

# Measuring progress on climate change- how are we doing?



Mark Davies  
Chief Executive  
Lancaster City Council  
8 December 2023

# THEMES



Understanding  
the context



Building  
Decarbonisation

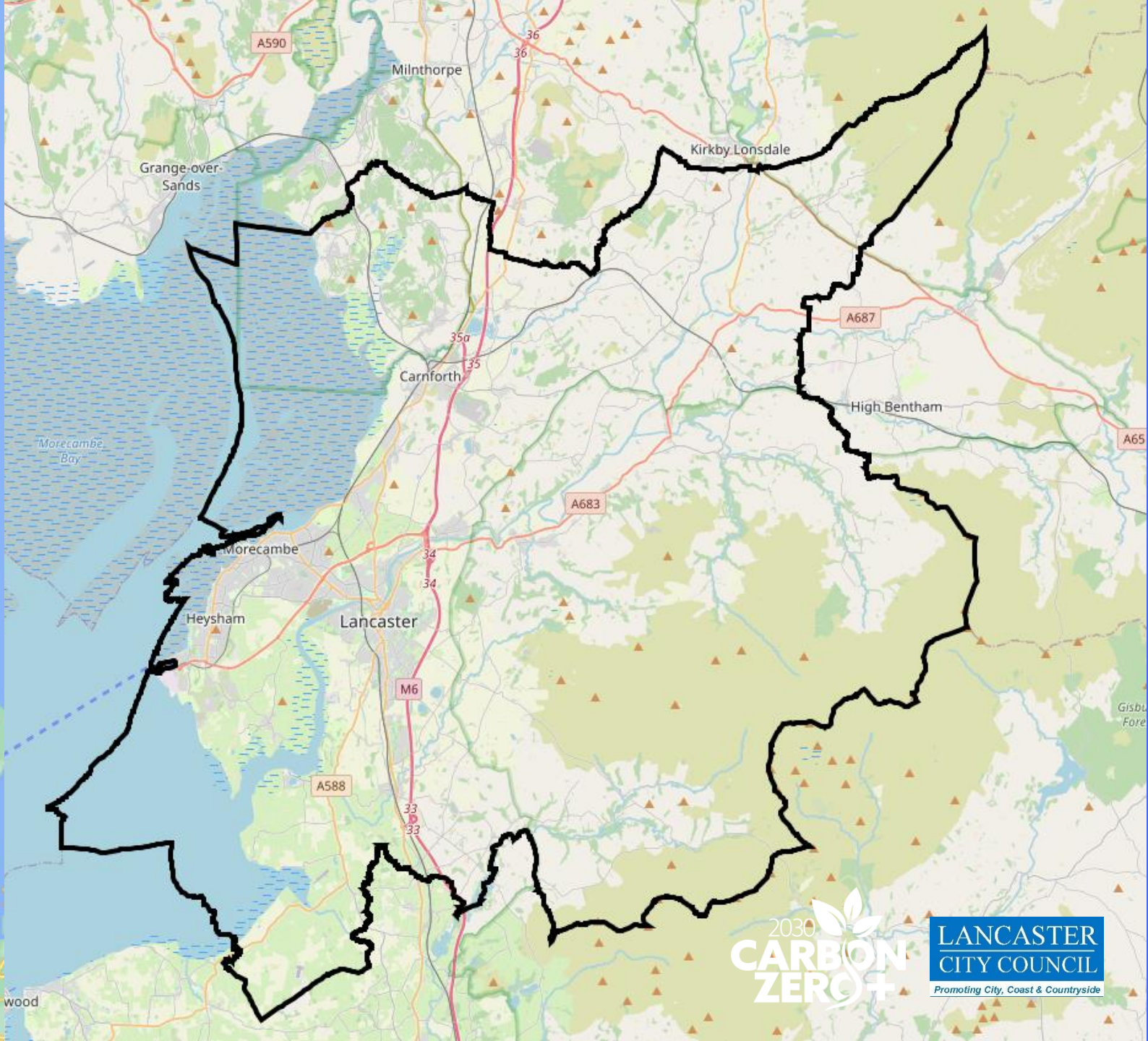


Transport and  
Travel



Lessons Learned





2030  
**CARBON ZERO+**

**LANCASTER CITY COUNCIL**  
Promoting City, Coast & Countryside



# Climate Emergency Declaration



# Lancaster City Council tCO2e Emissions: 01/04/21 - 30/09/23

Projections

About

Triggering

Gas	Fleet	Staff Travel	Electricity	Pool Cars	Staff Commute	Taxis	Council Housing	Water Sply	Water Treat.	Renewables	Total
2,281.487	3,198.670	25.71	1,617.358	15.88	1,203	3,383.93		97.18	168.53	-2	12,088

