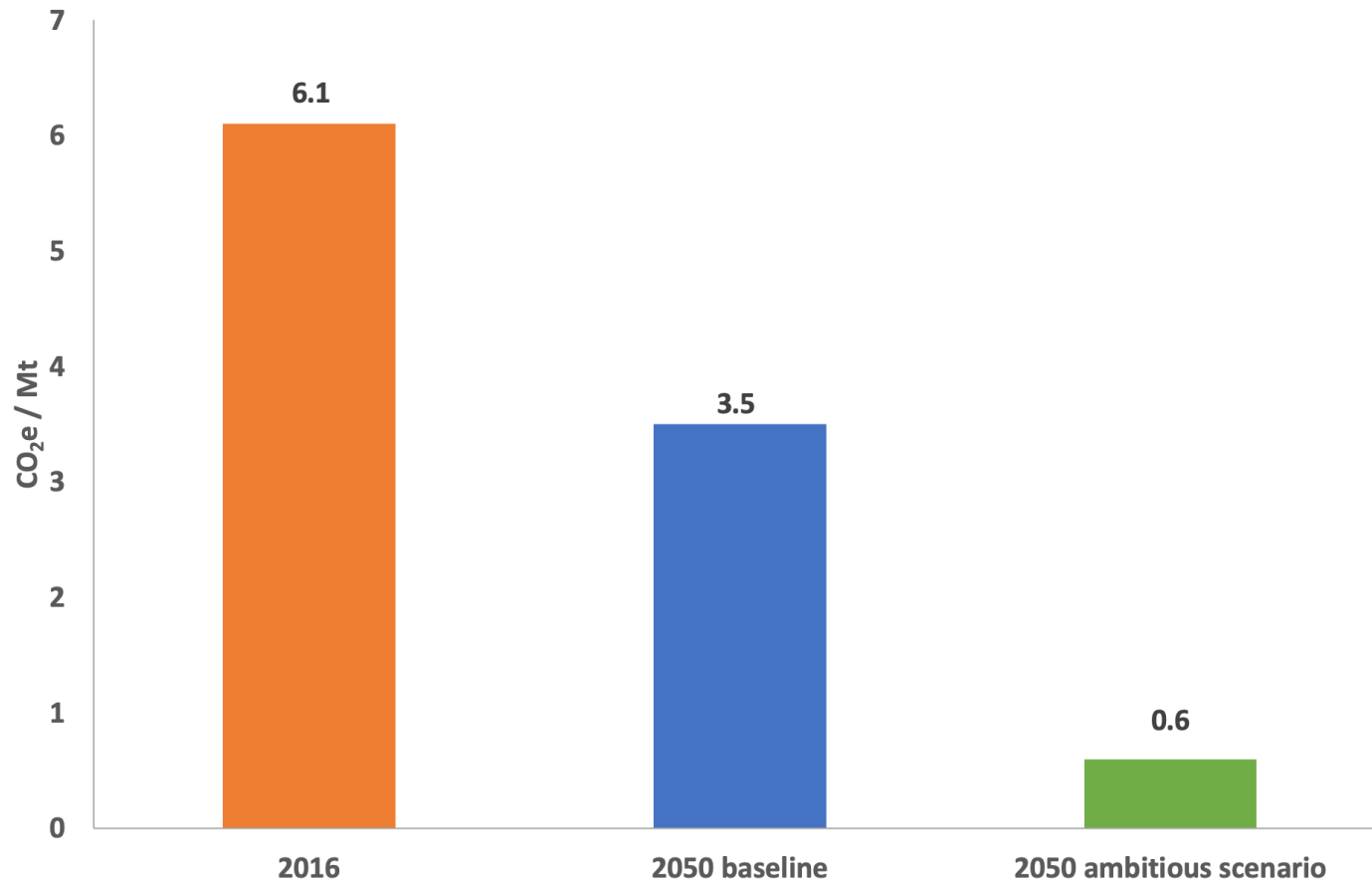


# Net Zero Cambridgeshire

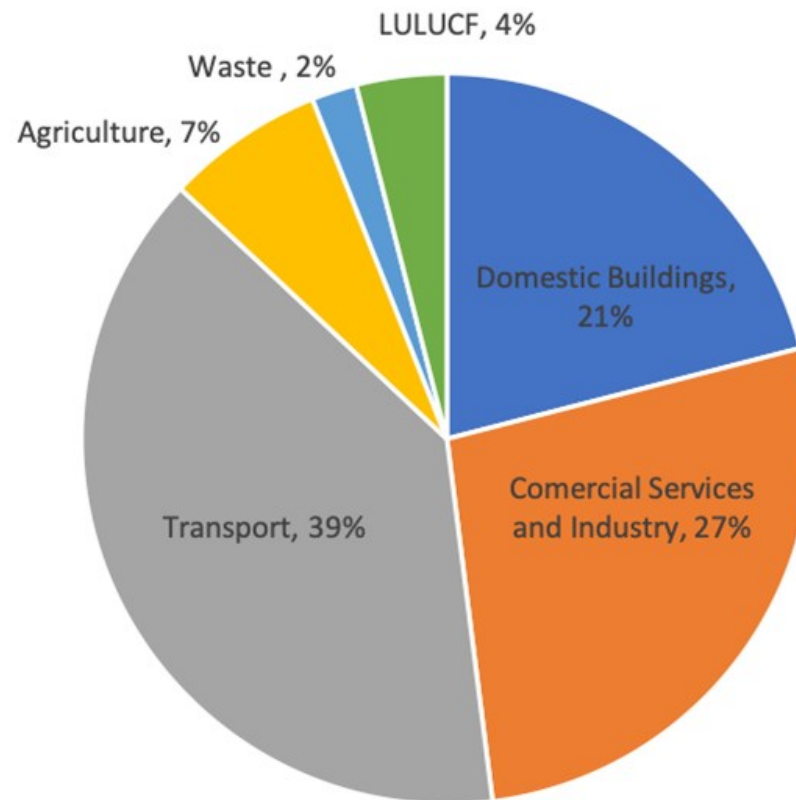
*What actions must Cambridgeshire County Council & Peterborough City Council take to reach net zero carbon emissions by 2050?*

James Weber, Kieran Gilmore, Peter Budden, Sarah Nelson,  
Yuchen Hu, Meena Matharu & Matteo Craglia

