

Dorset Council

# Climate and Nature Monitoring dashboard

Autumn/Winter 2024

Climate Change | Carbon Neutral Dorset

Biodiversity Loss | Nature Positive Dorset

Adaptation | Resilient Dorset

DRAFT





County emissions



Energy



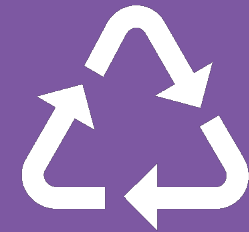
Buildings



Transport



Land

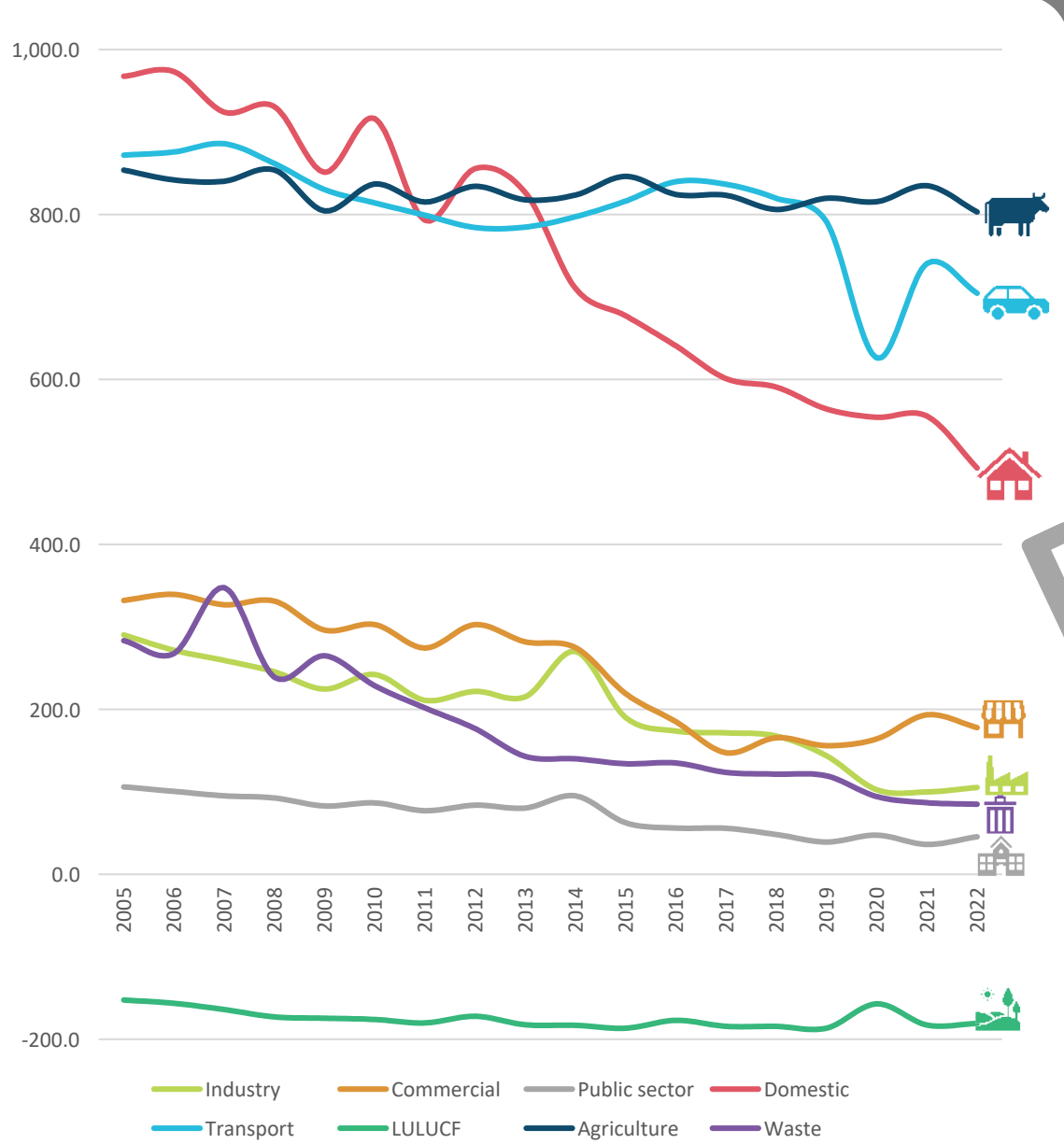


Waste

DRAFT



# County Emissions | Total and trend



Total emissions, 2022  
**2,233.8 ktCO<sub>2</sub>e**

Annual change, 2021-2022  
**-5.55%**

**Short-term trend:** Dorset's emissions reduced by 5.55% (121.4 kt) during 2021-2022 – compared to 4.9% for the SW and 5.5% for England.