Overview

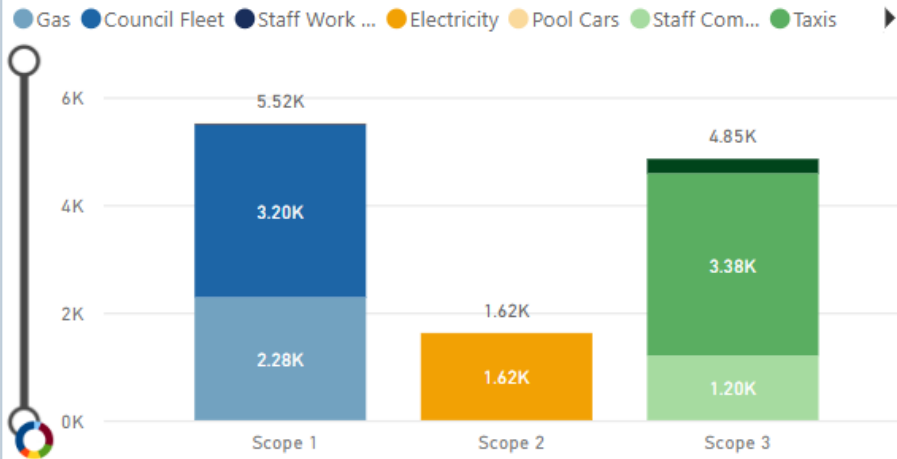
tCO2e Mileage kWh Cost

2018-2019 2019-2020 2020-2021 2021-2022

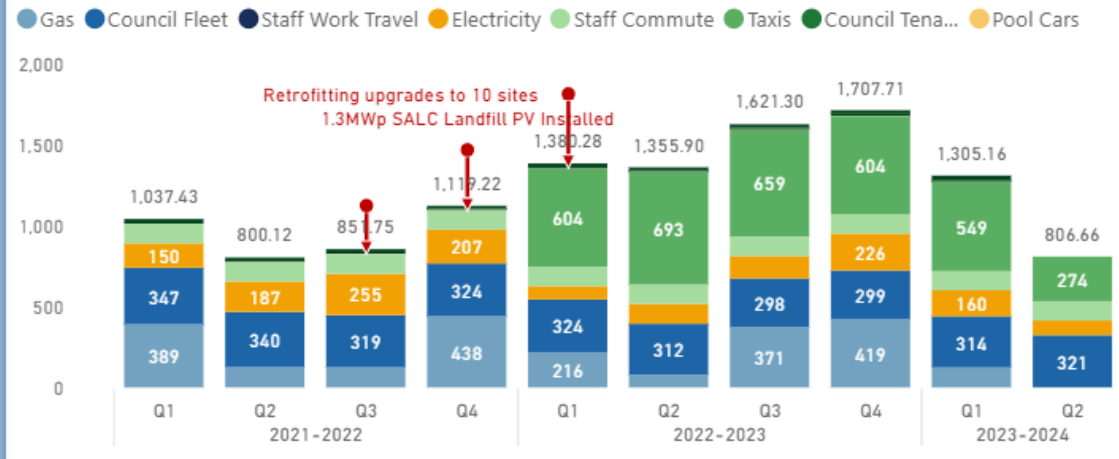
Scope 1 Scope 2 Scope 3

- EXT Activit
- LCC Activit
- Pool Car (Elec)
- Pool Car (ICE)
- Pool Car (Public)
- Staff Work Travel

Total by Emission Source and Scope



Total by Emission Source and Time

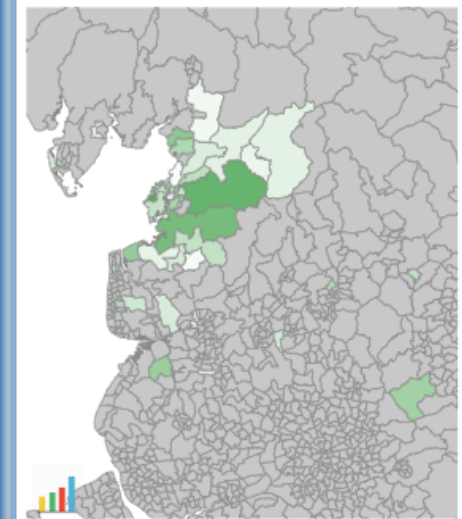


More...	11	5	16.56
White...	7		9.59
Healt...	4		5.01
Palati...	3		4.53
Lanca...			2.40
(Blank)			2.25
Salt A...			2.24
AONB			1.47

All	Gas	Electricity	Total	%	Change Prev. Yrs	DEC/EPC
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Quernmore Road - Williamson Park	201	49	250	6.4	-64.8	
Doris Henderson Way - Salt Ayre Sports Centre	200	895	1,095	28.1	-59.2	E
Meeting House Lane - The Storey	190	76	265	6.8	-28.8	D
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City Museum	24	10	35	0.9	-4.9	C
<b>Total</b>	<b>2,281</b>	<b>1,617</b>	<b>3,899</b>	<b>100.0</b>	<b>-847.9</b>	

Vehicle Type	Department	Miles	Litres	tCO2e	%	Change Prev. Yrs
Ref Collector	Public Realm Cleansing	395,903K	555K	1,498	46.8	-343.0
Van	Bulky Matters	105,002K	197K	531	16.6	38.1
Rcv	Cleansing	125,087K	118K	319	10.0	-56.8
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Tipper	Cleansing	45,228K	86K	232	7.2	-80.3
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Total	Vmu	553K	2K	4	0.1	-1.1
<b>Total</b>		<b>821,230K</b>	<b>1,184K</b>	<b>3,199</b>	<b>100.0</b>	<b>-68.2</b>

Staff Commuting tCO2e





# Lancaster City Council

# District Wide Emissions by Sector Comparison Tool

Second Tier Authority, Local Authority

Lancashire (Second Tier Authority) + Lancaster (Local Authority)

LA GHG Sector, LA GHG Sub-s...

All

Year

All

LA GHG Sub-sector

LA GHG Sector

GHG Typ...