# Introduction - Scenarios



# Introduction - Current Emissions

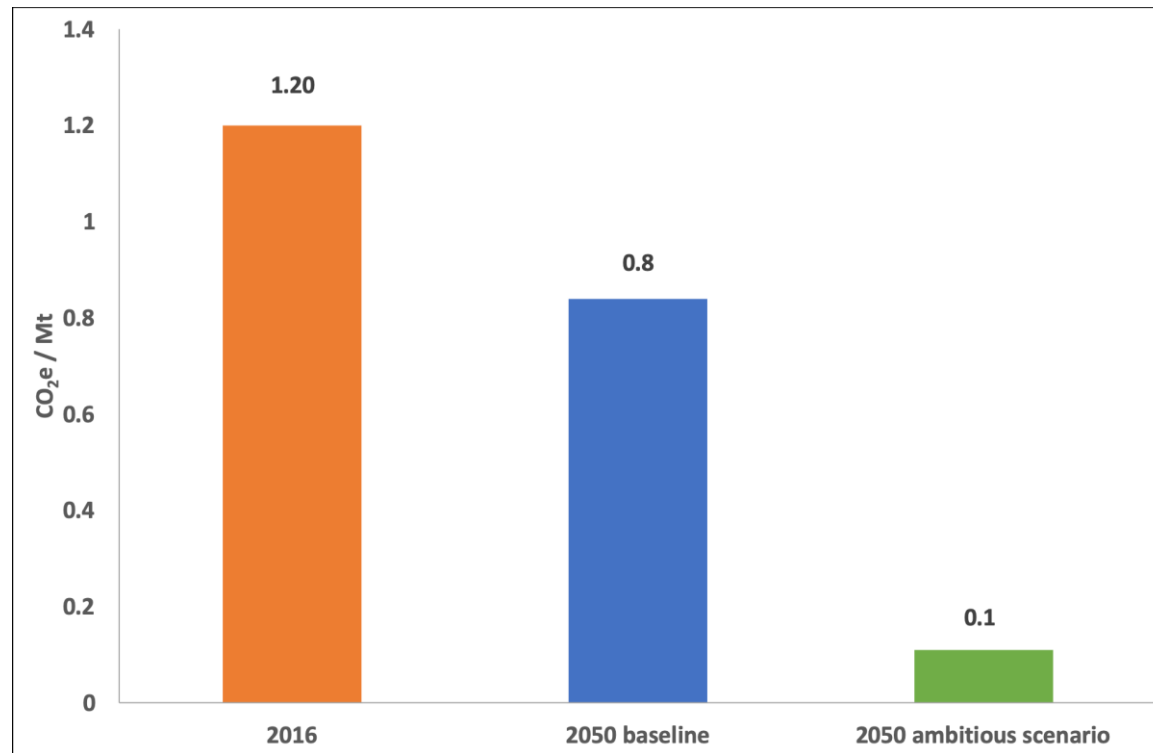


# Domestic Buildings

## Ambitious forecast – 91% reduction

- Household efficiency improvements
- Low carbon heat – heat pumps, community heating

