

Climate Actions for Frontline Services

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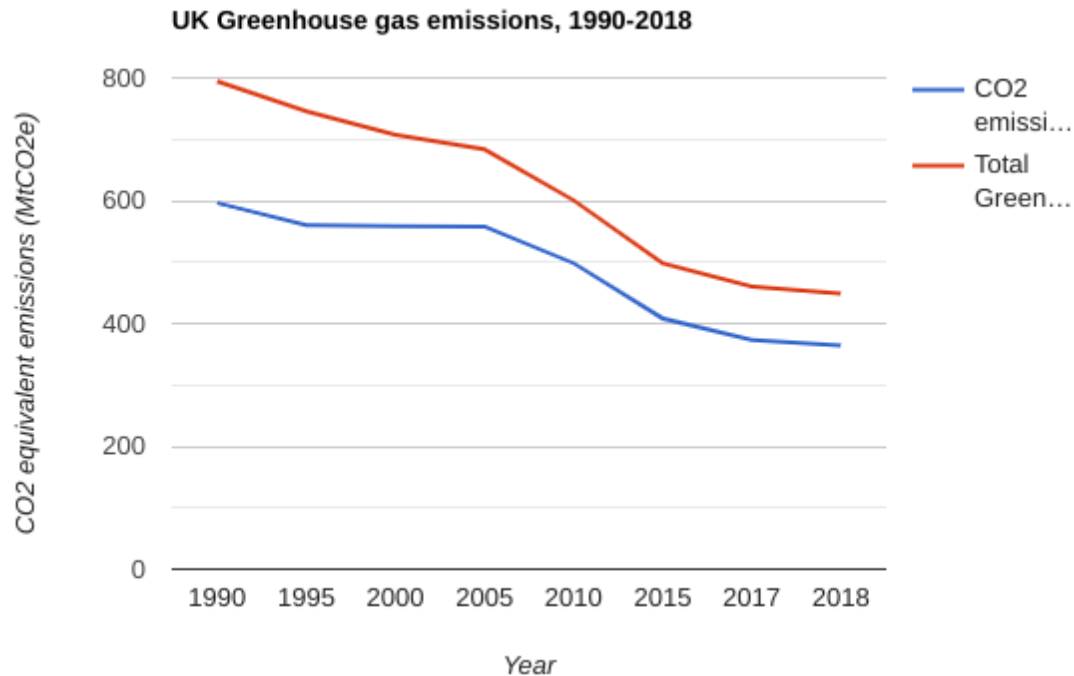


Association for
Public Service
Excellence

wakefieldcouncil
working for you

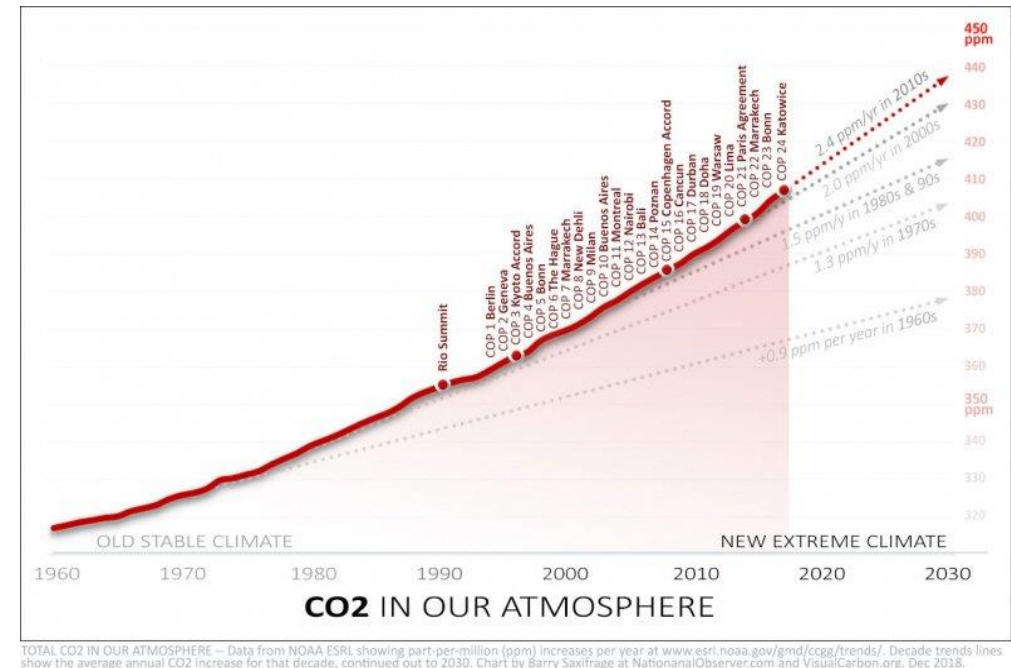
What problem are we trying to fix?