All

#

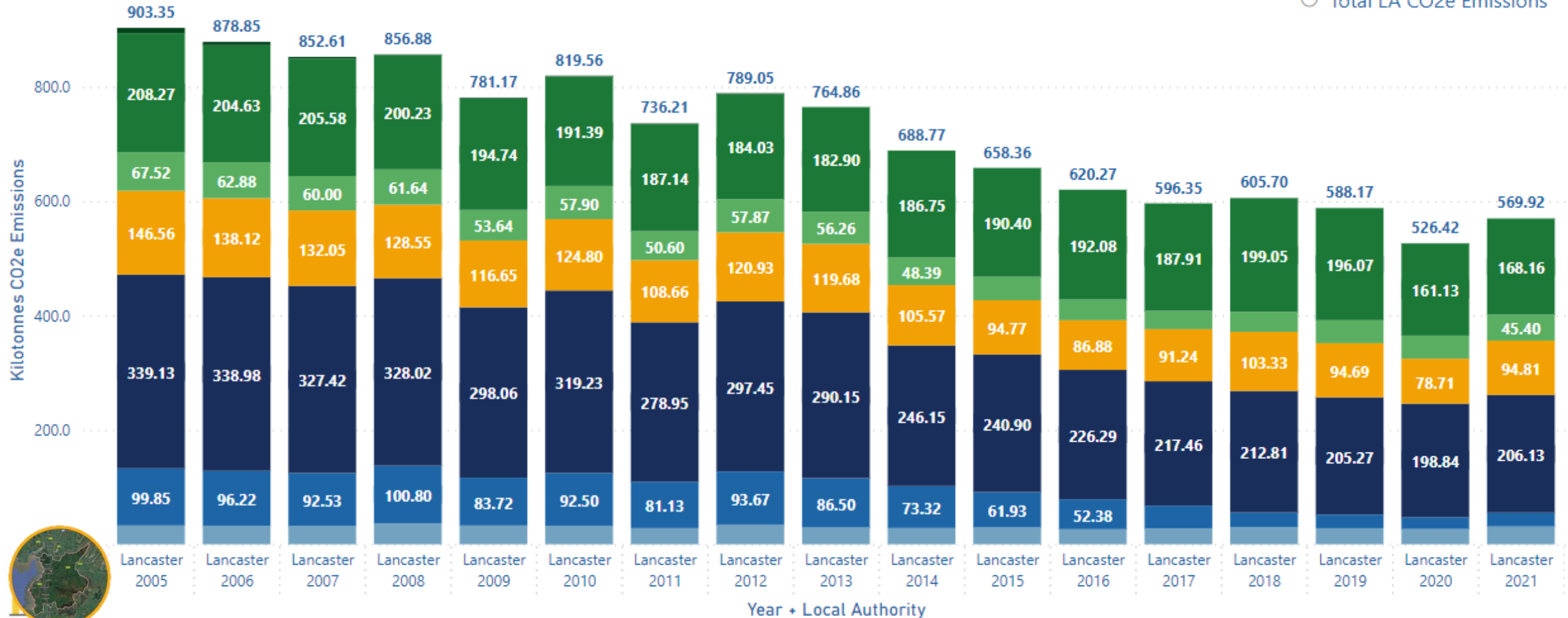
%

Δ#

LA GHG Sector ● Agriculture ● Commercial ● Domestic ● Industry ● LULUCF ● Public Sector ● Transport ● Waste management

