony Harvey)
2. Updates with 'Hints and Tips' and best practice
3. Linking with ABDO nationally through the SEE summit
4. Sustainability tool for self-assessment of your practice
5. Links with other LOCs through LOCSU
6. Support for Greener NHS

Appendices

- ❑ Why a Net Zero Health Service? (slide 5)
- ❑ The carbon footprint of NHS sight tests -Cheshire LOC commissioned study at 5 practices (slides 6-8)
- ❑ The NHS carbon footprint (slide 9)

Why a Net Zero Health Service?

The Climate Emergency is a health emergency



The Annual Carbon Footprint of NHS Sight Tests at Five Optometry Practices

The Centre for Sustainable Healthcare in partnership with

- NHS England
- NHS Improvement (Cheshire & Merseyside)
- Cheshire Local Optical Committee

Feb 2022

Background

- Climate change can exacerbate eye health conditions.
- Eye health services are often resource intensive; consumables, energy consumption and travel requirements contribute to rising greenhouse gas (GHG) emissions.
- If the NHS is to achieve net zero by 2045, services commissioned from the private sector must not be ignored.
- Until now the carbon footprint of NHS sight tests has been unknown.

Aims

1. Analyse the annual carbon footprint of NHS sight tests at five fixed site optometry practices in the North West.
2. Estimate the average carbon footprint of an NHS sight test. Develop recommendations for reducing GHG emissions associated with NHS sight tests.

Methods

In 2020, five optometry practices in the North West performed a total of **25,745 sight tests**. Annual resource use was measured retrospectively across all five practices.

Practice Type	Location	No. sight tests
1 – independent	Cheshire	1,053
2 – independent	Cheshire	1,400
3 – chain	Merseyside	20,172
4 – independent	Cheshire	1,120
5 – independent	Merseyside	2,000

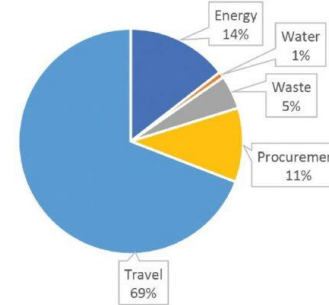
Resource	Metric
Electricity & gas	kWh or invoice cost
Water	m ³ or invoice cost
Waste	Tonnes per waste stream
Staff travel	Miles travelled per week
Patient travel	Average miles travelled per week
Procurement	No. bought annually or amount spent (£) on item annually

Resources were measured for the whole practice then apportioned to sight tests. 15% of medical procurement items incl. minims and fluorets were allocated under the assumption that items are used less frequently in sight tests compared to other services.

A **hybrid approach** was used to estimate the carbon footprint by converting resource use into GHG emissions. Majority of the carbon footprint was based on a process-based analysis, Environmentally Extended Input Output Analysis (EEIOA) was used for the procurement items due to time constraints.

Results - Annual Carbon Footprint

The annual carbon footprint of 25,745 sight tests performed by five optometry practices in 2020 was estimated at **135,573 kgCO₂e** or approximately the equivalent of flying return from London to Hong Kong 39 times.



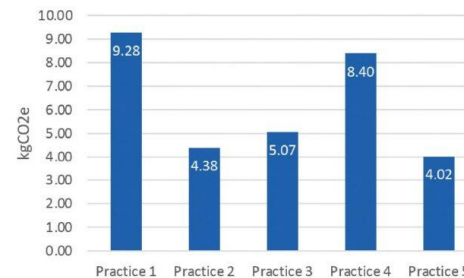
Travel contributes the largest (69%) proportion of emissions, adding 93,726 kgCO₂e with staff commuting contributing 48,063 kgCO₂e and patient travel contributing 45,662 kgCO₂e.

Energy is the second largest contributor (14%) adding 19,667 kgCO₂e, with electricity adding 15,957 kgCO₂e and gas adding 3,710 kgCO₂e.

Procurement adds 14,437 kgCO₂e (11%), waste adds 6,576 kgCO₂e (5%), and water adds 1,167 kgCO₂e (1%).

Results - Carbon Footprint per NHS Sight Test

The carbon footprint of an NHS sight test is estimated to range from 4.02 kgCO₂e to 9.28 kgCO₂e. Taking the annual number of sight tests performed and the annual carbon footprint across all practices into account, the **average carbon footprint per sight tests is estimated to be 5.27 kgCO₂e**.