Domestic Emissions

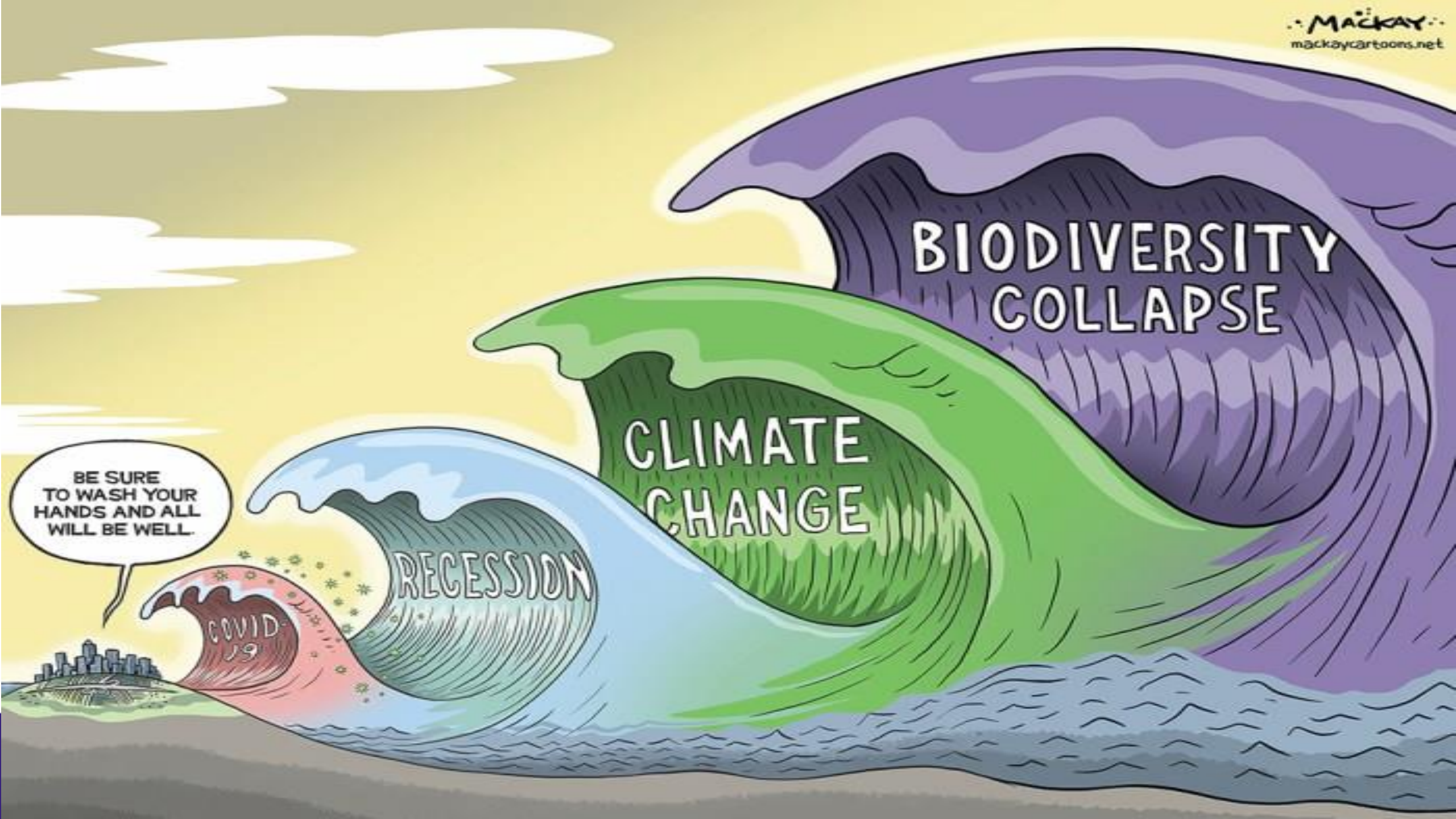


2020: 414 MtCO2e

International Emissions



2020: 33,000 MtCO2e



BE SURE
TO WASH YOUR
HANDS AND ALL
WILL BE WELL.

COVID-
19

RECESSION

CLIMATE
CHANGE

BIODIVERSITY
COLLAPSE

What problem are *local authorities* trying to fix?

Wakefield **District** emissions
(2019): 1.7 Mt CO₂e

Wakefield **Council** emissions
(2019): 0.035 Mt CO₂e

0.4% of UK
emissions

0.005% of Global
emissions

0.008% of
UK emissions

0.0001% of
Global emissions

(2% of District emissions)

What problem are *local authorities* trying to fix?



Local Authorities are on the Frontline



Commitments - International and Local Context

2015 - Paris Agreement – 196 countries agree to limit global warming to 2°C, and preferably by 1.5°C compared to pre-industrial levels.

June 2019 – West Yorkshire Combined Authority (WYCA) commitment to achieve Net Carbon Zero region by 2038.



2008 - Climate Change Act – legally binding target for UK. Updated in 2019 to be net zero by 2050.

May 2019 – Wakefield Council declares a climate emergency and commits to be a net zero organisation by 2030.

A show of hands please...

Who has declared a climate emergency?

Who has set a target to be a carbon neutral / zero organisation?

Who has set a target to be carbon neutral / zero for their district?

Who is 100% confident they will achieve their stated target/s?