● LA Influence CO2e Emissions

○ Total LA CO2e Emissions





CROSS SERVICE CLIMATE HUB



# LOOKING AT BUILDINGS



## Understanding the problem

Dashboard

## Leading by example

Building Decarb

## Supporting the district

Local Plan  
Local Area Energy Plan

## Working with communities

Community Land Trust  
Homes





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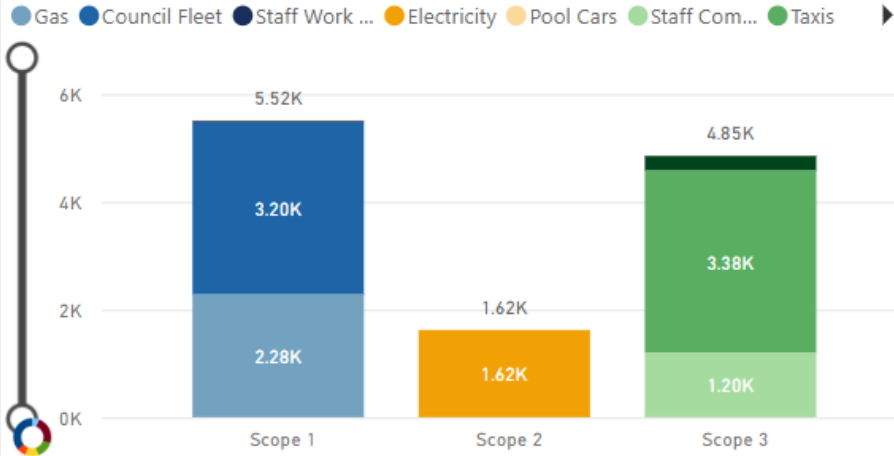
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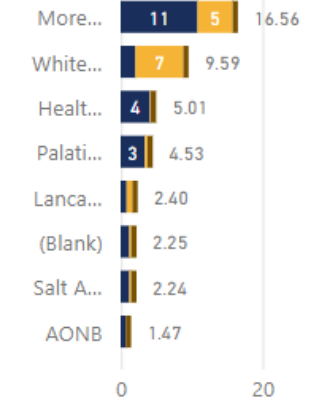
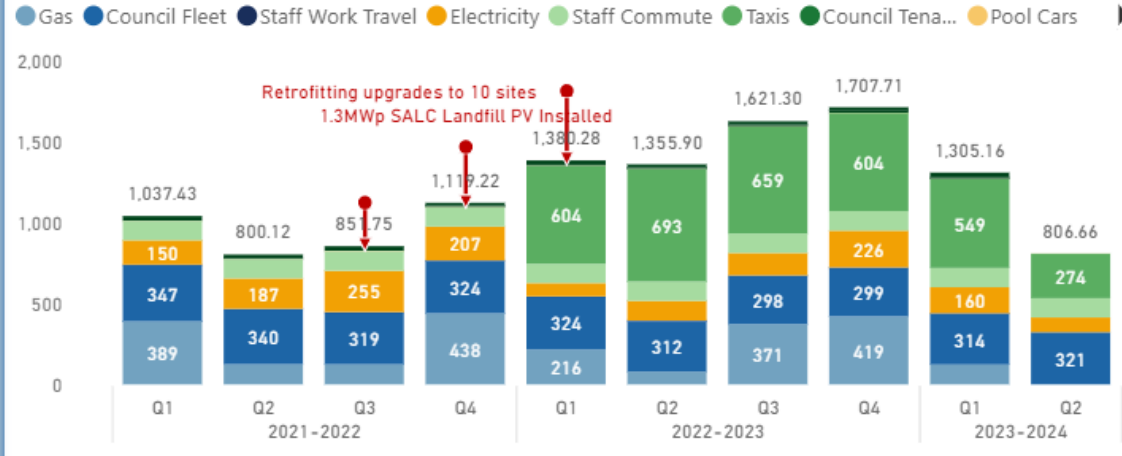
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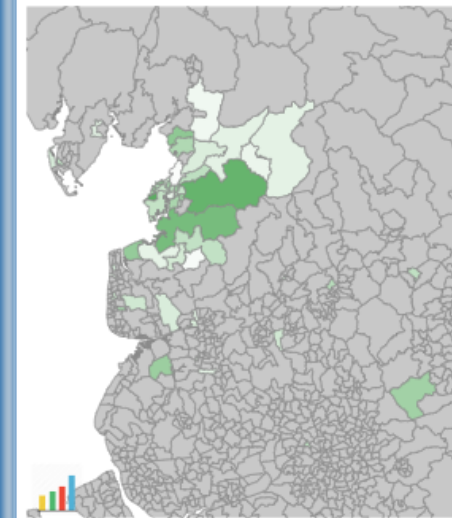
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Staff Commuting tCO2e





# Salt Ayre Leisure Centre



2030  
**CARBON  
ZERO+**

**LANCASTER  
CITY COUNCIL**  
Promoting City, Coast & Countryside



Lancaster City Council have set a target to reduce the Council's direct emissions to net zero by 2030. In order to achieve this target, significant investment is required over the coming years.

Achieving the target will require dedicated internal resource and significant long term planning. The decarbonisation of the building stock should be planned and budgeted. This report analyses 18 buildings within the LCC stock, and proposes a decarbonisation plan for these buildings.

#### Summary of buildings within scope of this plan

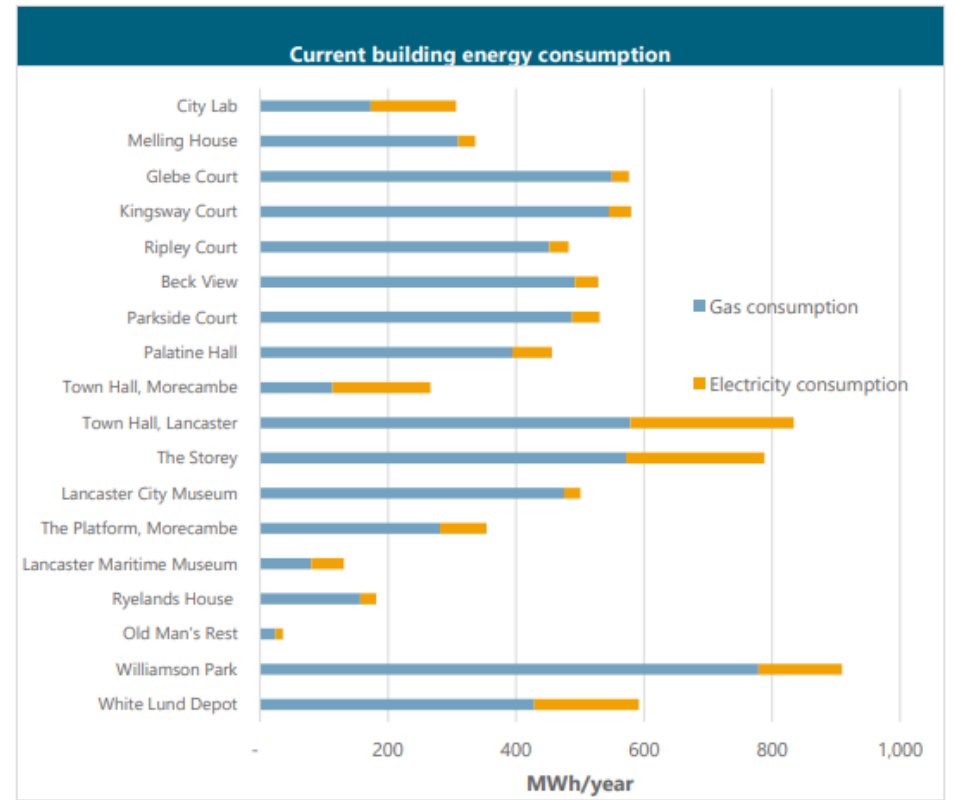
Number of buildings	18
Total annual energy consumption of existing buildings	8,388MWh
Total annual carbon emissions of existing buildings	1727 tCO2

