



Climate Emergency Information & initial baseline results

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Sefton Council 

Today

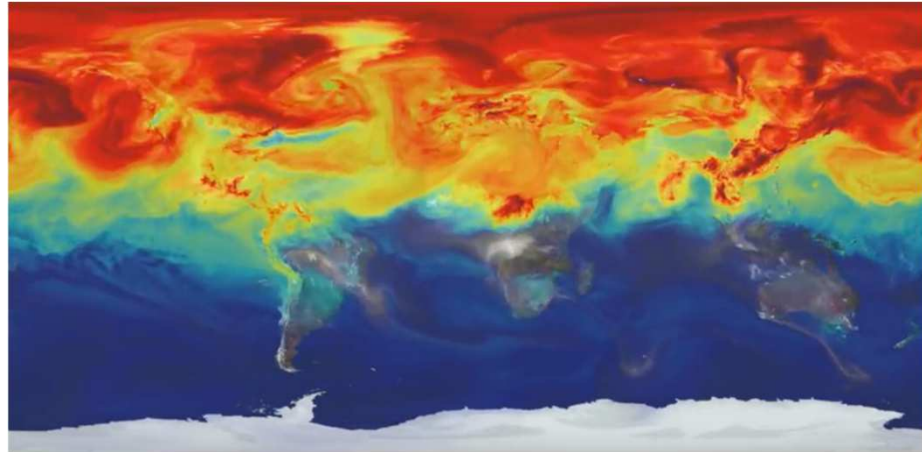
Purpose :

- 1. Provide an overview of the science behind Climate Change and**
- 2. Report the initial baseline results, with a focus on your area.**