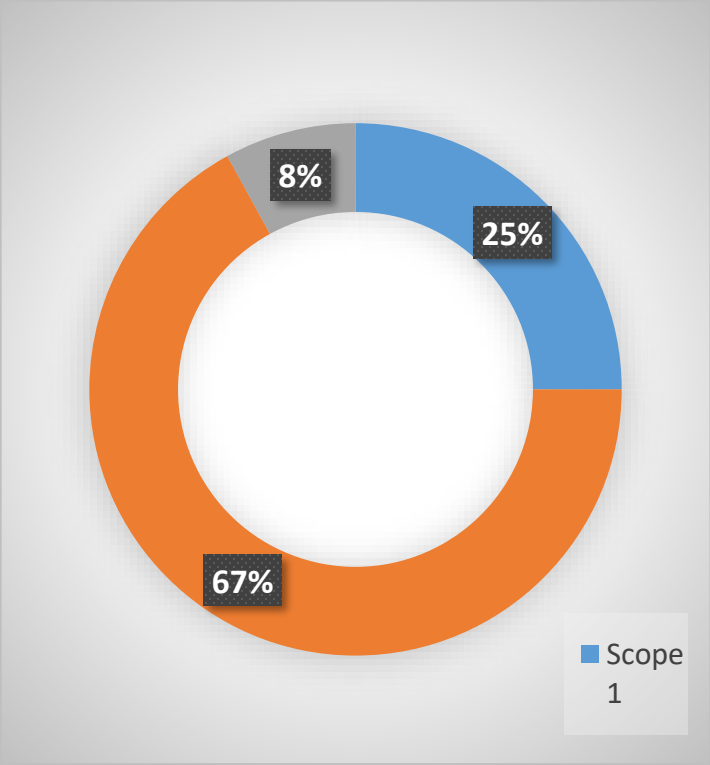
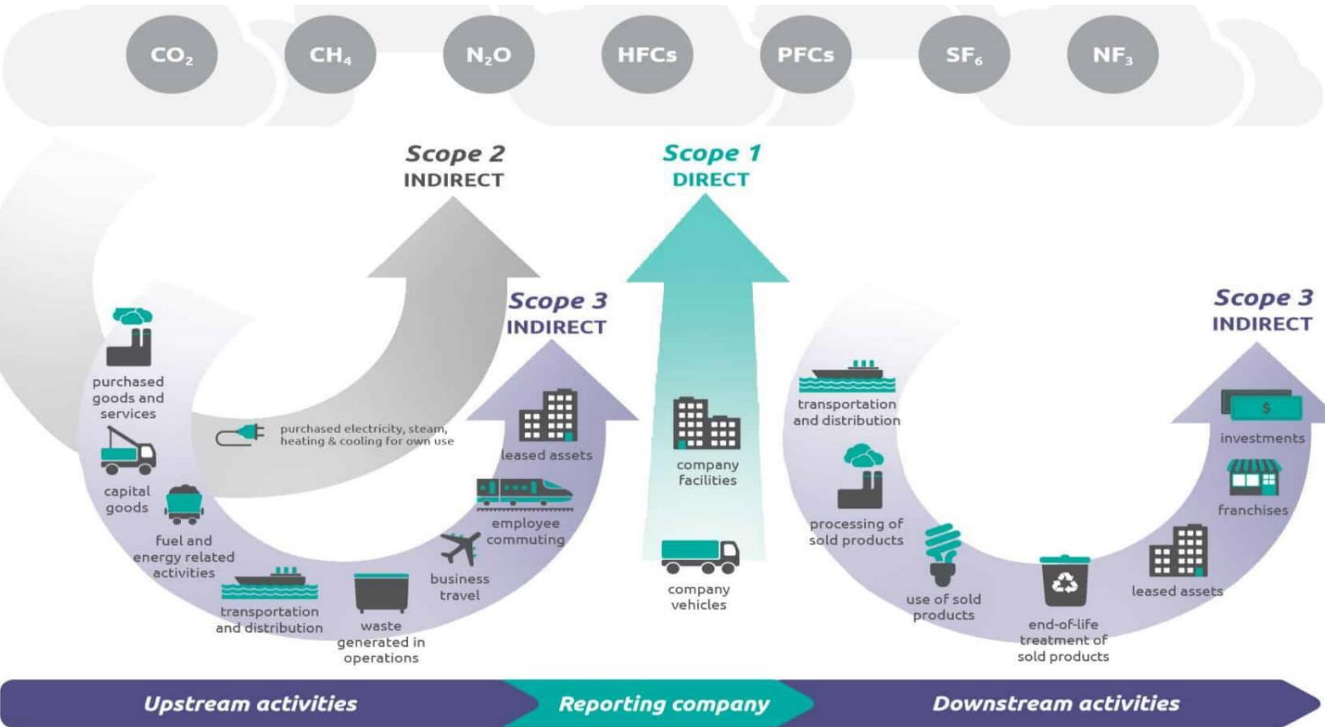
Local Authorities are on the Frontline



