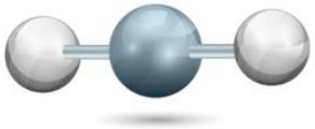
Carbon Literacy

By Ioana Sovago

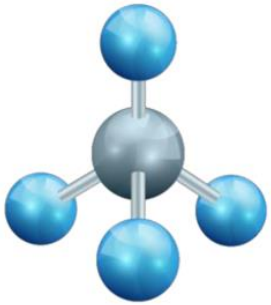
Global warming potentials

Oil
Cement
Coal
Gas
Deforestation



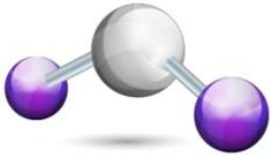
Carbon dioxide CO_2

Livestock
Organic waste



Methane CH_4

Fertilisers

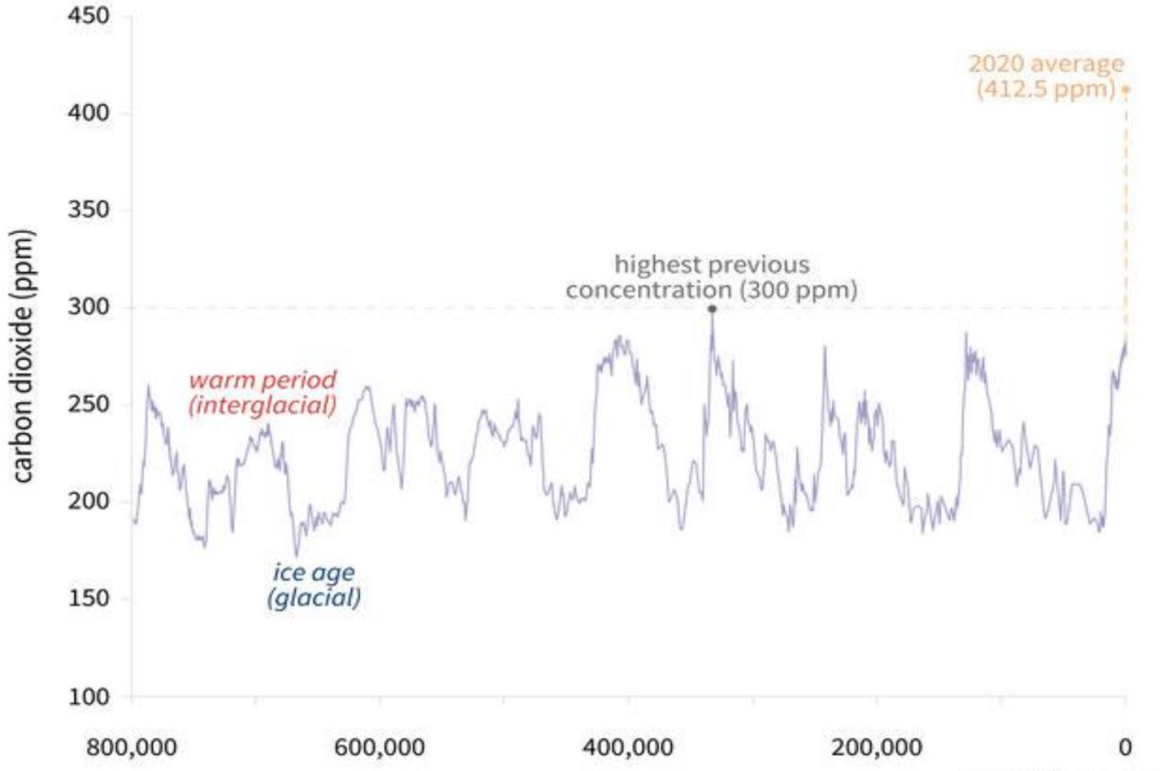


Nitrous Oxide (N_2O)