**Medium-term trend:** Dorset's emissions reduced by 8.72% (213kt) since our baseline year of 2019 – compared to 9.9% for the SW and 10.6% for England.

**Long-term trend:** Emissions reduced by 37.1% (1319.6 kt) since 2005 – compared to 41.2% for the SW and 42.8% for England.

**Dorset's emissions are therefore reducing at a similar but marginally slower pace than the regional and national averages.**

Per capita emissions, 2022  
**5.8 tCO<sub>2</sub>e**

SW average: **5.2**  
England average: **5.1**

Dorset ranks **207<sup>th</sup> out of 296** council areas in England by per capita emissions. (The lowest is Hackney at 2.2, and the highest the City of London at 55.2)

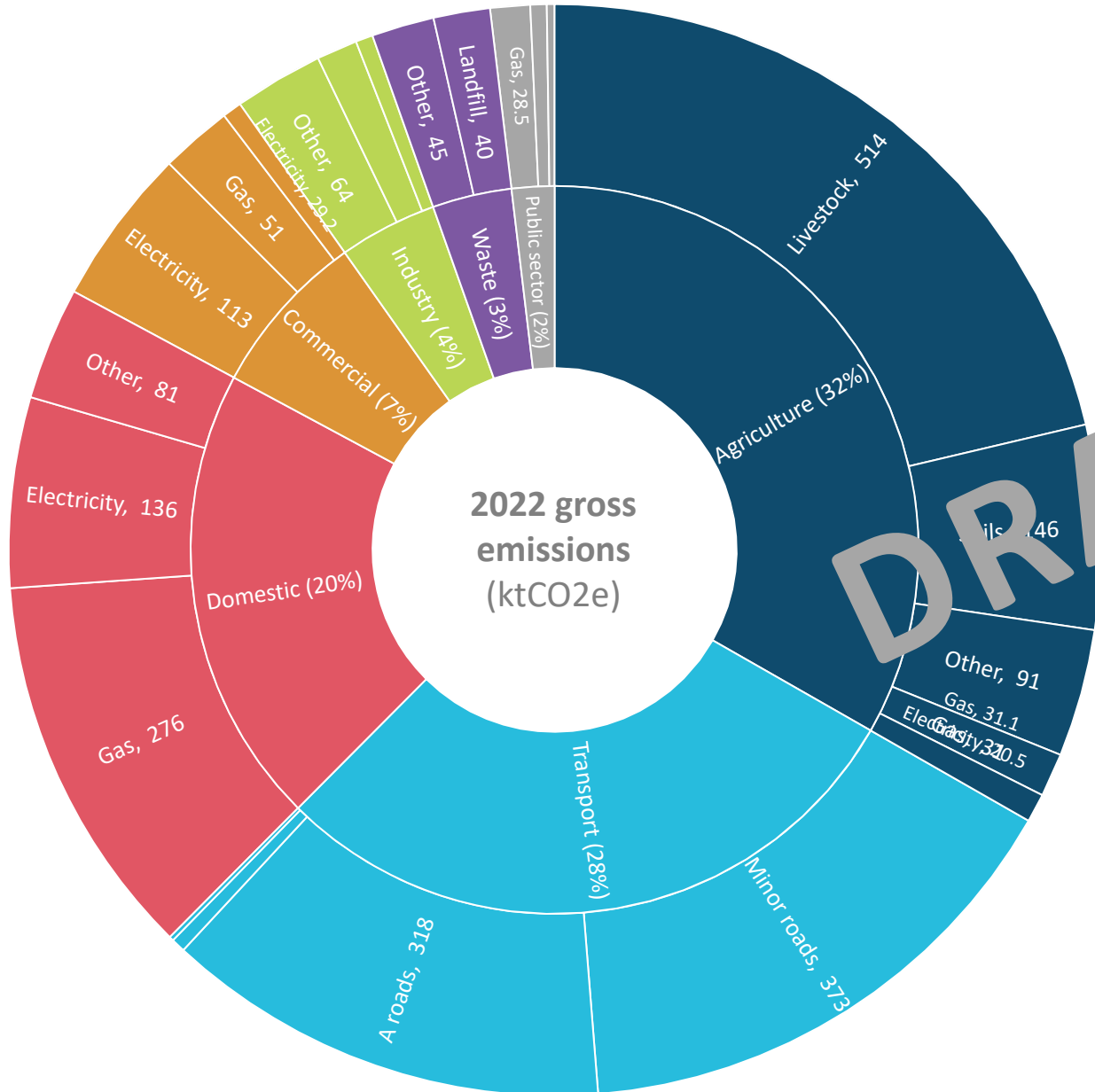
Emissions per km<sup>2</sup>, 2022  
**0.9 ktCO<sub>2</sub>e**

SW average: **1.2**  
England average: **2.2**

Dorset ranks **26<sup>th</sup> out of 296** council areas in England by per capita emissions. (The lowest is Northumberland at 0.4, and the highest is the City of London at 190.1.)