Local Authority Climate Change Action Plan



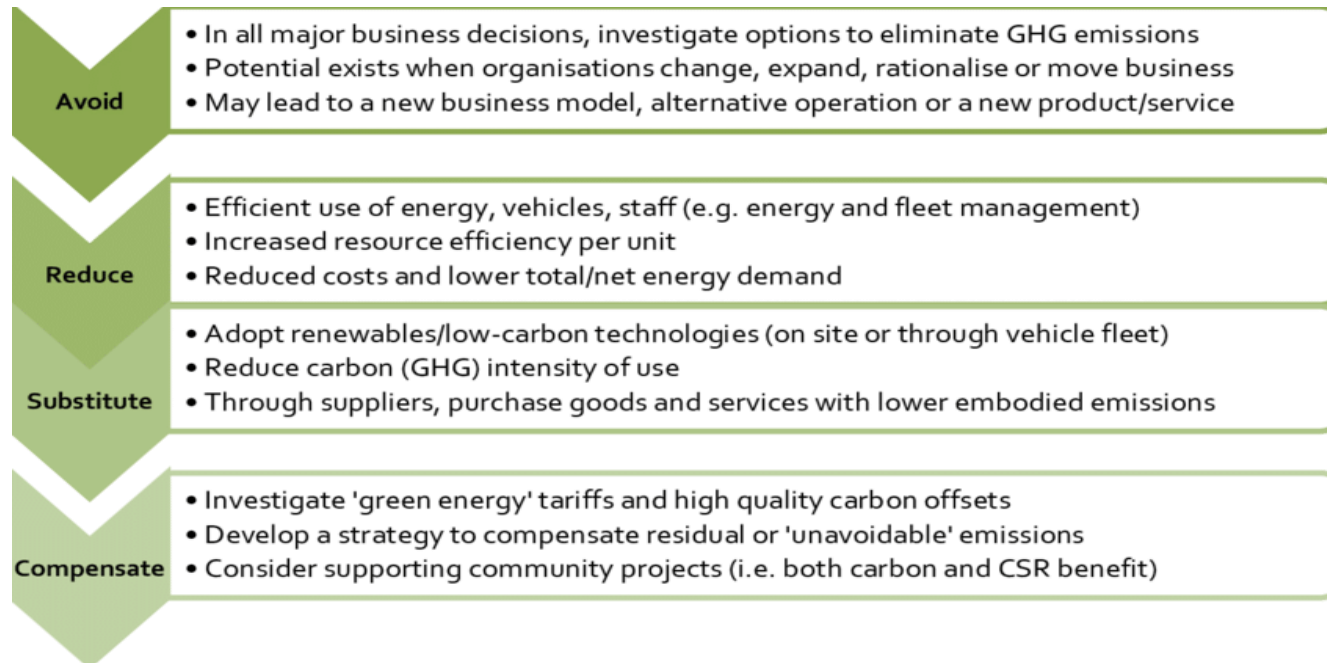
Understanding of the Problem



- Scope 1 (25%)
- 8,682 tCO₂e
- Scope 2 (67%)
- 23,692 tCO₂e
- Scope 3 (8%)
- 2,847 tCO₂e

Solving the problem...

Solution Hierarchy:



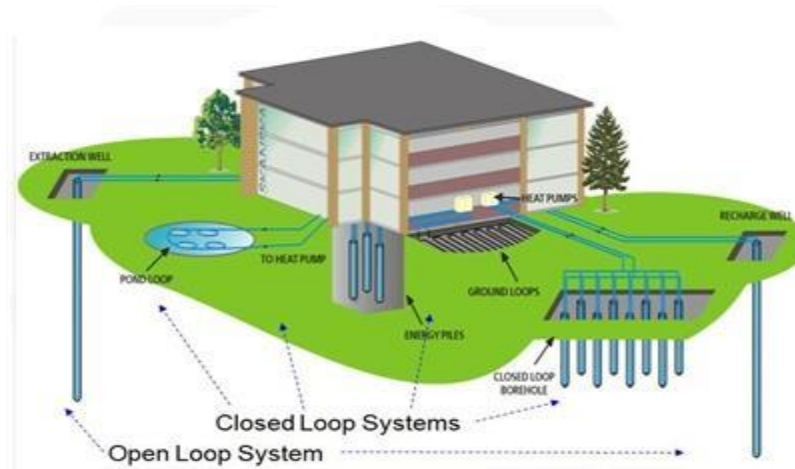
Thematic Approach:

- Property
- Transport
- Energy
- Off-setting
- Behaviour / Decisions
- District Role / Leadership

Theme 1: Property:

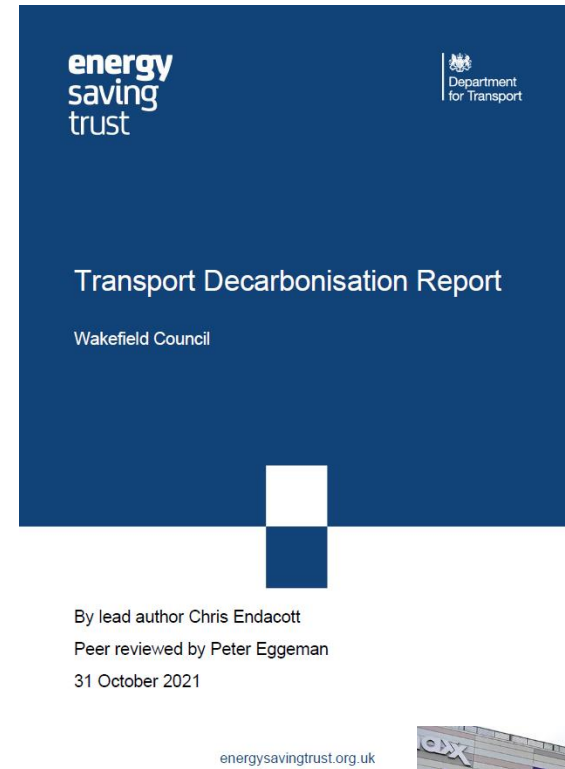
- Rationalisation of buildings / occupancy.
- Energy efficiency as part of long term maintenance programme.
- Boiler replacement – air source / ground source heat pumps / minewater heat (very tricky!!)
- Replacement of 45,000 street lights with LED

Solution	Cost of Solution (£)	Energy Saving (kWh per annum)	Emissions Saving (tCO2e per annum)	Cost Saving (£ per annum)	Simple Payback (Yrs)
Cooling Optimisation	69,000	69,364	14	2,081	33.16
Basic Time PIR Controls Water Heater	36,750	97,785	30	12,223	3.01
Hotwater Optimisation	117,000	227,358	46	6,821	17.15
BMS & Controls	290,000	271,051	55	8,132	35.66
Cooling Thermal Transfer	297,487	490,474	151	61,309	4.85
VSD	509,000	528,530	162	66,066	7.70
Smart TRV solution	39,600	917,196	187	27,516	1.44
Heating Thermal Transfer	106,068	1,601,933	327	48,058	2.21
Valve Insulation	824,000	1,929,918	394	57,898	14.23
Boiler Optimisation	511,500	1,314,574	404	164,322	3.11
Behaviour Management	3,137	892,502	365	26,775	0.12
Cavity/ Solid Wall Insulation	631,736	2,402,899	491	72,087	8.76
Roof Insulation	9,411	2,402,899	491	72,087	0.13
Building LED Lighting	5,080,865	3,280,943	1,008	410,118	12.39
Street Lighting LED	21,000,000	15,136,283	4,650	1,892,035	11.10
Total	29,525,554	31,563,706	8,777	2,927,527	10.09



Theme 2: Transport

- 439 fleet vehicles /144 items of plant
- 2 million fleet miles / year (3.3kt CO2e)
- Grey fleet: 2,300 cars / 2.15m miles (566t CO2e)
- Reduce the fleet operations
- Reduce mileage (Remote / Digital working)
- Replace with zero / low emission alternative.
- All our vehicles are capable of moving to electric
- Replacement Cost / Infrastructure??
- Whole life costing – fuel / maintenance car mileage savings