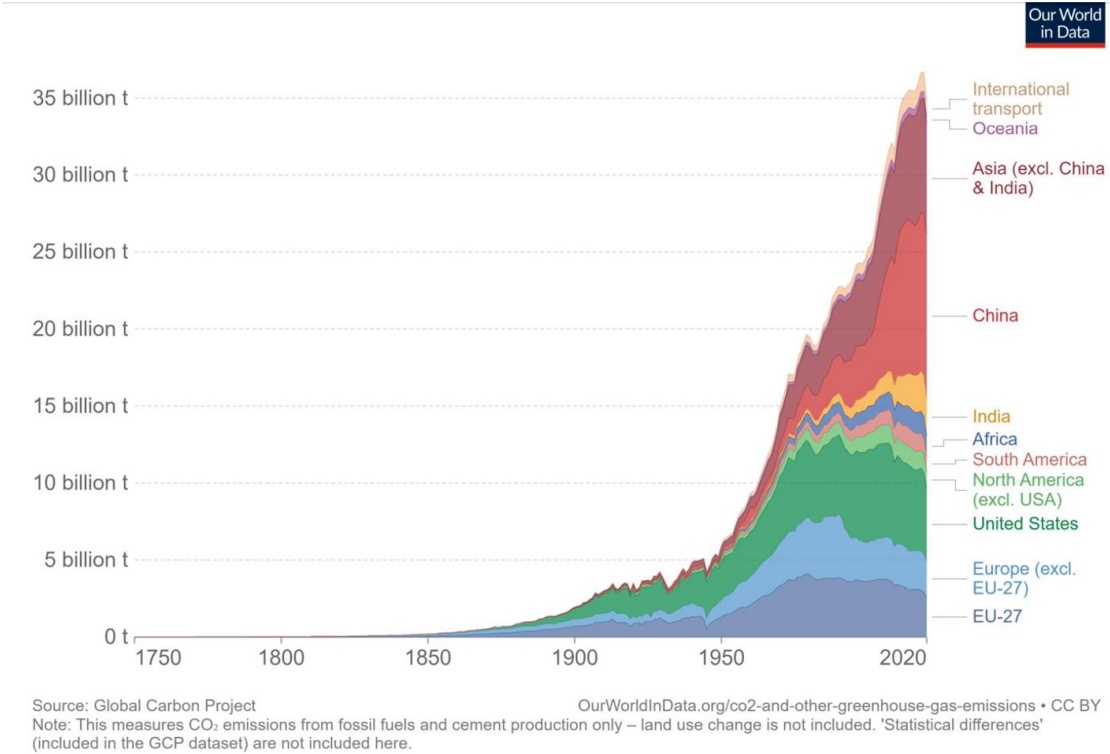
Aerosols
Refrigerators

F gases