# County Emissions | Sectoral breakdown



### Industrial: 105.4kt

| Short-term<br>2021-2022         | Medium-term<br>2017-2022       | Long-term<br>2005-2022          |
|---------------------------------|--------------------------------|---------------------------------|
| +5.5%                           | -38.6%                         | -64%                            |
| Regional: -4.8%<br>England: -9% | Regional: -5%<br>England: -11% | Regional: -65%<br>England: -59% |

### Commercial: 178kt

| Short-term<br>2021-2022       | Medium-term<br>2017-2022       | Long-term<br>2005-2022          |
|-------------------------------|--------------------------------|---------------------------------|
| -8%                           | +20.7%                         | -46.4%                          |
| Regional: -8%<br>England: -5% | Regional: -11%<br>England: -9% | Regional: -60%<br>England: -58% |

### Public sector: 45.7kt

| Short-term<br>2021-2022           | Medium-term<br>2017-2022          | Long-term<br>2005-2022          |
|-----------------------------------|-----------------------------------|---------------------------------|
| +25.9%                            | -18.2%                            | -56.9%                          |
| Regional: -2.2%<br>England: -6.4% | Regional: -3.2%<br>England: -5.9% | Regional: -59%<br>England: -57% |

### Domestic: 492.7kt

| Short-term<br>2021-2022         | Medium-term<br>2017-2022        | Long-term<br>2005-2022          |
|---------------------------------|---------------------------------|---------------------------------|
| -11.3%                          | -18%                            | -49.1%                          |
| Regional: -12%<br>England: -13% | Regional: -13%<br>England: -13% | Regional: -48%<br>England: -47% |

### Transport: 704.6kt

| Short-term<br>2021-2022           | Medium-term<br>2017-2022       | Long-term<br>2005-2022           |
|-----------------------------------|--------------------------------|----------------------------------|
| -4.9%                             | -15.8%                         | -19%                             |
| Regional: -0.5%<br>England: +0.5% | Regional: -8%<br>England: -11% | Regional: -8.3%<br>England: -19% |

### LULUCF sources: 81.5kt

| Short-term<br>2021-2022 | Medium-term<br>2017-2022 | Long-term<br>2005-2022 |
|-------------------------|--------------------------|------------------------|
| +0.1%                   | +0.1%                    | -11.2%                 |
|                         |                          |                        |

### Agriculture: 803kt

| Short-term<br>2021-2022       | Medium-term<br>2017-2022      | Long-term<br>2005-2022          |
|-------------------------------|-------------------------------|---------------------------------|
| -3.8%                         | -2.5%                         | -6%                             |
| Regional: -2%<br>England: -3% | Regional: -4%<br>England: -4% | Regional: -10%<br>England: -13% |

### Waste: 85.1kt

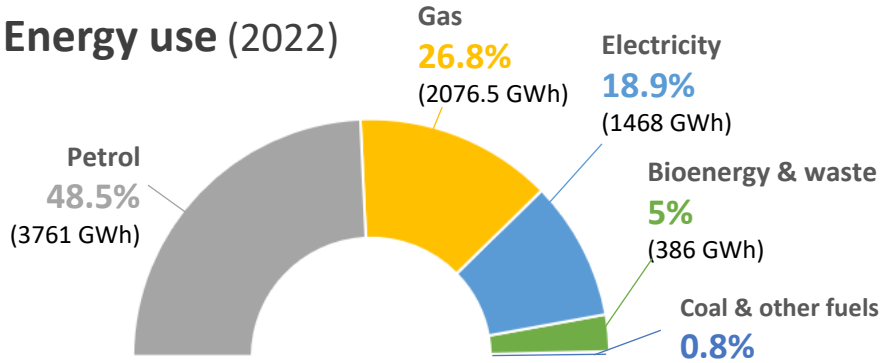
| Short-term<br>2021-2022          | Medium-term<br>2017-2022        | Long-term<br>2005-2022          |
|----------------------------------|---------------------------------|---------------------------------|
| -2.1%                            | -31.2%                          | -70%                            |
| Regional: -11%<br>England: +0.7% | Regional: -33%<br>England: -10% | Regional: -73%<br>England: -50% |



# Energy



## Energy use (2022)



Around **76%** of our energy use comes directly from fossil fuels – with more indirectly through electricity. That has barely changed from 2005, when it was 79.5%.



**663 GWh** per 100,000 people is used by households – compared to 596 regionally and 617 in England. Locally this reduced by 8.5% from 2021-22, and by 25.8% from 2005-2022.