Recommendations for Optometry Practices and Optometrists

General

1. Share results with your practices
2. Monitor your carbon footprint
3. Set up a green team
4. Collaborate with other practices

Travel

1. Undertake a travel survey
2. Car share
3. Encourage active travel
4. Promote sustainable travel information to patients
5. Combine appointments
6. Consolidate deliveries

Energy & Waste

1. Upgrade to energy efficient buildings and equipment
2. 'Switch off' campaign
3. Install smart meters
4. Undertake a waste audit
5. Recycle frames

Procurement

1. Offer paperless sight tests
2. Include sustainable spectacles in your offer
3. Ask suppliers to reduce packaging and make packaging recyclable

Recommendations for Commissioners of sight tests

1. Ensure commissioned optometry services are involved in Greener NHS plans and discussions
2. Encourage collaboration between NHS England, optometry professional bodies and optometrists
3. Consider travel and accessibility when commissioning new optometry contracts, ensuring that services commissioned are accessible by active or public transport

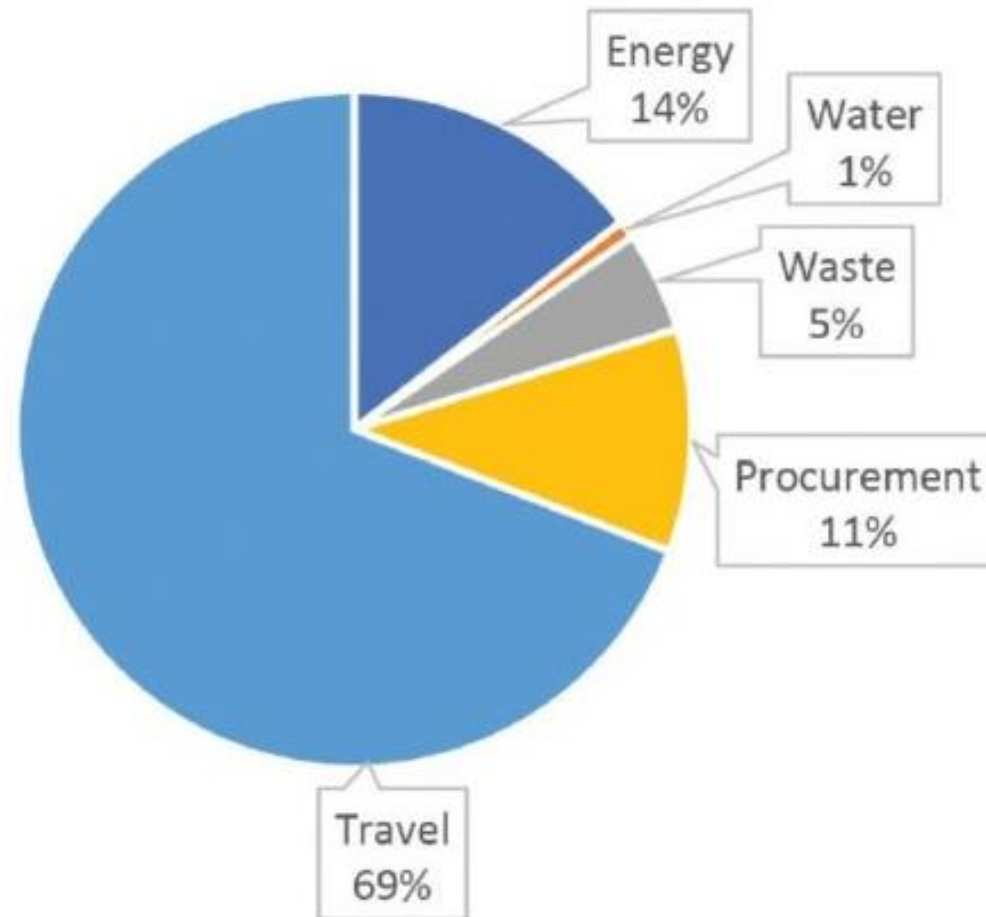
Limitations & Further Research

- Small sample size
- Based on one region of England
- Retrospective data lead to differences in accuracy. Prospective data would ensure greater accuracy.