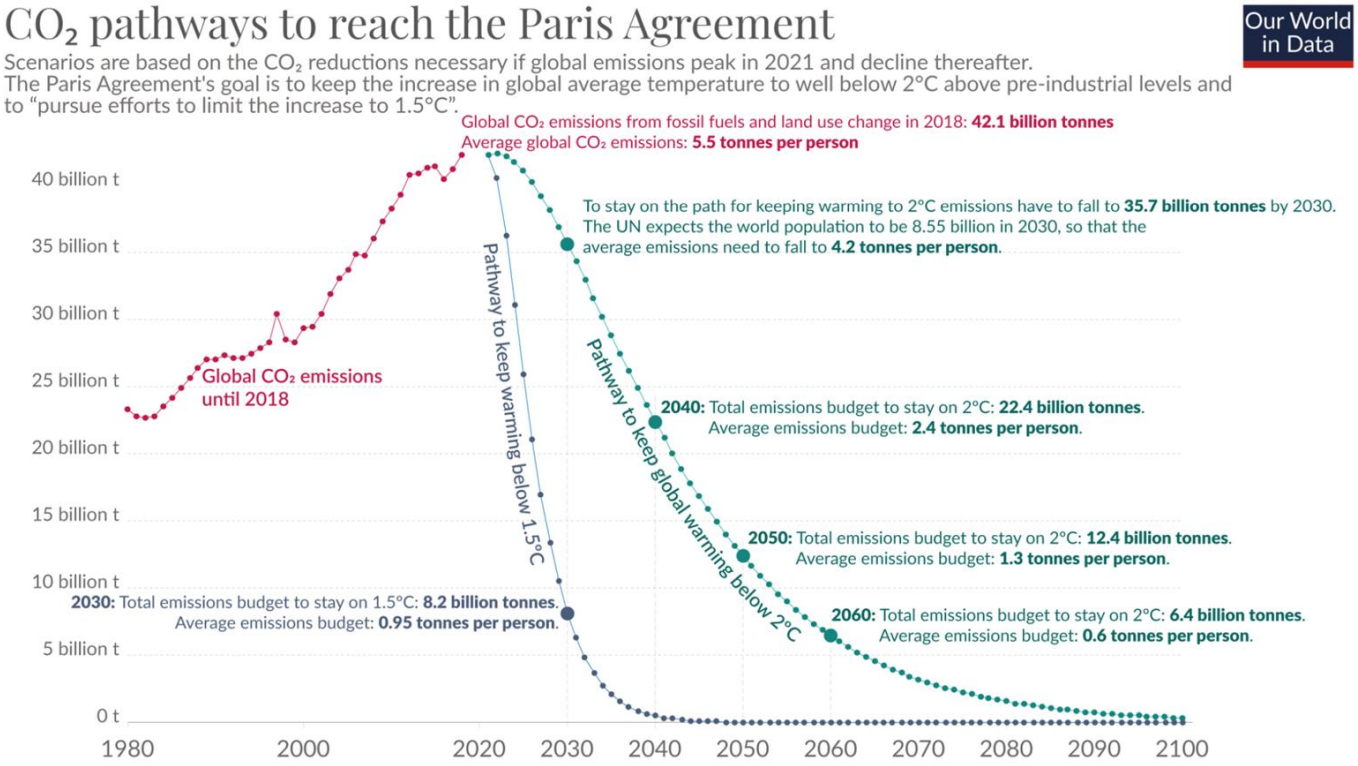
Level of CO_2 over the past 800,000 years