**582 GWh** per 100,000 people is used by industry and commerce – compared to 584 regionally and 796 in England. Locally this reduced by 1.3% from 2021-22, and by 12.6% from 2005-2022.



**795 GWh** per 100,000 people is used for travelling – compared to 796 regionally and 689 in England. Locally this reduced by 0.8% from 2021-22, and by 5.3% from 2005-2022.

## Renewable generation (2022)

# 328.4 GWh

of renewable energy was generated locally in 2022 – up 5.3% on 2017.

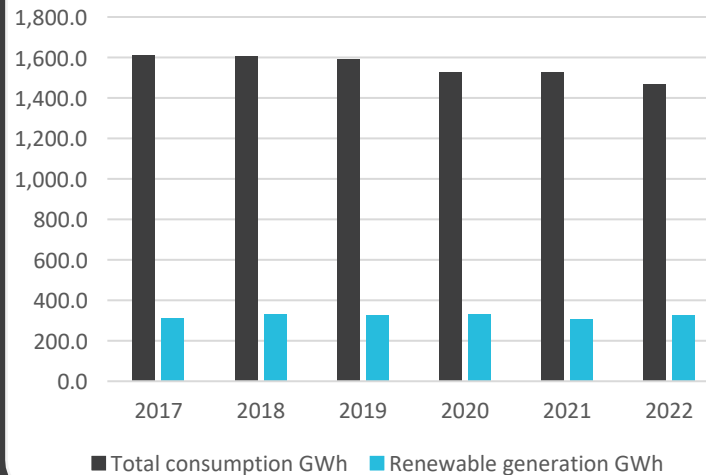
That was equivalent to

# 22.4%

of our electricity consumption, and

# 4%

of our total energy consumption



## Renewables infrastructure (2023)

# 14,261 installations

▲ +50.6% (2019-2023)

Compared to 43% in England and 45% in the SW

# 358MW capacity

▲ +21.7% (2019-2023)

Compared to 18% in England and 12% in the SW

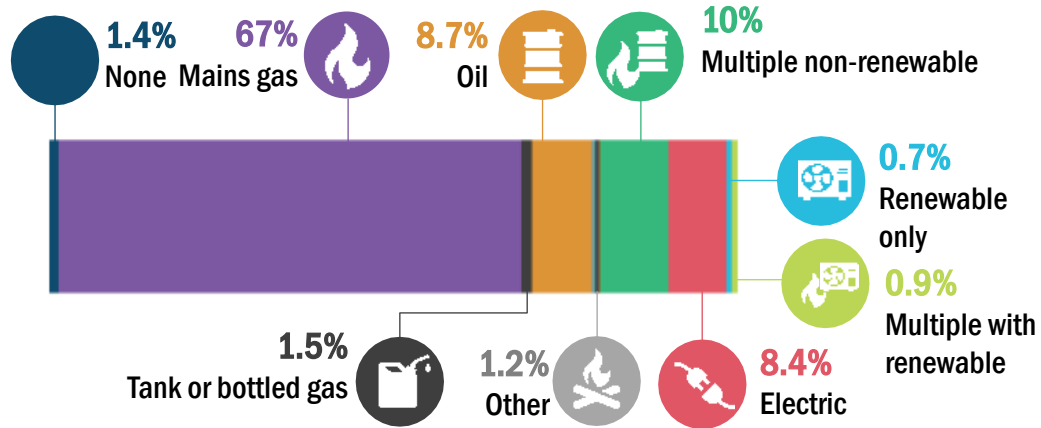
**Solar (99.6%)****14,207 installations****344.7 MW capacity****Onshore Wind (0.3%)****26 installations****0.9 MW capacity****Hydro (0.03%)****11 installations****0.1 MW capacity****Anaerobic Digestion (1.7%)****14 installations****5.1 MW capacity****Landfill gas (2.4%)****3 installations****7.2 MW capacity**



# Buildings



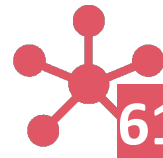
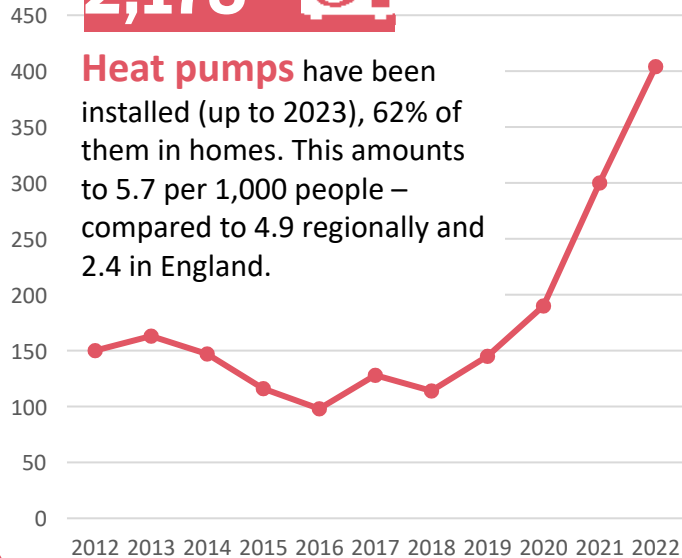
## Household heating (2021)