**Model available for council use.**

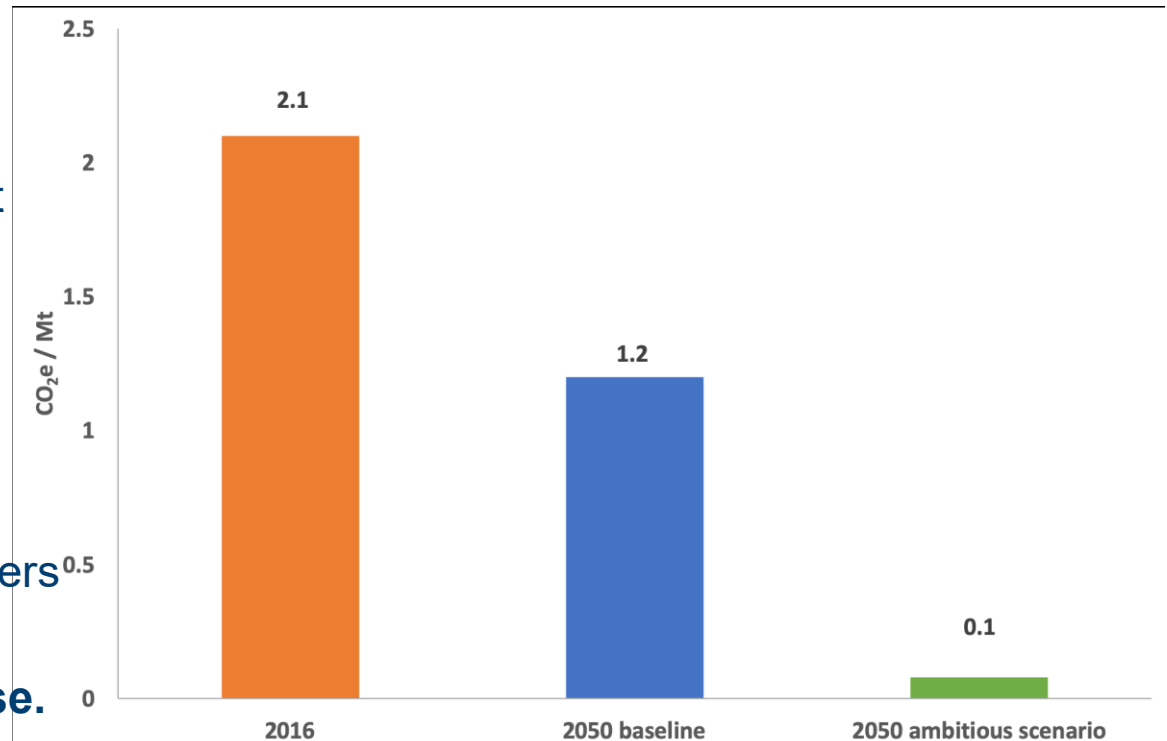


# Transport

## Ambitious forecast – 95 % reduction

- Electrification of all transport fleet.
- 10% modal shift to public transport.
- Rollout of 3500 public chargers

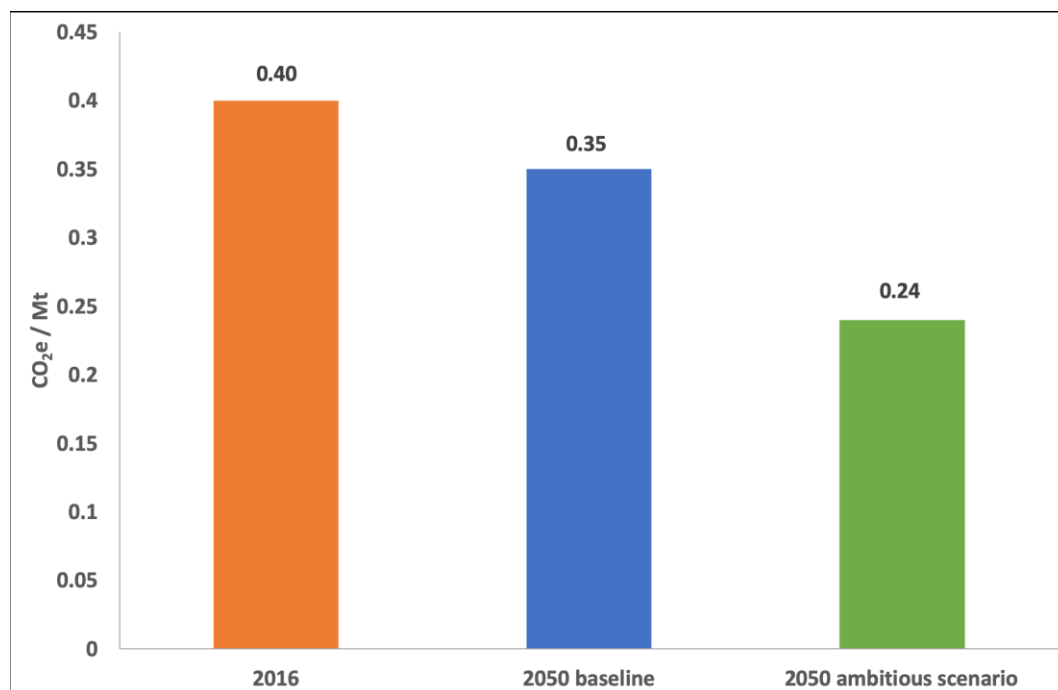
Model available for council use.