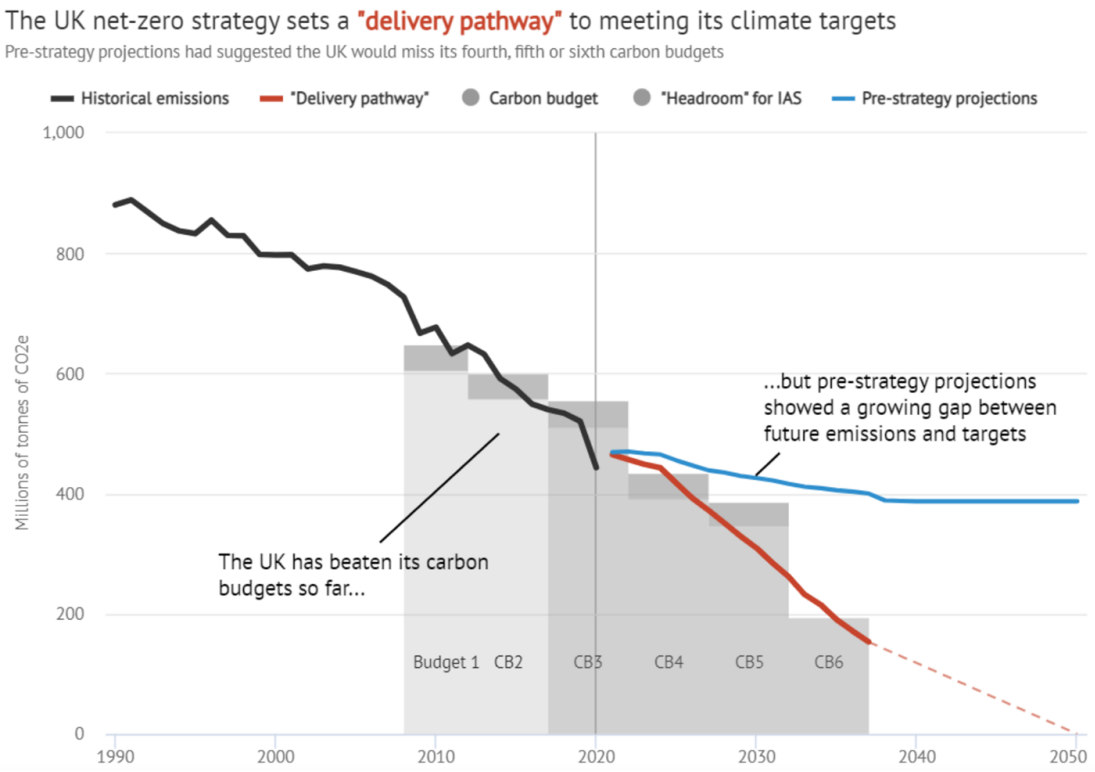
Total emission over time



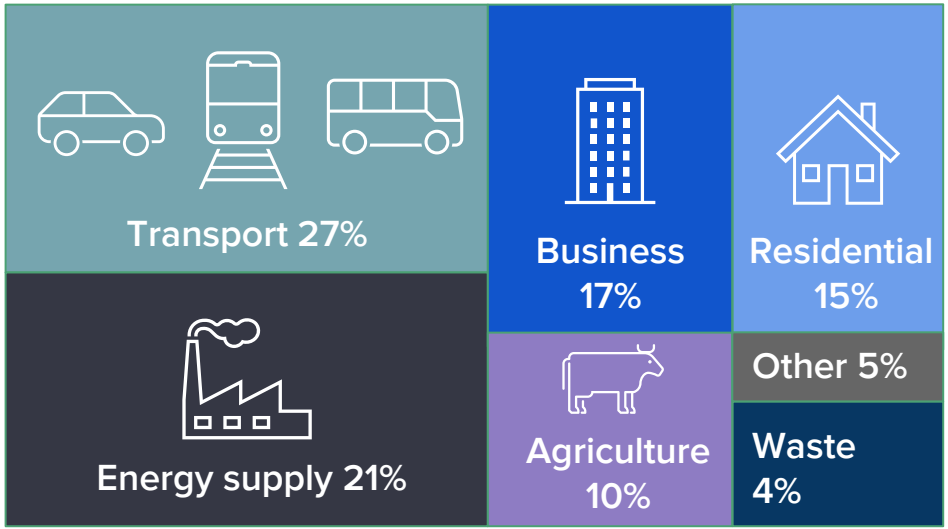
Paris agreement



Current UK progress



UK Greenhouse emission



Cambridgeshire's footprint

https://impact-tool.org.uk/

Cambridgeshire

17.8t CO_2e*

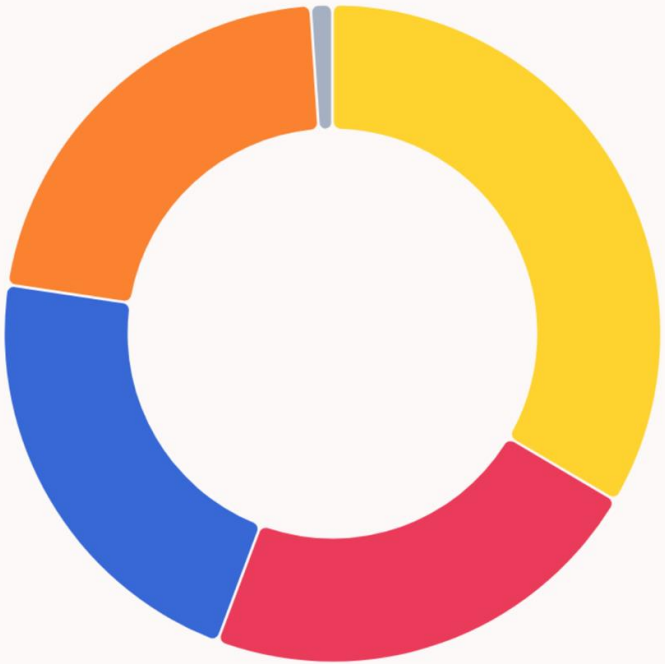
per-household consumption footprint (p.a.)