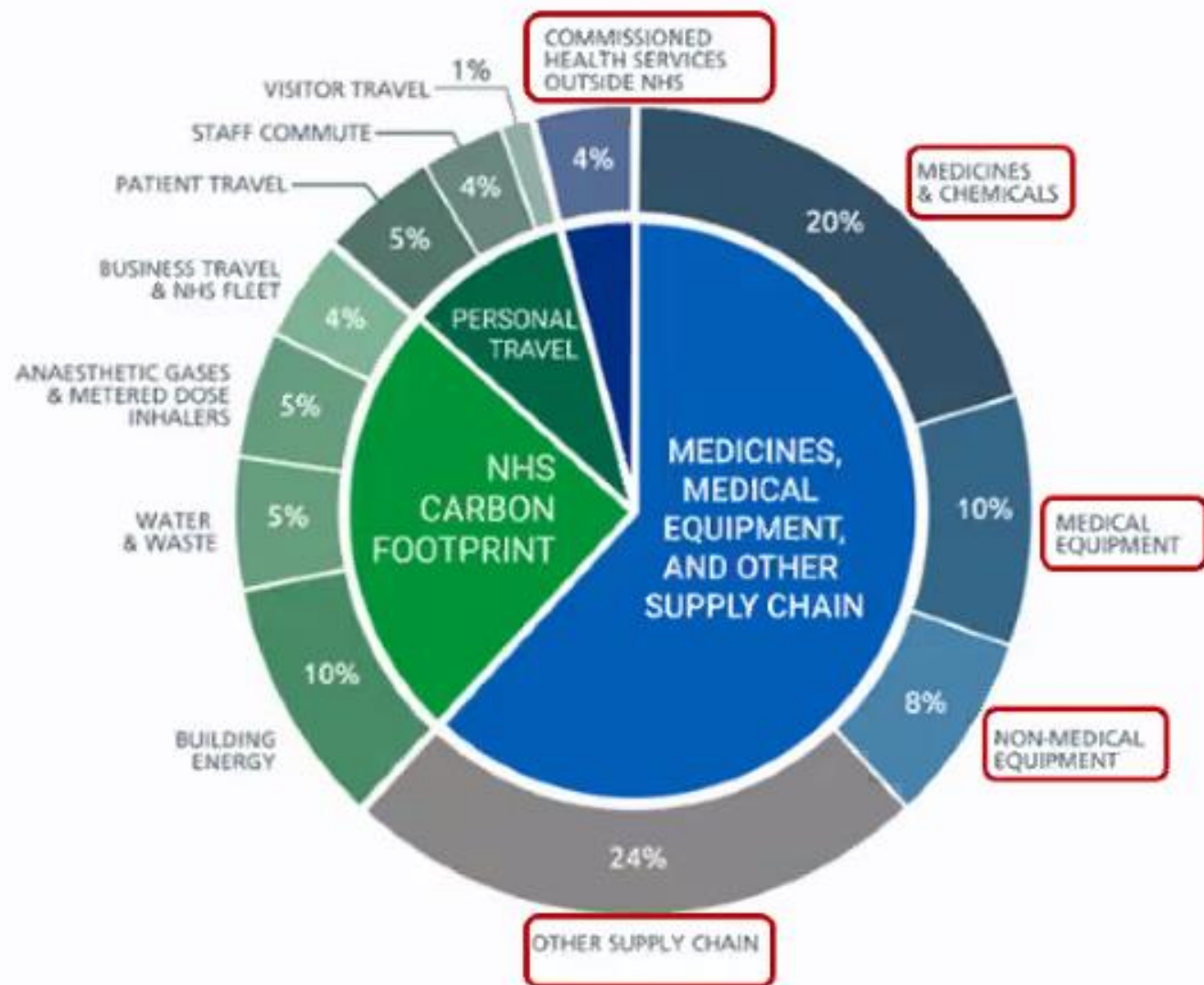
Additional NHS commissioned eyecare services should be evaluated to understand the full GHG emissions impact of the high street optometry sector.

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The NHS Carbon Footprint



Need advice ?

- Contact Tony Harvey at tharvey@abdoregions.org.uk