#### Outcome of proposed decarbonisation projects within this plan

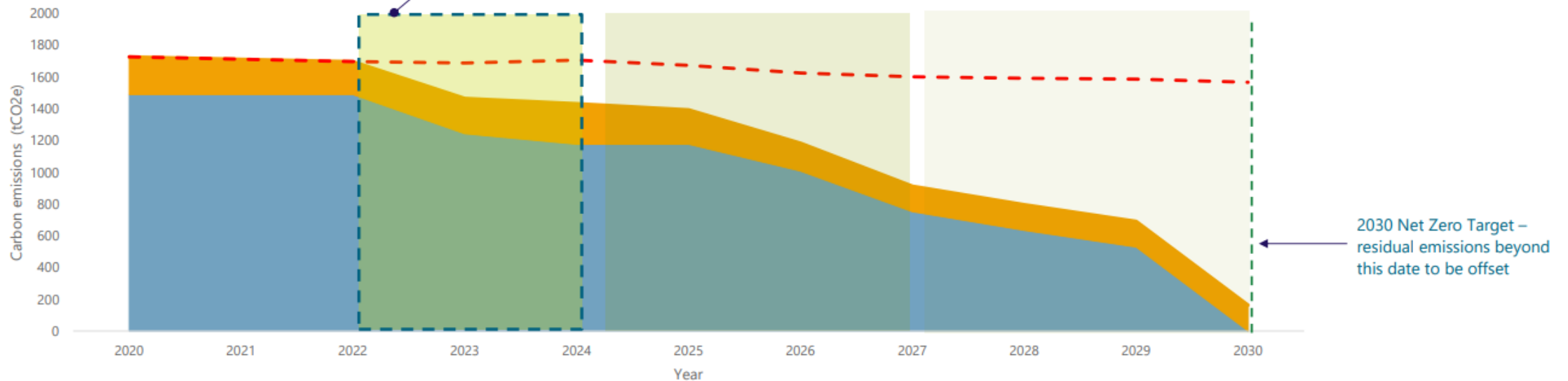
Annual carbon emissions in 2030	47 tCO2
Annual carbon saving in 2030	1680 tCO2
% operational carbon vs existing by 2030	2.73 %
Total capital cost	£ 14.97 million

#### Short Term Action Plan

- Moving away from reliance on burning of fossil fuels is a key priority. Any boilers coming to their end of life should be prioritised for replacement in lieu of heat pumps.
- Where heating plant is replaced, smart controls should be installed to optimise performance and allow remote visibility of energy consumption.
- Replacement of non-LED lighting should be prioritised across the building stock.
- Regards improvement of fabric, priority should be on the buildings in particularly poor condition or with significant portions of single glazing.
- All priority interventions (i.e., prior to 2024) should be prepared for the next round of PSDS funding (phase 4)