EMISSIONS BREAKDOWN (t CO_2e)

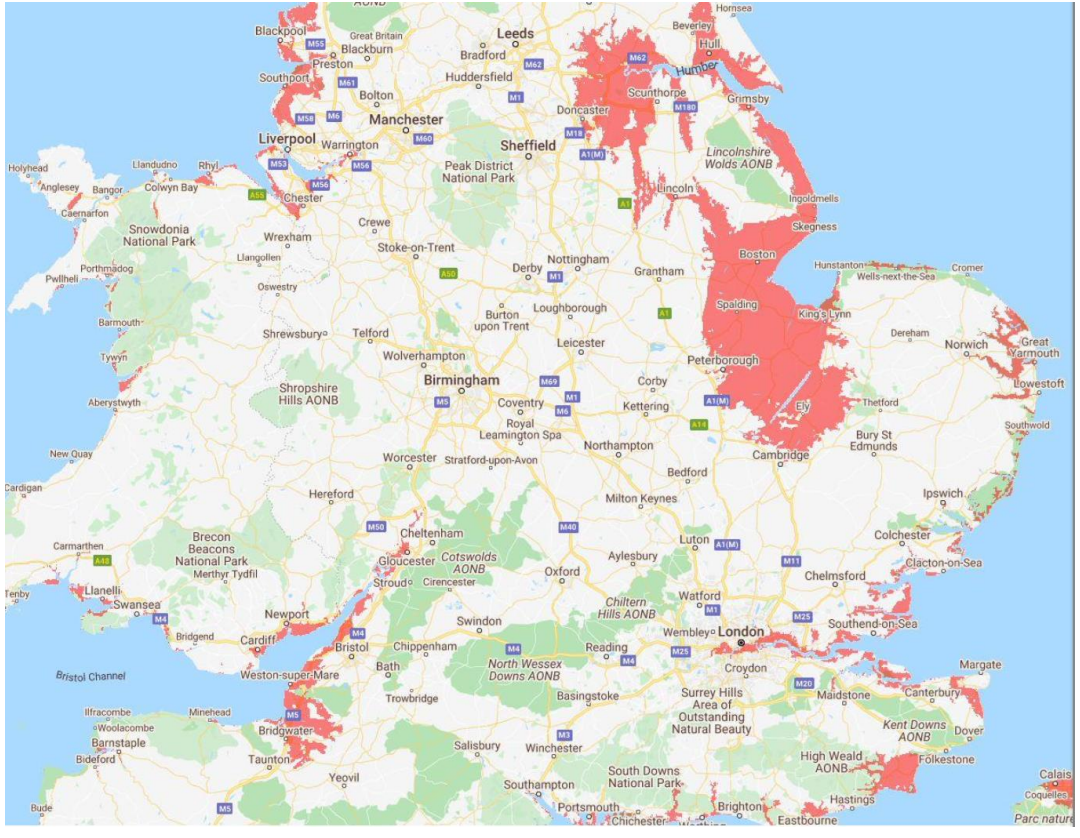
Consumption of goods and services	5.97
Housing	3.96
Travel	3.86
Food and diet	3.84
Waste	0.19

PDF Report

*CO_2e stands for "carbon dioxide equivalent" and is a standard unit of measurement in carbon accounting. It expresses the impact of a number of different gases collectively as a common unit.



UK risk areas

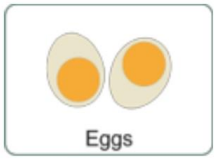


Carbon Footprint per food

1

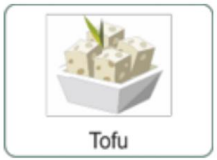
0.2 kg

2



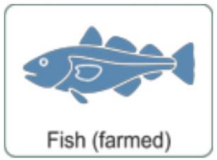
0.3 kg

3



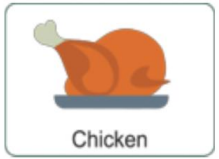
0.6 kg

4



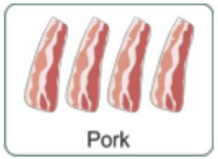
1.5 kg

5



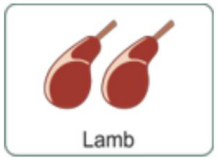
1.7 kg

6



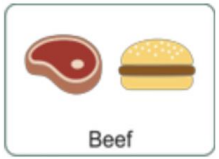
2.3kg

7



5.67kg

8



10.5kg

Food: greenhouse gas emissions across the supply chain

Our World in Data

Land Use Change | Farm | Animal Feed | Processing | Transport | Retail | Packaging