### 2,178



**Heat pumps** have been installed (up to 2023), 62% of them in homes. This amounts to 5.7 per 1,000 people – compared to 4.9 regionally and 2.4 in England.



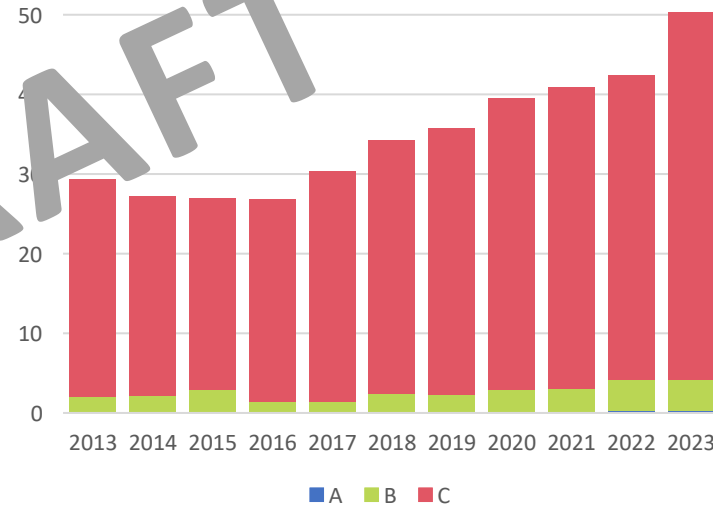
### 61

**Heat networks** were registered by 2022, serving **1,543** customers. That's amounts to 4 connected customers per 1,000 people – compared to 4.5 regionally. Another **489** customers will connect locally if those in the pipeline are built.

## Energy efficiency

### 50.3%

of **homes** assessed for energy efficiency had an EPC rating of C or above in 2023 (excluding new builds) – compared to 49.4% regionally and 52.6% nationally.



### 75%

of **non-domestic buildings** locally are EPC C or above.



### 12.5%

of homes (22,223) were in **fuel poverty** in 2022 – compared to 12.9% regionally and 13.1% in England.



### 495

**homes** have been upgraded through Government grant-funded energy efficiency schemes (LAD & HUG) since 2020. That amounts to 1.3 households per 1,000 people – compared to 1.35 regionally and 1.16 in England.

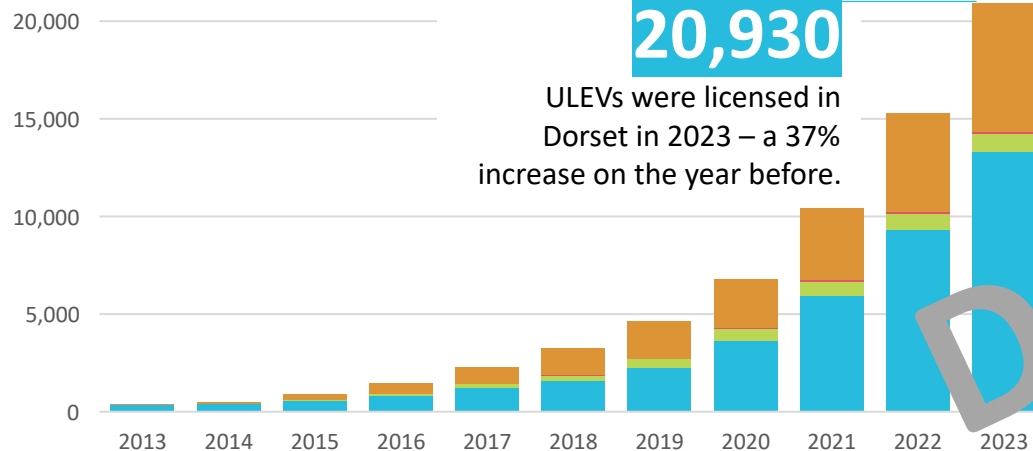
**2.2%**

of our road vehicles were electric in 2023 – compared to 5.3% regionally and 4.7% in England, but...



**25.5%**

of newly licensed cars or vans were EVs or hybrid.