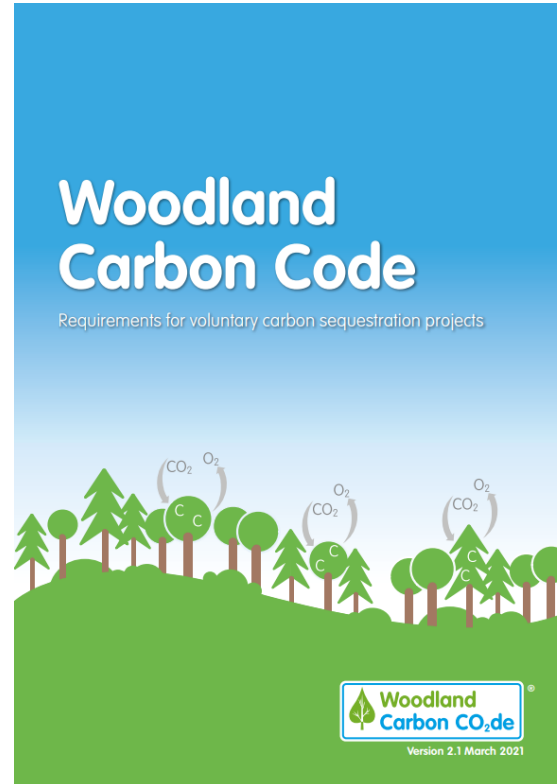
Theme 3: Energy

- The “Big Ticket” Item
- 2 x solar farms – circa 36MW renewable energy
- Using our land to build / enter into partnership
- REGO certification
- Feasibility Study / Commercial Model (PPA / Sleeving etc)
- Capex – circa £40 - £50m
- Plus rooftop / stand-alone solar with private wire
- Plus Energy from Waste (anaerobic digestion)



Theme 4: Carbon Off-setting

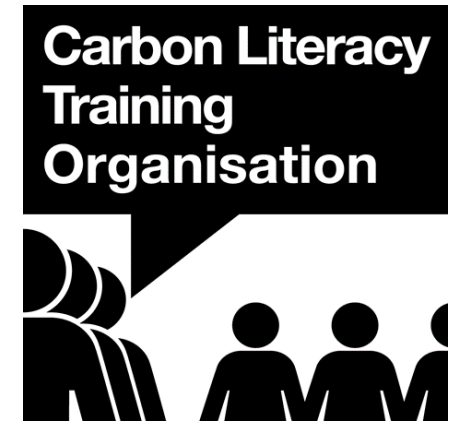
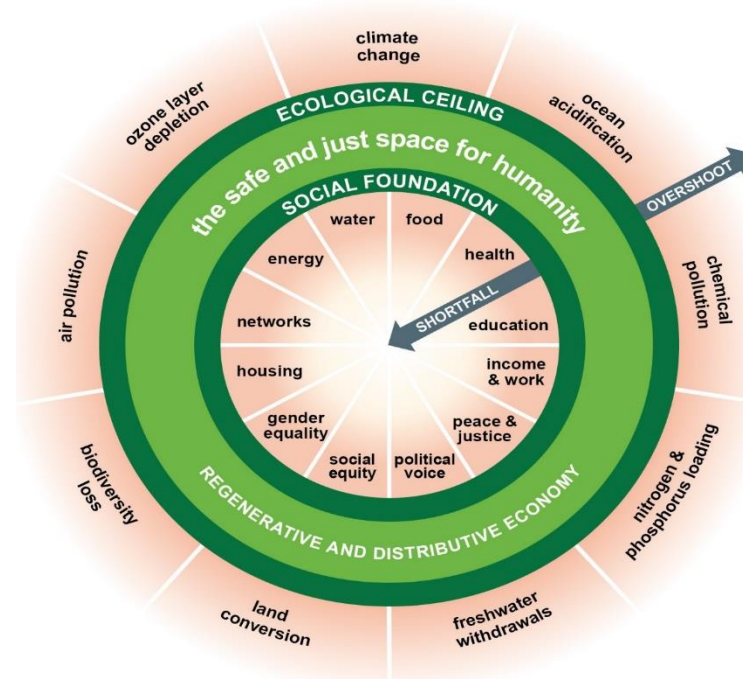
- Carbon Sequestration
- Tree Planting (Northern Forest / White Rose Forest)
- Don't forget to certify!! Carbon Credits – e.g. Woodland Carbon Code
- Other Carbon off-setting schemes
- Peat restoration
- Flood alleviation
- Nature Recovery / Biodiversity
- Community Engagement