Above-ground changes in biomass from deforestation, and below-ground changes in soil carbon

Methane emissions from cows, methane from rice, emissions from fertilizers, manure, and farm machinery

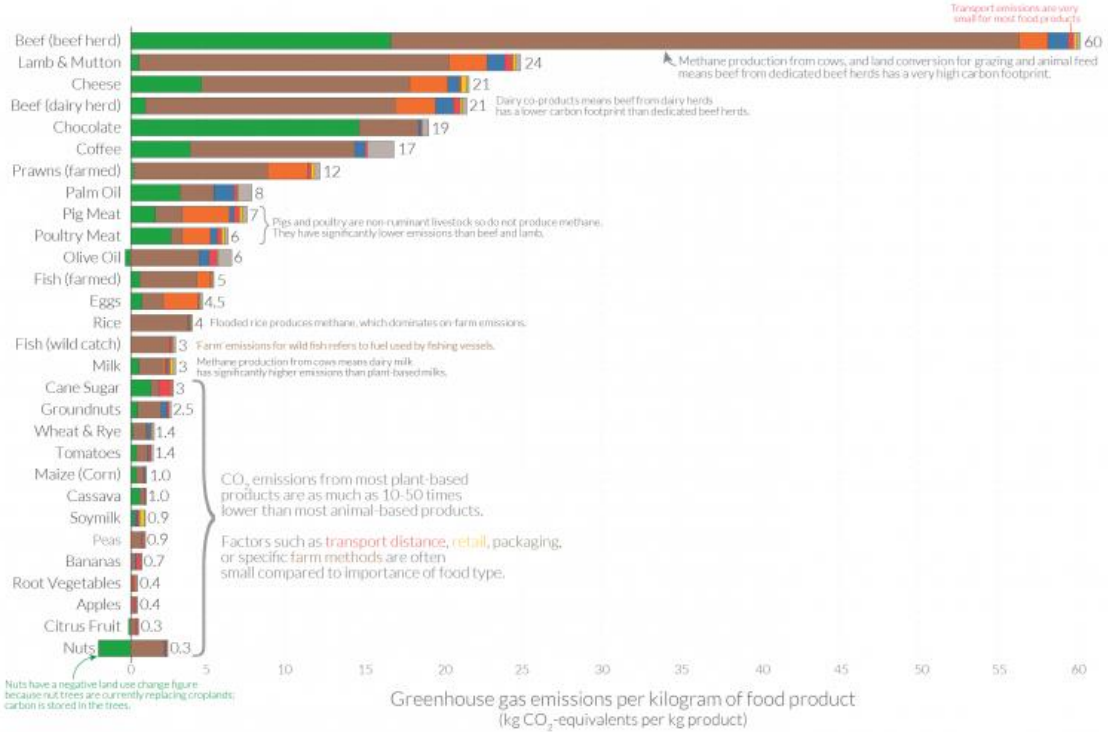
On-farm emissions from crop production and its processing into feed for livestock

Emissions from energy use in the process of converting raw agricultural products into final food items

Emissions from energy use in the transport of food items in country and internationally

Emissions from energy use in refrigeration and other retail processes

Emissions from the production of packaging materials, material transport and end-of-life disposal



Note: Greenhouse gas emissions are given as global average values based on data across 38,700 commercially viable farms in 119 countries.
Data source: Poore and Nemecek (2018). Reducing food's environmental impacts through producers and consumers. Science. Images sourced from the Noun Project.