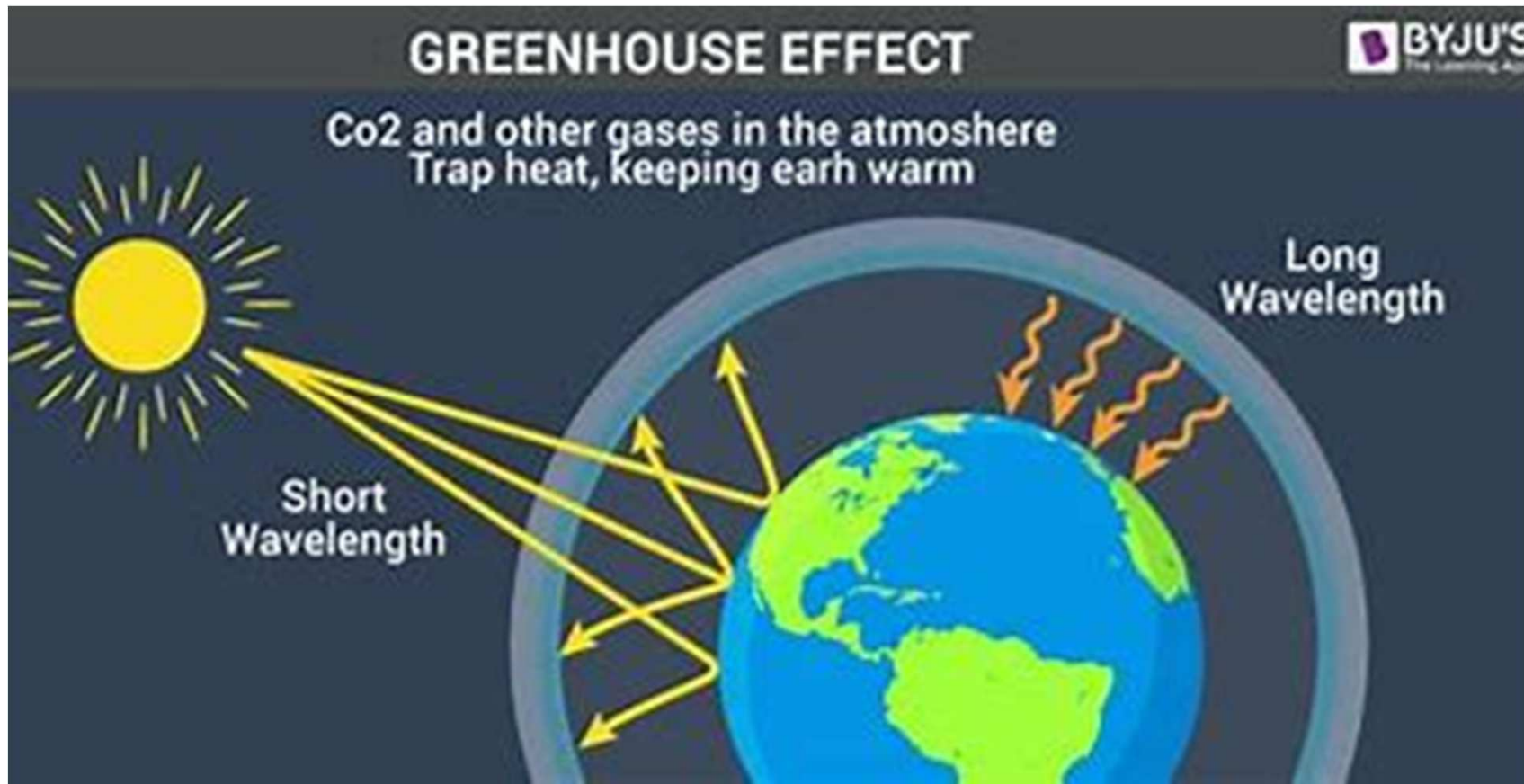
Climate Change

- [Climate Time Machine](#)



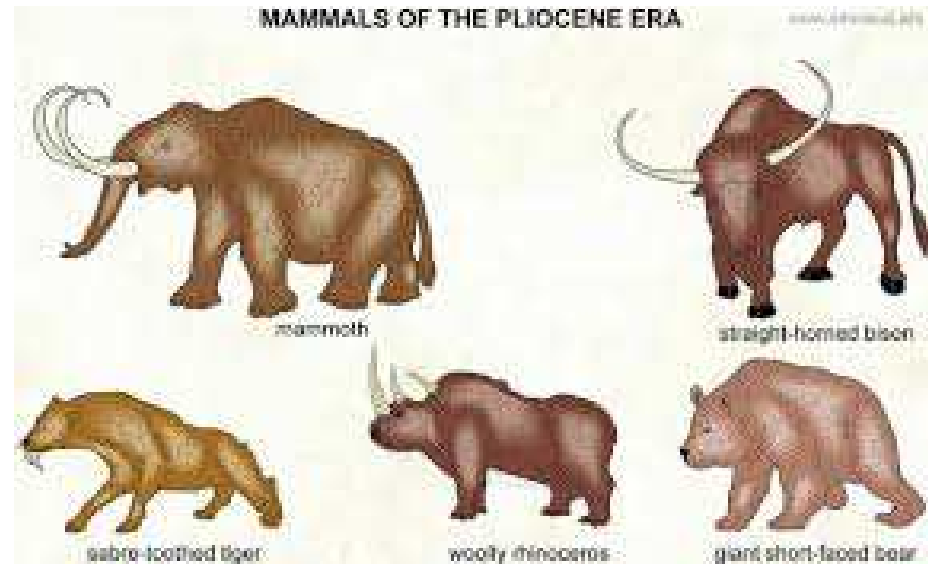
See [NASA's](#) 'a year in the life of earth's CO2

Climate Change



Climate Change

- The last time we had CO2 levels (above 400ppm) this high we had trees at the South pole – The Pliocene era (from about 5.3 million to 2.6 million years ago)



Carbon

- “If we keep carbon emissions going at the current rate, by the end of the century we will have 1,000ppm,” The low 280ppm level of CO₂ in the run-up to the industrial revolution was rooted in carbon being removed from the air by plants and animals and then buried. “It formed coal seams, gas and oil fields. And what we have been doing for the last 150 years is digging it all up and putting it back into the atmosphere, it’s crazy.”