# Agriculture

## Ambitious scenario – 40 % decrease

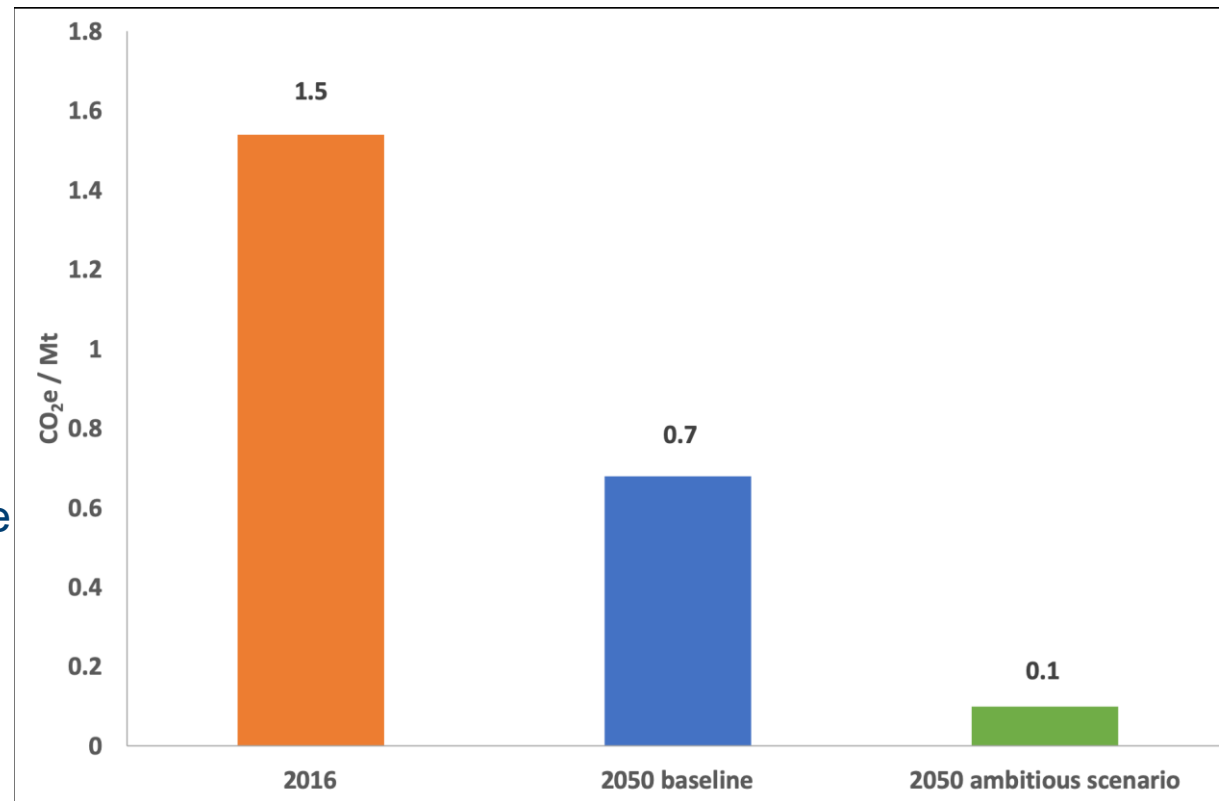
- Reduction of red meat and dairy by 20%
- Livestock feed additives
- Improved fertiliser efficiency