This is a screenshot of the Wakefield Council website page titled 'Wakefield's Woodland Creation'. The page features the council's logo at the top left and a search bar at the top right. Below the navigation bar, the page title 'Wakefield's Woodland Creation' is followed by the text 'We are planting 2.6 million trees – and you can help!'. A large photograph of a lush green woodland landscape with a winding river is shown. Below the photo, the text reads: 'Photo credit: Ian Byrom. We've set an ambitious target to help reforest Wakefield. Together with Wakefield Tree Wardens, Woodland Trust, Yorkshire Water, Engle and others we aim to plant more than 1,300 hectares of land with trees between 2020 and 2050 to connect communities with nature, create new habitats for wildlife and help our district adapt to climate change. The Council'.

Theme 5 – Behaviour Change & Decision-making

- Climate Change embedded into decision making processes
- Corporate planning / prioritisation and polices.
- Financial decisions – “Value” (natural / social capital)
- Staff awareness / training
- Member awareness and buy-in.
- Empower individuals to make changes



Theme 6 – District Action

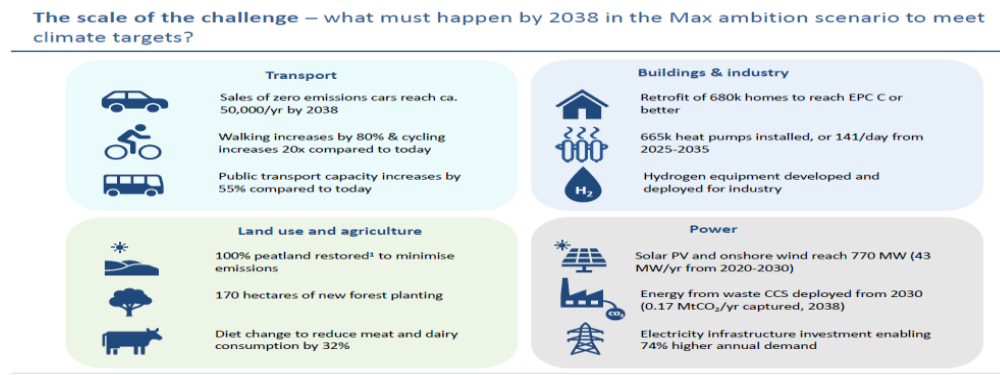
- Policy Decisions / Plan Making
- Sustainable Procurement / Supply Chain
- Infrastructure: Transport / Highways /EV Charging / Buildings
- Flood Risk Management
- Operations
- Social Media / Comms
- Stakeholders: Public Sector / Voluntary & Community / Housing / Business/Industry / Transport
- Regional / Joined-up thinking



Just Transition Wakefield @Just... 14h
Replying to @ClimateWake...
Some real inspiration in there - thank you for sharing.

Emma Bird @emma_comp 17h
Replying to @MyWakefield @ClimateWak...
Really good to see you're ahead of some of your targets! The waste water heat feasibility looks interesting, look forward to seeing more about it.

Wakefield Council @MyWake... 19h
The @IPCC report shows the urgency needed to tackle climate change – and we're already taking proactive steps to reduce our carbon emissions.
Take a look at what we're doing here citizen.wakefield.gov.uk/council-invest...
And find out more @ClimateWakey #Climate Wakefield #climatchange



What we do makes a difference...





[Wakefield MDC](#)



[Wakefield Council - Climate Change Action Plan](#)



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