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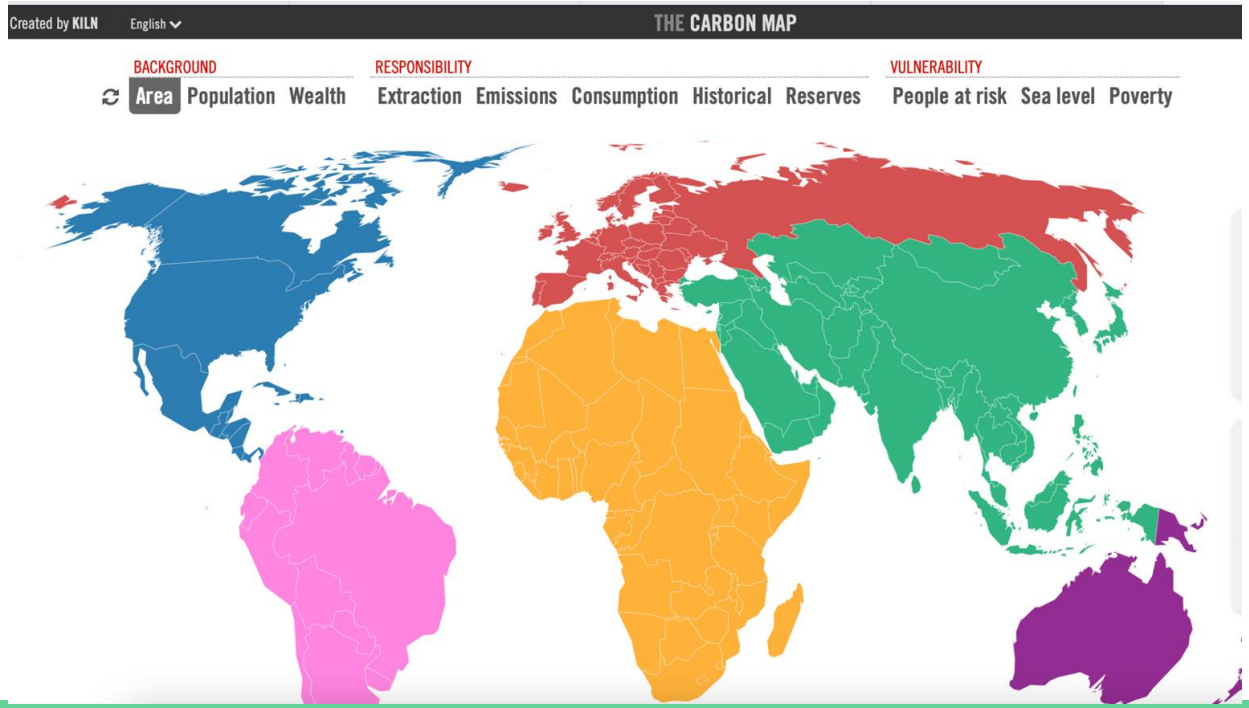
Carbon Map

https://www.carbonmap.org/



Carbon Footprint

https://footprint.wwf.org.uk/#/

Why Carbon Literacy in our Council

- Our value
- Influence/impact
- Duty/ethics
- Political and social will
- Government and sectoral targets
- Financial savings

What role the Town Council have?

1. Leading by example
2. Statutory and regulatory responsibilities/powers
3. Community leader and collaborator
4. Local and neighbourhood planning
5. Educator- sharing examples of good practice
6. Lobbying for policy changes and funding
7. Enabling practical action by local people

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Leading by example

Statutory and regulatory responsibilities/powers

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Educator- sharing examples of good practice