Carbon emissions projection tCO2e/yr

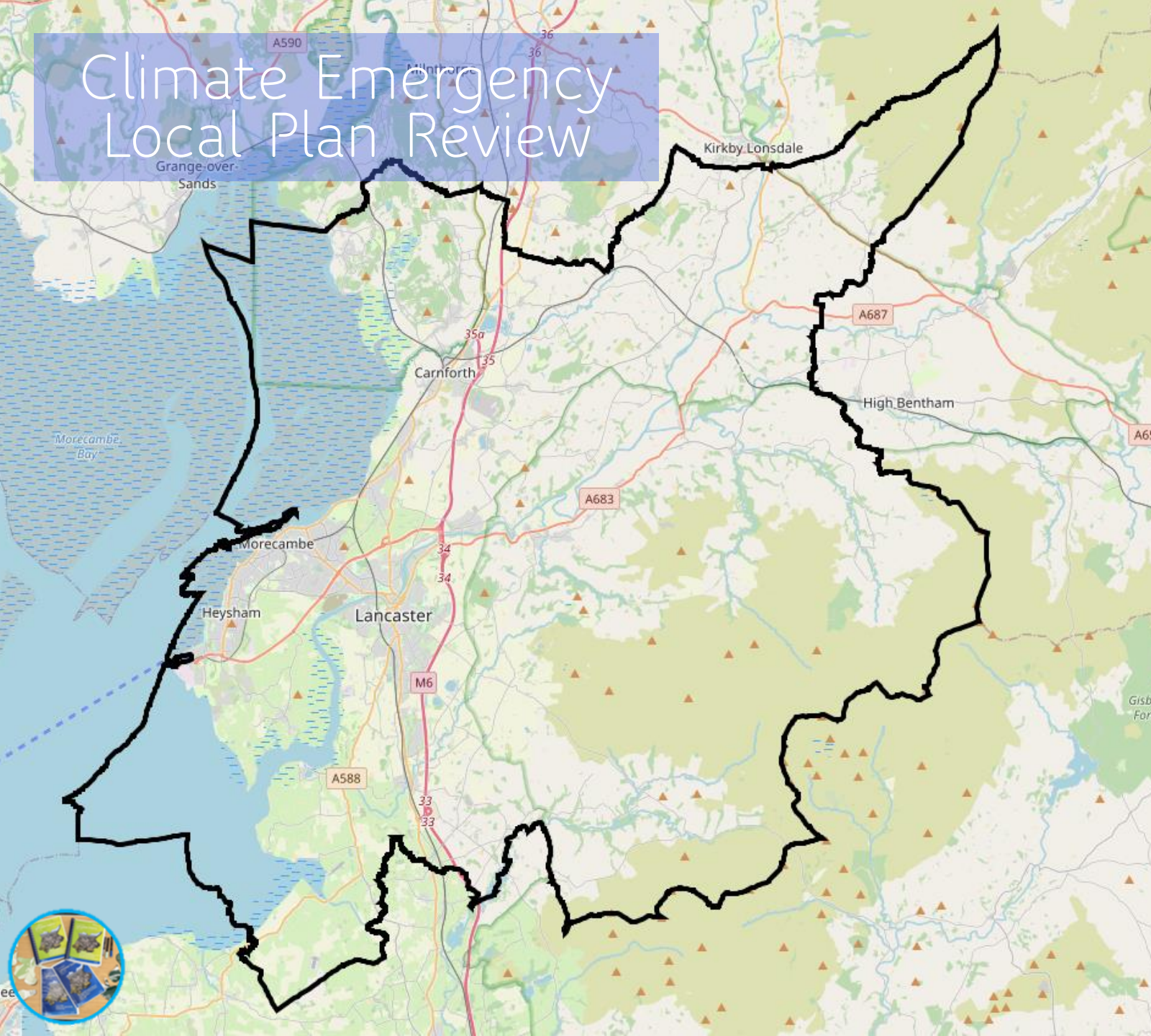


2030 Net Zero Target – residual emissions beyond this date to be offset





# Climate Emergency Local Plan Review



TRACK CHANGE VERSION

A Local Plan for

# Lancaster District

2020 – 2031

Plan period 2011 - 2031



**SUBMISSION VERSION**

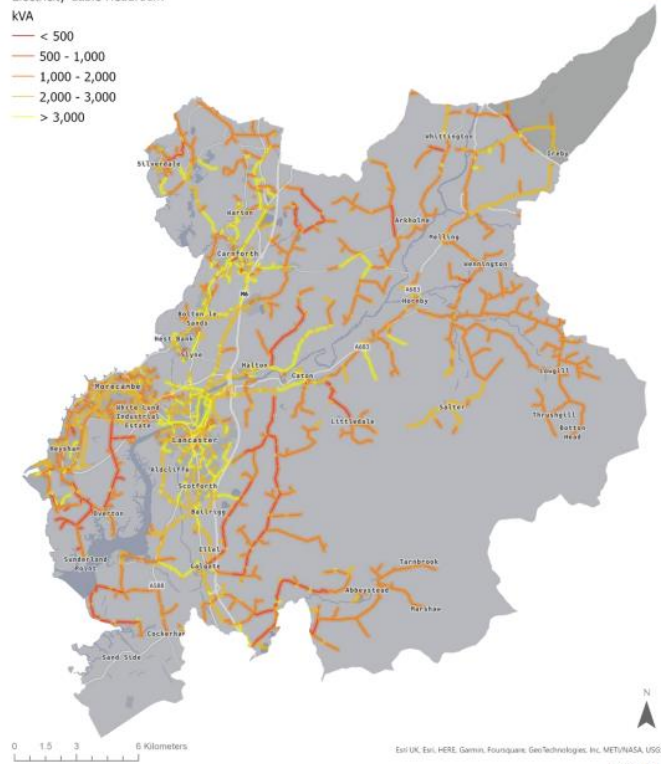
**Part Two: Climate Emergency review of  
the Development Management**



# Local Area Energy Planning

Electricity Cable Headroom  
kVA

- < 500
- 500 - 1,000
- 1,000 - 2,000
- 2,000 - 3,000
- > 3,000



0 1.5 3 6 Kilometers

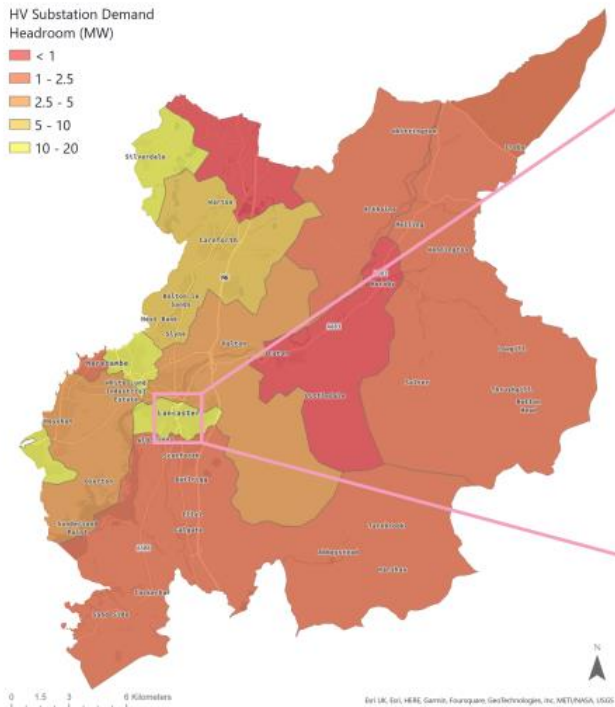
Esri UK, Esri, HERE, Garmin, Fourqquare, GeoTechnologies, Inc, METI/NASA, USGS