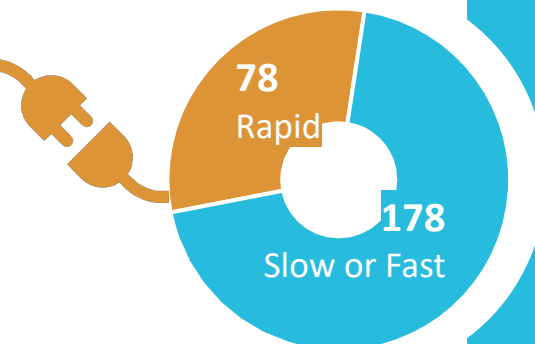


**20,930**  
ULEVs were licensed in Dorset in 2023 – a 37% increase on the year before.

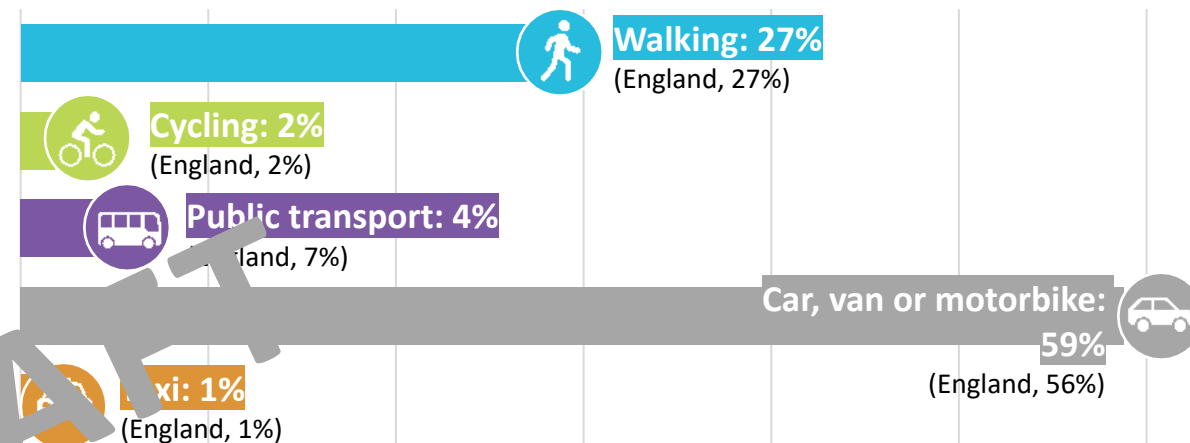
■ Battery electric ■ Other fuels ■ Plug-in hybrid electric (diesel) ■ Plug-in hybrid electric (petrol)

There are **256** EV chargers in Dorset, **66% of which are council-sponsored.**

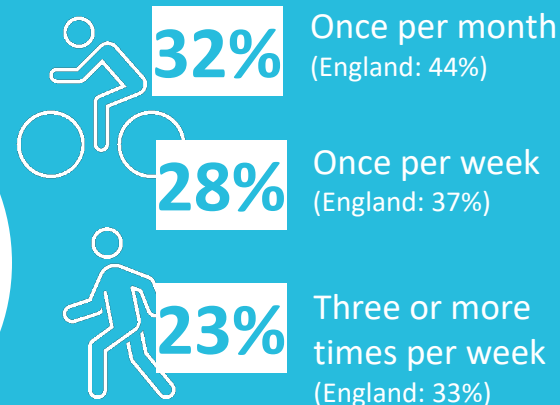
That amounts to **67 per 100,000 people** – compared to 80 regionally or 97 in England (making us 138<sup>th</sup> out of 296 council areas)