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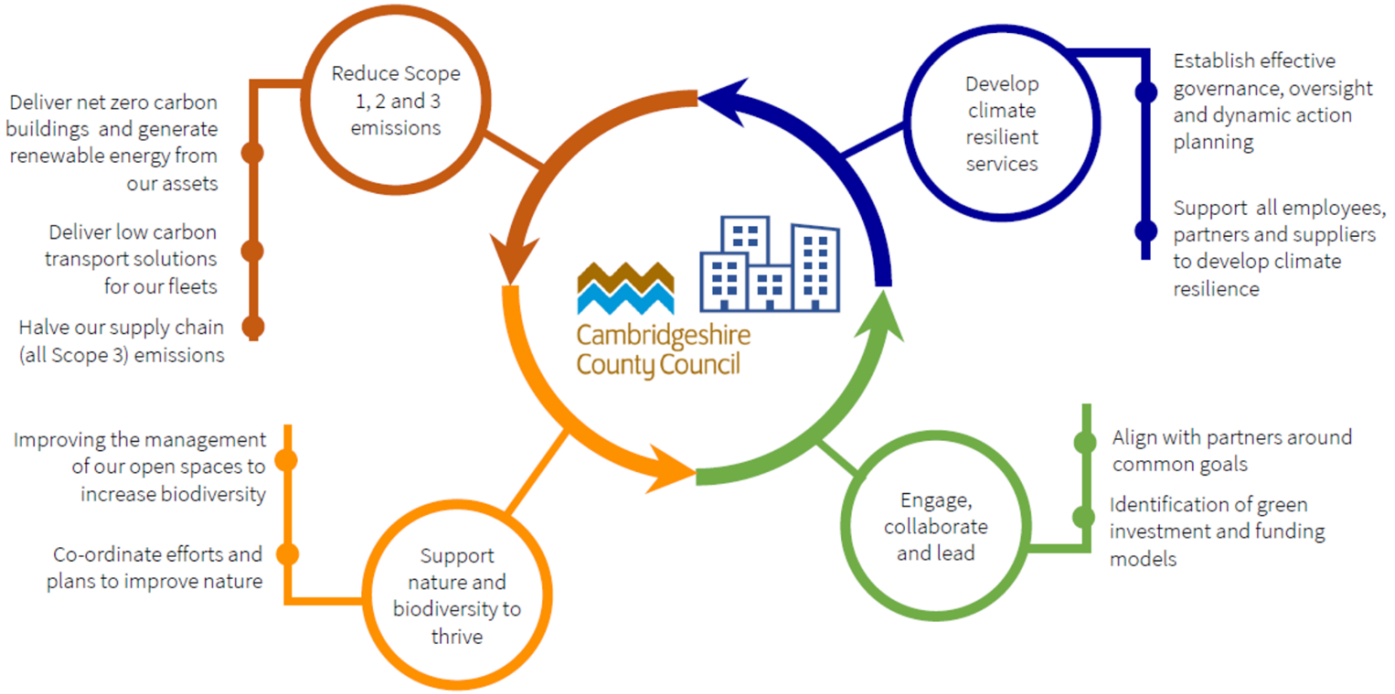
Enabling practical action by local people

Net Zero Cambridgeshire 2045

To halve emissions from our supply chain and operate our buildings and fleets with net zero emissions by 2030, the **Council** will deliver against these priorities



Net Zero Cambridgeshire 2045

Key targets the Council will need to work towards in order to ensure we are on track for carbon reductions and improving nature

2022

Finalisation of the Council's Net Zero programme and resourcing plan to deliver net zero ambition.

Communication and engagement Plan agreed.

Please click here for the Council's Action Plan (link)

2023

Milestone:
50% carbon emissions reduction for the Council's scope 1 & 2 carbon footprint

Milestone:
Agree with partners a shared science-based carbon reduction target for Cambridgeshire to drive collective action

Milestone:
Final Biodiversity Audit, Strategy & Objectives

2024

Embed environmental value in decision making

All -buildings owned and occupied by the Council have fossil fuel free heating.

The Council has transition plans to Net Zero in place for all its fleet vehicles

Planning for 2030 – 2045

TARGET:
Understand and grow our natural capital account to benefit people and nature by 2025

2025

TARGET:
The Council will reduce emissions from our buildings and fleet transport to net zero by 2030 (scopes 1&2)

TARGET:
The County Council will reduce its supply chain emissions (all scope 3) by 50.4% by 2030

TARGET:
Improve our Biodiversity across Council estate by 2030

2030

TARGET:
Cambridgeshire carbon emissions will be net-Zero by 2045

TARGET:
Support our communities and businesses to decarbonise by 2045

TARGET:
All Council buildings and infrastructure to be resilient to climate change impacts by 2045

Grant funding

- Community Energy England
- Rural Community Energy Fund
- Heat Networks Investment Project
- Electric Vehicle Charging Grant Schemes
- National Lottery
- Community Funds

What can we do?

- Switch to LED
- Recycle
- Switch to renewable energy provider
- Double or triple glaze
- Smart meters

Solar panels

https://solartogether.co.uk/landing

Community engagement

- What low carbon initiatives would be popular with local people?
- Does it align with local concerns?
- How does it benefit the local community?
- Who do we need to get involved to make this work?