© 2023 Energy Systems Catapult

## Electricity network

HV Substation Demand  
Headroom (MW)

- < 1
- 1 - 2.5
- 2.5 - 5
- 5 - 10
- 10 - 20



0 1.5 3 6 Kilometers

Esri UK, Esri, HERE, Garmin, Fourqquare, GeoTechnologies, Inc, METI/NASA, USGS

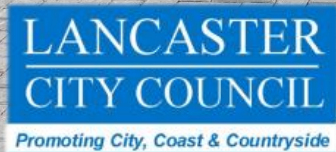


0 0.13 0.25 0.5 Kilometers





# Lune Walk





# LOOKING AT TRANSPORT



## Understanding the problem

Dashboard

## Leading by example

Fleet electrification

## Supporting the district

EV Charging and Car Club

## Working with communities

Local Climate Engagement Programme



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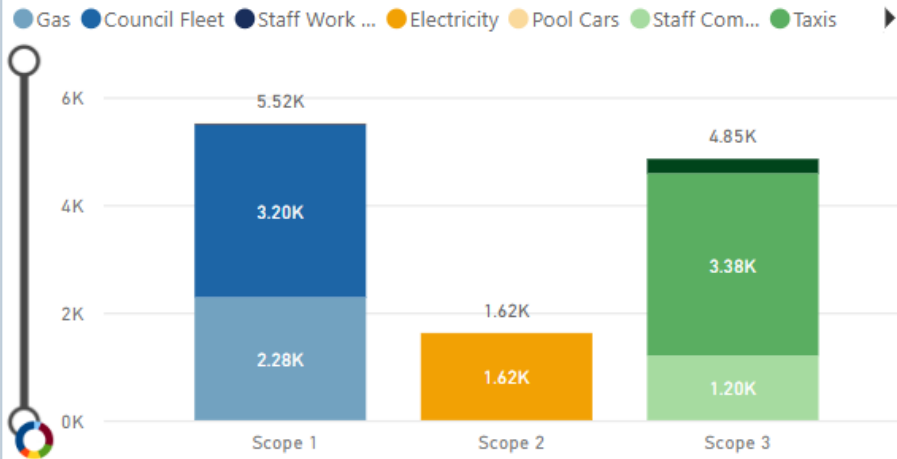
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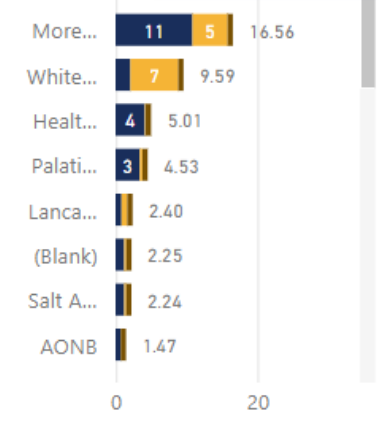
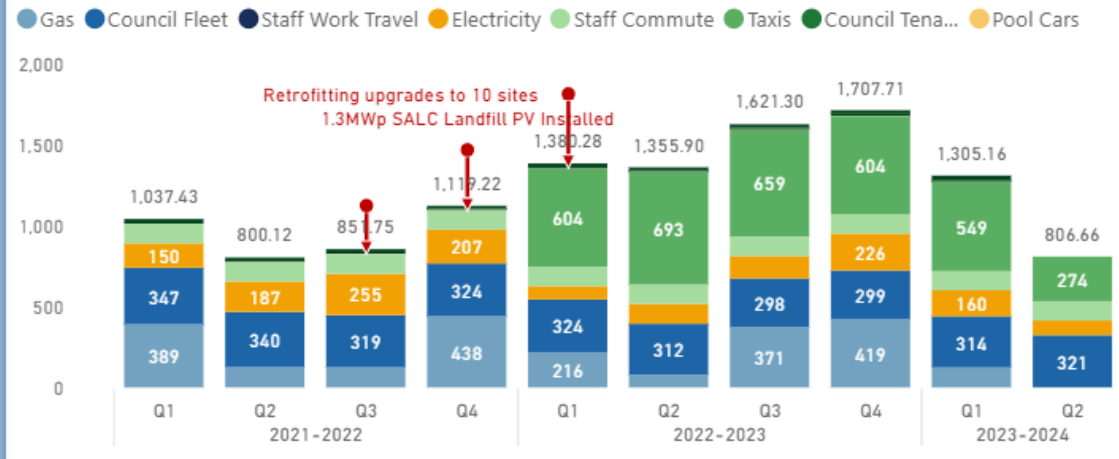
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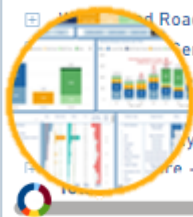
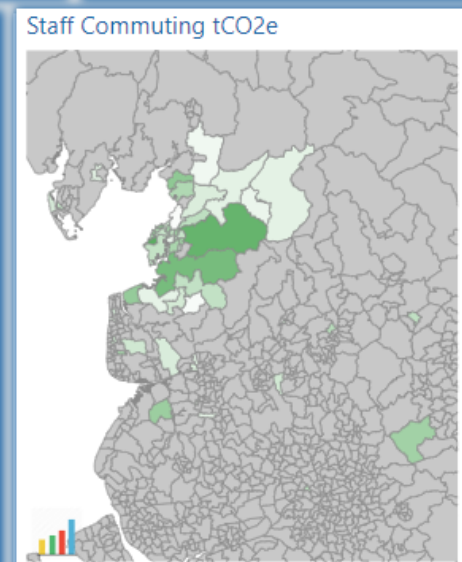