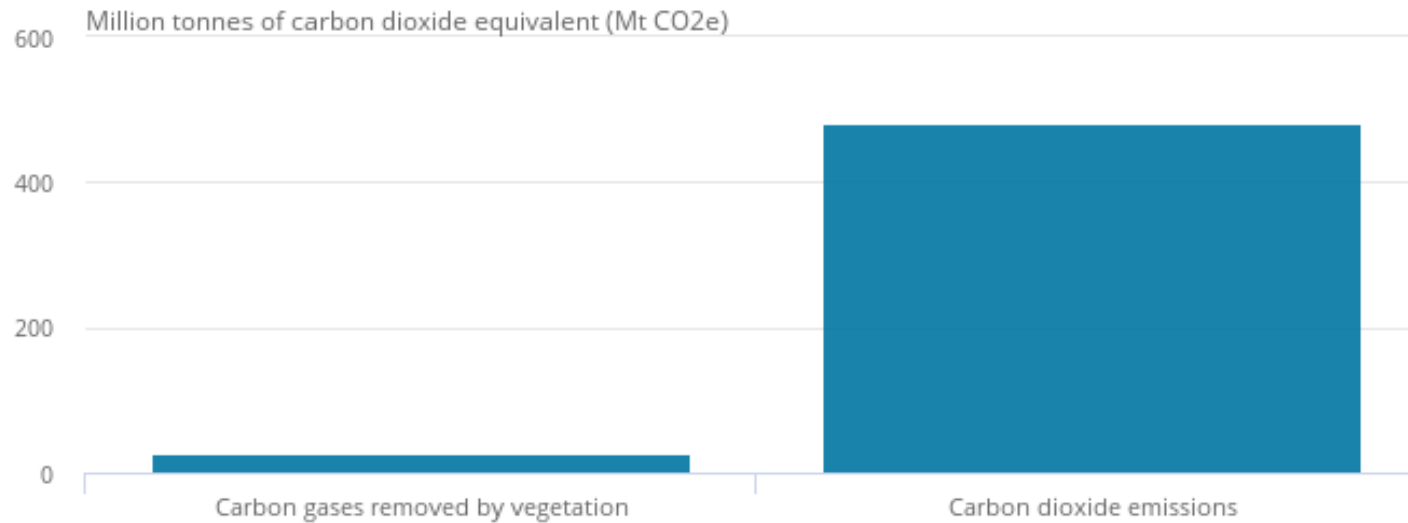
Martin Siegert, a geophysicist and climate-change scientist at Imperial College London (Guardian Interview 2019)



Offsetting

Figure 2: 28 million tonnes of carbon gases were removed by UK vegetation in 2017

Carbon dioxide emissions and carbon gases removed by vegetation, 2017



Source: Ricardo Energy and Environment, UK Greenhouse Gas Inventory and Office for National Statistics



International Context

- The international target set was to limit temperature rise to 1.5°C at the 2015 Paris Climate Change COP conference.
- An IPCC Report in 2018 stated that humans had 12 years in which to make significant changes to the way we live in order to achieve the 1.5°C target
- Business as usual is not an option.



Quantifying Sefton's Emissions

- Scope 1 – Gas and Vehicles (Council wide Assessment)
- Scope 2 – Electricity (Council wide Assessment)
- Scope 3 – 15 Other indirect areas (staff travel, procurement, waste, investments etc.)