## Mode of transport (SW regional)



## Adults engaged in active travel (2022)



## Bus journeys per head (2022)



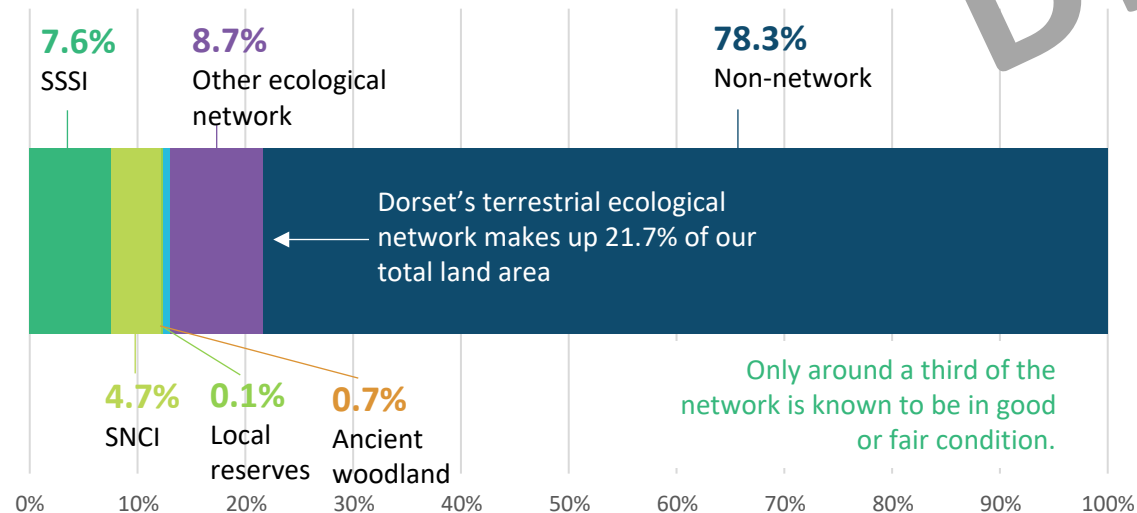
**12.5**

Compared to 24.1 regionally and 50.2 in England

## Land use, 2022



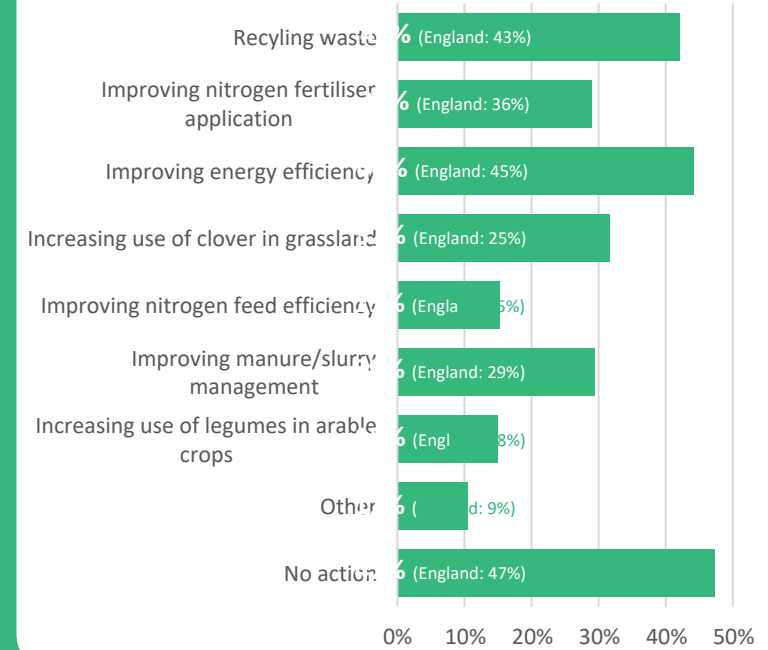
## Terrestrial ecological network



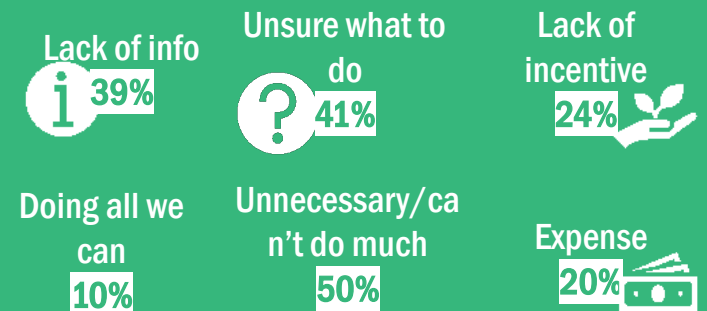
## Net emissions, 2022



## Farm emission practices, 2023 (SW Regional)



## Barriers to action



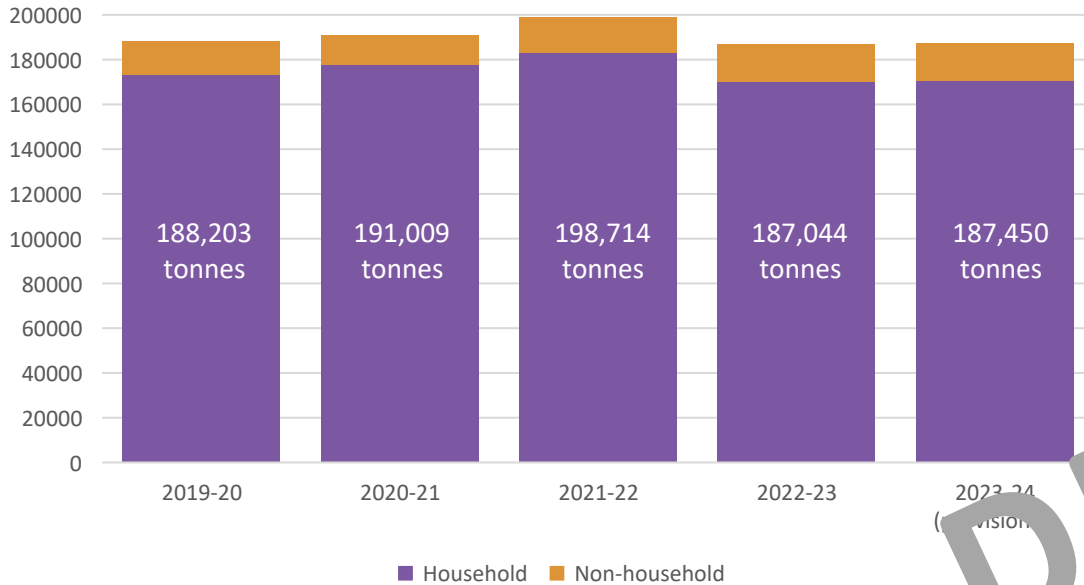




# Waste

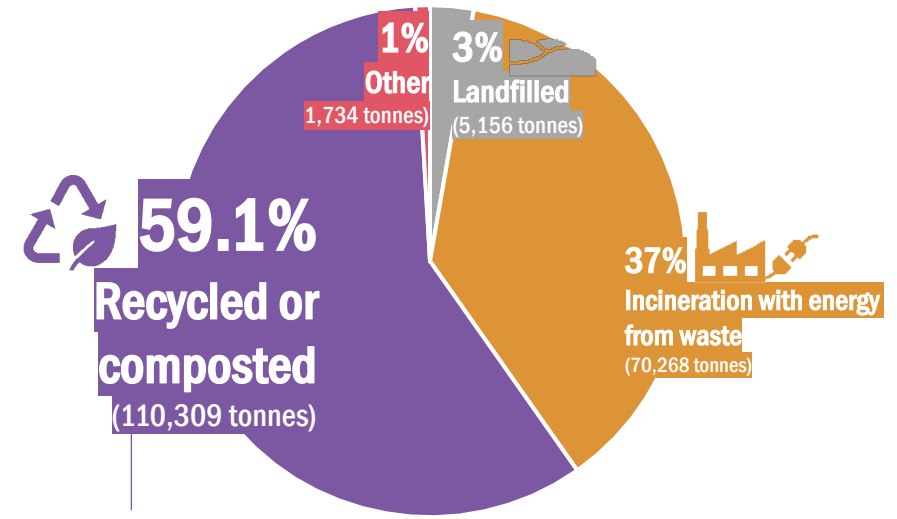


## Local authority-collected waste, tonnes (2019-24)



## Waste management, 2022/23

**#1**  
Dorset Council is the number 1 performing Unitary Authority area for household recycling and composting rates



This compares so a regional average of **48.2%** and an England average of **41.7%**

**377.9kg**

Residual household waste per household

Down 6.3% on 2021/22.



This compares to 456kg regionally and 509kg in England. Dorset produces the 6<sup>th</sup> lowest amongst 94 unitary authorities

## Recycling breakdown (average yield per household)





# Sources



## Greenhouse Gas Emissions:

- Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy: [UK local authority and regional greenhouse gas emissions statistics, 2005-2022](#)



## Energy:

- Department for Business, Energy & Industrial Strategy: [Total final energy consumption at regional and local authority level, 2005-2022](#)
- Department for Energy Security and Net Zero: [Regional Renewable Statistics](#)