# Commercial Services & Industry

## Ambitious scenario – 93 % decrease

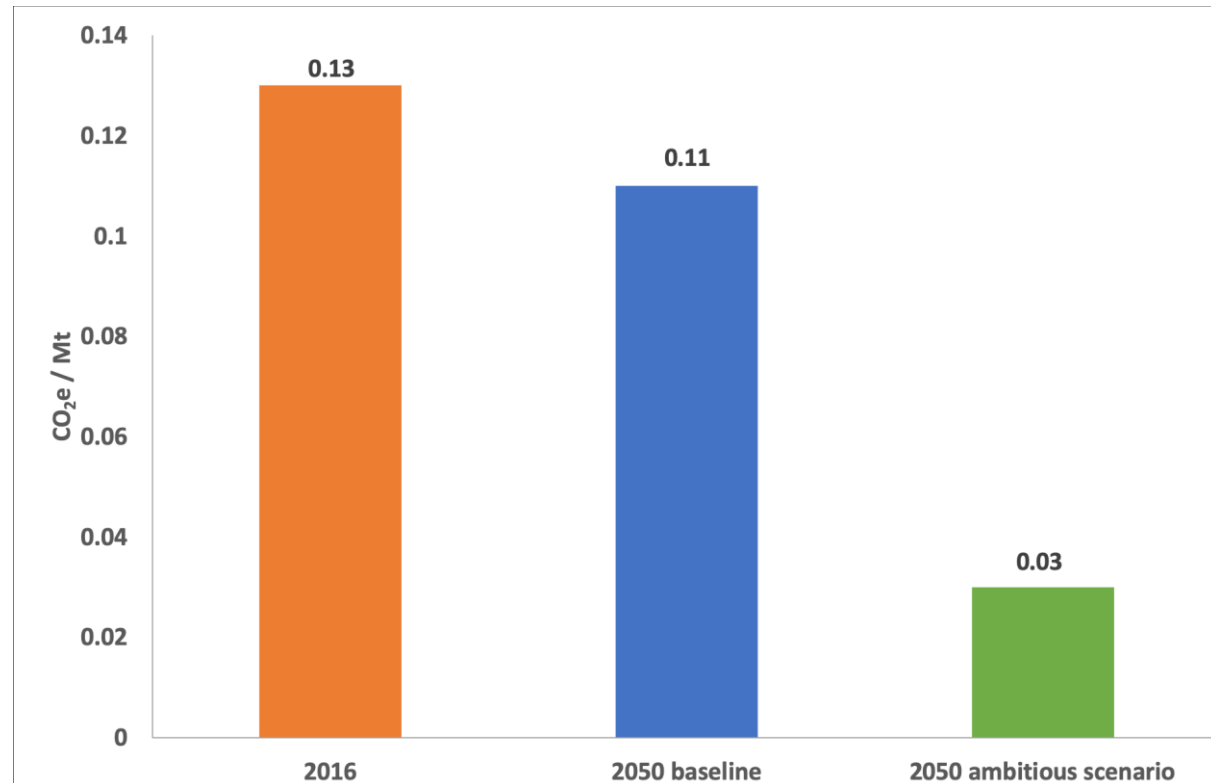
- Low carbon heating
- Carbon capture and storage



# Waste Management

## Ambitious scenario – 77 % decrease

- Landfill gas capture
- Carbon capture and storage
- Electrification of transport





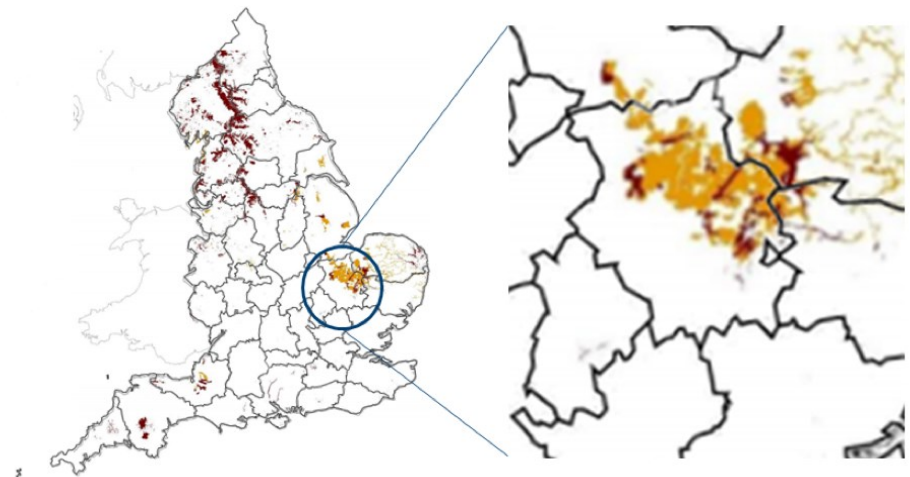
# Afforestation

- Economic analysis of afforestation in Cambridgeshire
- Abatement costs of **£15-50 per tonne CO<sub>2</sub>**.
- Mixture of species considered - promotes biodiversity.

**Model available for council use for further study.**

# Peatland

- Inclusion of peatland emissions could **double** total emissions.
- Large-scale peatland restoration a priority.
- Opportunity for world-wide impact.
- Further research needed.



# Ambitious to Net Zero

## Final 0.6 Mt CO<sub>2</sub>e

- Afforestation
- Carbon capture and storage
- Demand reduction