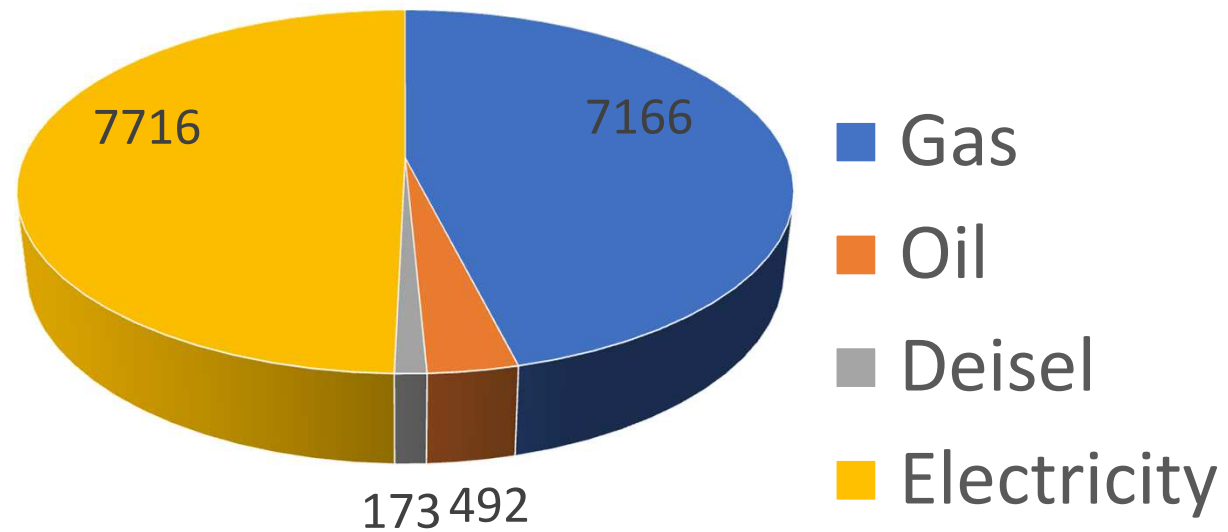
Key Features

- Difficult exercise
- Scope 1 and 2 assessment is robust but extensive due diligence will take place to validate
- A lot of scope 3 activity will be brought together at a corporate level e.g impact of ICT, issues in corporate buildings
- As a result services will have different scope 3 profiles e.g. Corporate Resources, due to ICT procurement



Scope 1 & 2 Council operations

Basic baseline CO2 15,547T



Scope 1&2; how the information was collected and what is included

- Gas & Electricity – Council contracts. Large buildings consumption metered every half hour.
- Vehicles – litres of diesel, oil consumed.
- Central Government provide conversion factors each year for fuels – CO₂ & CO₂e

- Included- street lighting, all offices, leisure centres, depots.
- NOT included – schools, new directions



Scope 1 & 2 – Big emitters- some examples

- Street Lighting
41% of electricity
- Leisure Centres
24% of Gas
10% electricity
- Corporate buildings
Heating, lighting,
IT equipment



Scope 1
and 2-
what does
15,547
tonnes
equates to!



Running 4,202 least affluent UK homes for a year



15,768 flights from London to New York



3,109 average cars (10,000 miles) each year



The lifetime of 15,547 broadleaf trees (100 years)

Scope 3 What is included?



Scope 3 – Childrens Services

Purchased Equipment	Commissioned services	
Staff Commuting	Staff survey	
Investment		
Business Travel	Train (37,000m) Car (284,000m)	2.4T 82T
IT	Information being collated from suppliers	1500



Evaluating the Baseline

Challenges	Opportunities
Quantify emissions	Effective management
Supplier interaction	Using spend to effect change
Gathering additional information via staff	Staff engagement and education
	Innovation and ideas
	Improving environmental conditions for Sefton



Next Steps

- Complete the baseline collection exercise at a council level
- Understand what the council knows, what further work is required and what will remain unknown
- Member Reference Group to meet and provide strategic direction
- Strategy developed and provided to Cabinet and Council
- First Annual Report will be completed and first 3 year implementation plan developed
- Continual role for O&S committee- 6 monthly update as part of work programme



