A 'How to' Guide for measuring the carbon footprint of general practice

For a practice to have their carbon footprint calculated, the data held within the practice can be analysed.

Why?

The Climate Change Act 2008 sets legally binding targets for the UK to take action to reduce carbon dioxide equivalent emissions by 100% by 2050.

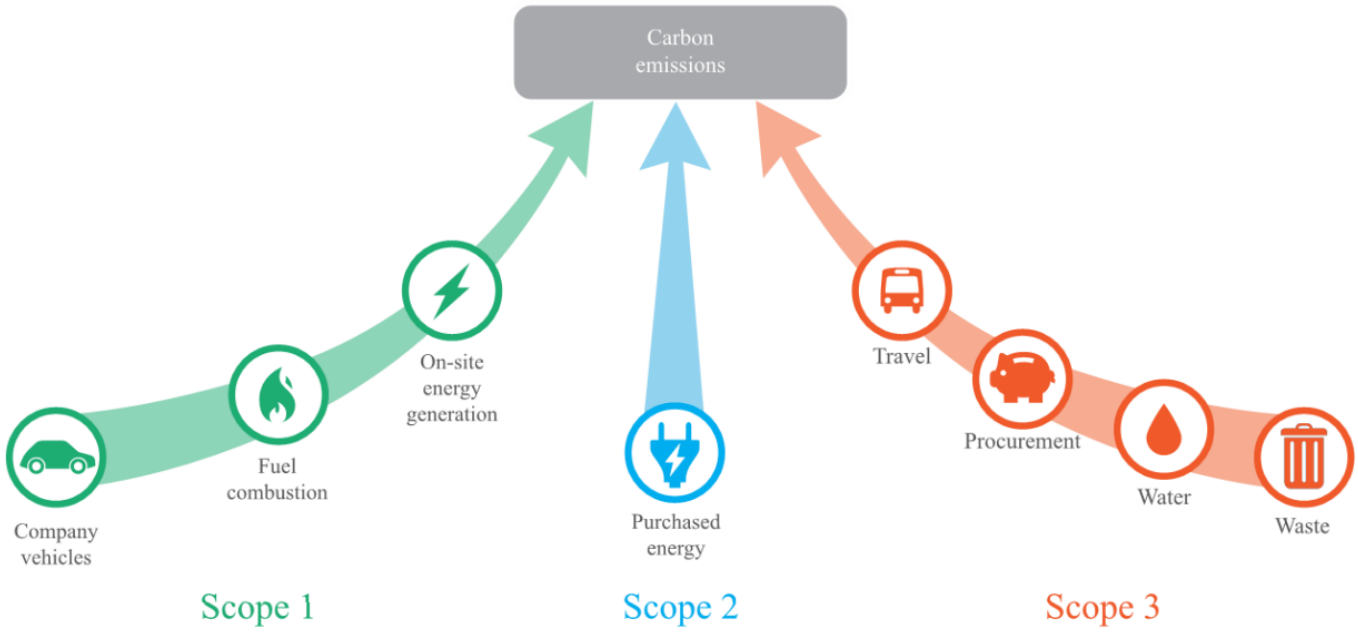
According to The Lancet, climate change is "the biggest global health threat of the 21st century". Our business is health, and we have a moral duty to act on health threats, to manage long-term strategic risk and to mitigate future demand on the health service

What is a carbon footprint?

The carbon footprint is the sum of all the direct and indirect greenhouse gas emissions (Carbon dioxide (CO_2), methane, nitrous oxide (e.g., Entonox), hydrofluorocarbons (in fridges and inhalers), perfluorocarbons and sulphur hexafluoride) attributable to a given process, product or organisation. This is usually written as 'CO_2e' or 'carbon dioxide equivalent.

What are the components of a carbon footprint?

A carbon footprint is split into 3 areas



- Scope 1 – gases used by the business e.g., gas for heating, hydrofluorocarbons for fridges, company vehicle emissions
- Scope 2 – electricity bought for use on site
- Scope 3 – everything else e.g., all purchases, waste, water etc

How to measure the carbon footprint of a practice?

Data is collected from invoices etc. I will attend the practice and use excel to record the information by month for a whole year. Once collected, conversion factors are applied to each aspect, and a total obtained.

Data for Scope 1 and 2 is easy to find/record.

- The information on the gas and electric bills show the amounts used.
- If there has been servicing of the fridges and they have been 'regassed', then the type of gas and volume should be recorded.
- The assumption is there are no business vehicles owned/run by the practice, but if there are, then amount of fuel used over the year will be recorded

Scope 3 is more complex, but can be broken down into the following areas

- Office supplies
- Clinical supplies
- Food and drink
- Professional services
- Waste
- Staff and business travel
- Water
- Electrical equipment
- Patient travel

On Excel, data is collected across 5 areas

- Area 1 – Basic practice characteristics
- Area 2 – How much gas and electric are used? Information found on the bills
- Area 3 – What does the practice spend money on? Using procurement invoices, a table for each invoice/money spent is completed.
- Area 4 – Staff travel. Staff postcode, method of travel (Car/Walk/Cycle/Bus) and number of days worked. Note if cars are electric.
- Area 5. Patient travel can be calculated from their post codes from the clinical system looking at number of patients attending across the year on given days

Once the tables are completed,

- Conversion factors are applied for each item/ category to convert to CO_2e
- The carbon footprint of staff travel is calculated
- Prescribing data (e.g. Inhaler prescriptions collected from openprescribing.net) and expenditure is converted into CO_2e
- The carbon footprint for the whole practice is calculated.
- Any assumptions made are recorded
- Methods to reduce the practices' carbon footprint are demonstrated