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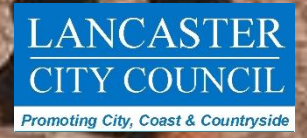




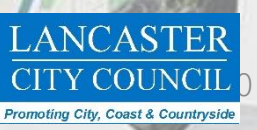




2023 Winners of the iNetwork Transforming & Innovating Public Services (TIPS) Award









# LOCAL CLIMATE ENGAGEMENT







Welcome to a new kind of conversation - vote on other people's statements.

Anonymous wrote: 100+ remaining

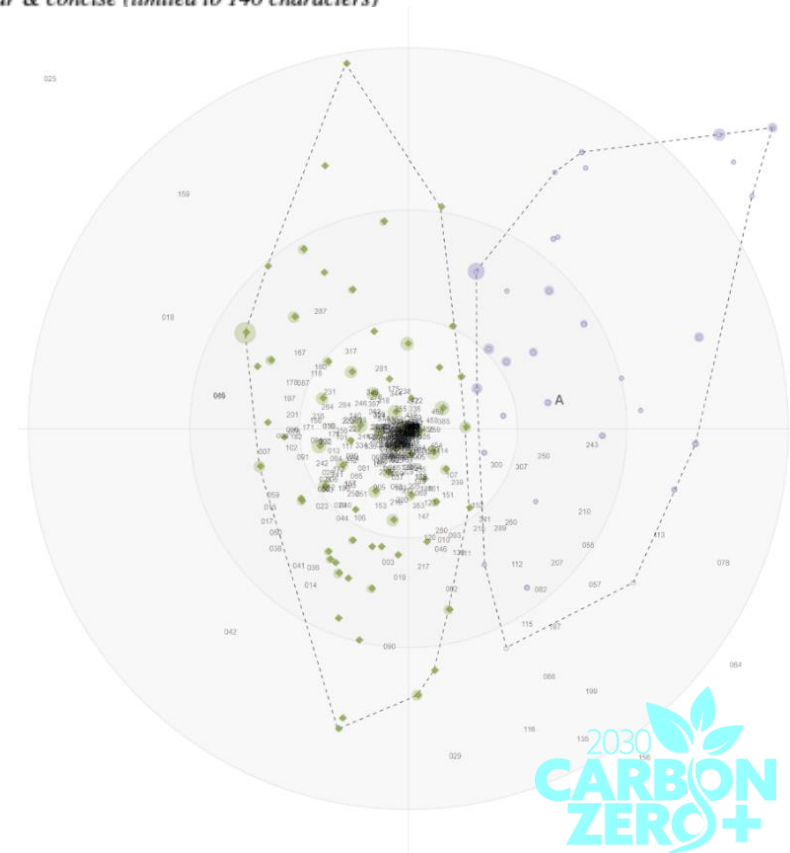
**Bus shelters should have green roofs for biodiversity**

Agree     
  Disagree     
  Pass / Unsure

Are your perspectives or experiences missing from the conversation? If so, add them in the box below.

What makes a good statement?

- Stand alone idea
- Raise new perspectives, experiences or issues
- Clear & concise (limited to 140 characters)









# LESSONS LEARNED



Act now not tomorrow



Quantify and monitor the problem



Collaborate widely



Share learning



Council Climate  
Action Scorecards

# 2023

# Lancaster City Council

★ High scoring council – district

Overall score

# 61%

Highest scoring section

85%  
Planning & Land Use

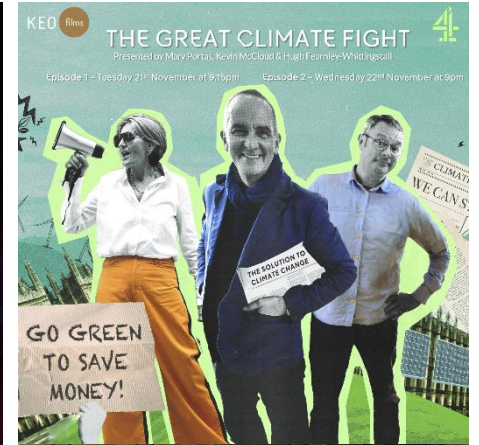
★ High scoring council

Lowest scoring section

27%  
Transport



**FSB Local Government Awards England**



**LANCASTER CITY COUNCIL**  
Promoting City, Coast & Countryside



“We believe that the only suitable response [to the climate emergency] will be one that brings many organisations and individuals together to work collectively and not separately. This is bigger than Lancaster.”

Lancaster Peoples' Jury Statement, 2020

# Thank you



Mark Davies  
mdavies@lancaster.gov.uk  
<https://www.lancaster.gov.uk/>