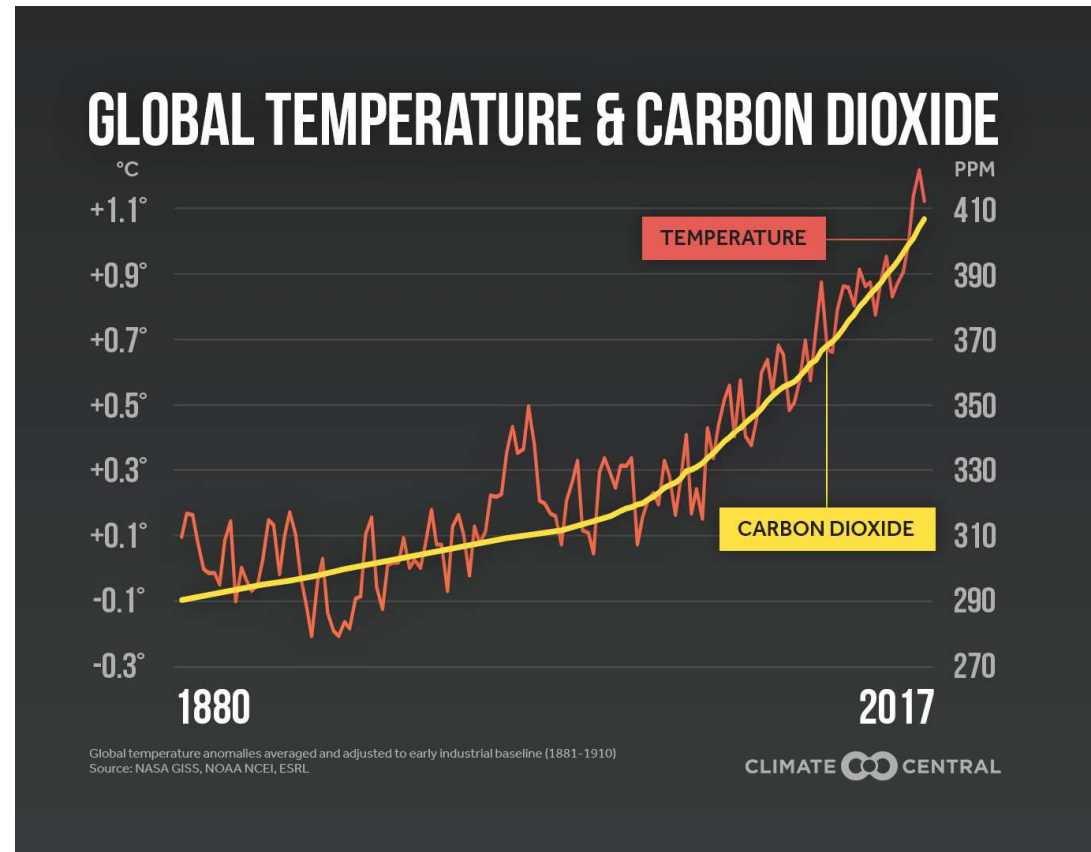
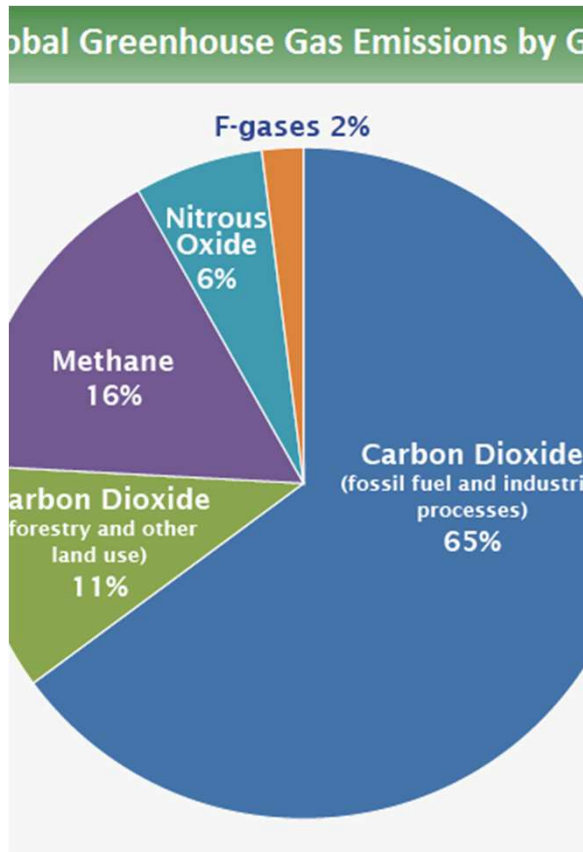
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Climate Change – Why a CO2 focus



Offsetting