- Department for Energy Security and Net Zero: [Renewable Energy Planning Database](#)



## Buildings:

- Office for National Statistics: [Type of central heating of the accommodation based on Census 2021](#)
- MCS: [MCS Data Dashboard](#)
- Ministry of Housing, Communities and Local Government: [Live tables on Energy Performance of Buildings Certificates](#)
- Department for Energy Security and Net Zero: [Heat Networks Planning Database](#)



## Transport:

- Department for Transport: [Vehicle licensing statistics data tables \(VEH0132: Licensed ULEVs\)](#)
- Department for Transport: [Electric vehicle public charging infrastructure statistics](#)
- Department for Transport: [Mode of travel](#) and [CW0301: Proportion of adults who do any walking or cycling, for any purpose, by frequency and local authority](#)
- Department for Transport: [BUS01: Local bus passenger journeys](#)



## Land:

- Ministry of Housing, Communities and Local Government: [Land use in England, 2022](#)
- Dorset Local Nature Partnership: [Natural Value Report 2022](#)
- Department for Energy Security and Net Zero: [UK local authority and regional greenhouse gas emissions statistics, 2005-2022](#)
- Department for Environment, Food & Rural Affairs: [Farm practices survey February 2024](#)



## Waste:

- Department for Environment, Food & Rural Affairs: [Local authority collected waste management - annual results](#)
- WRAP LA Portal: [Waste & recycling information for local authorities](#)
- [WasteDataFlow portal](#)