

# Net-zero carbon Sheffield

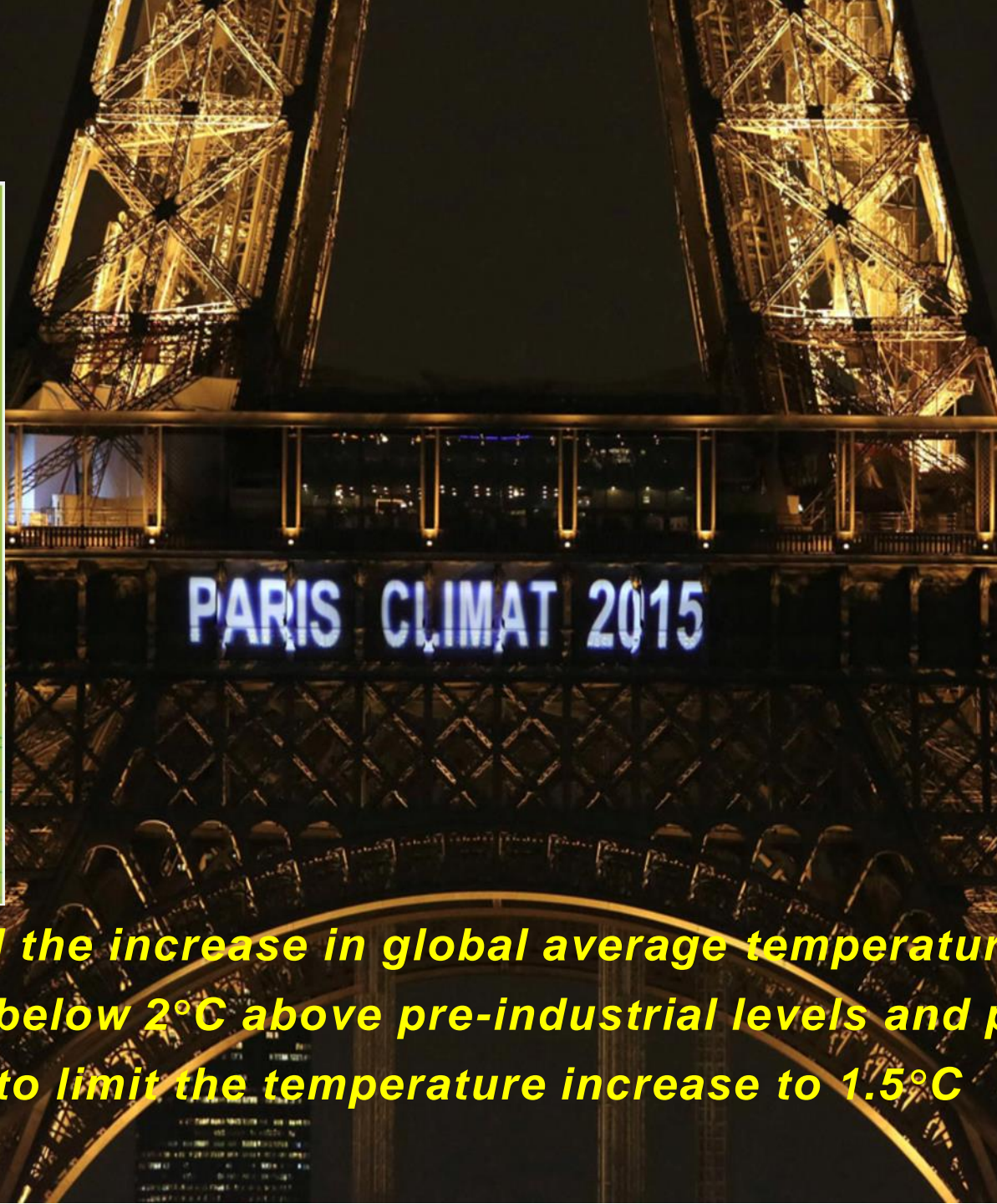
Mark Whitworth  
Sheffield City Council

## GREEN CITY Strategy

Our strategy for a low carbon,  
resilient and sustainable Sheffield



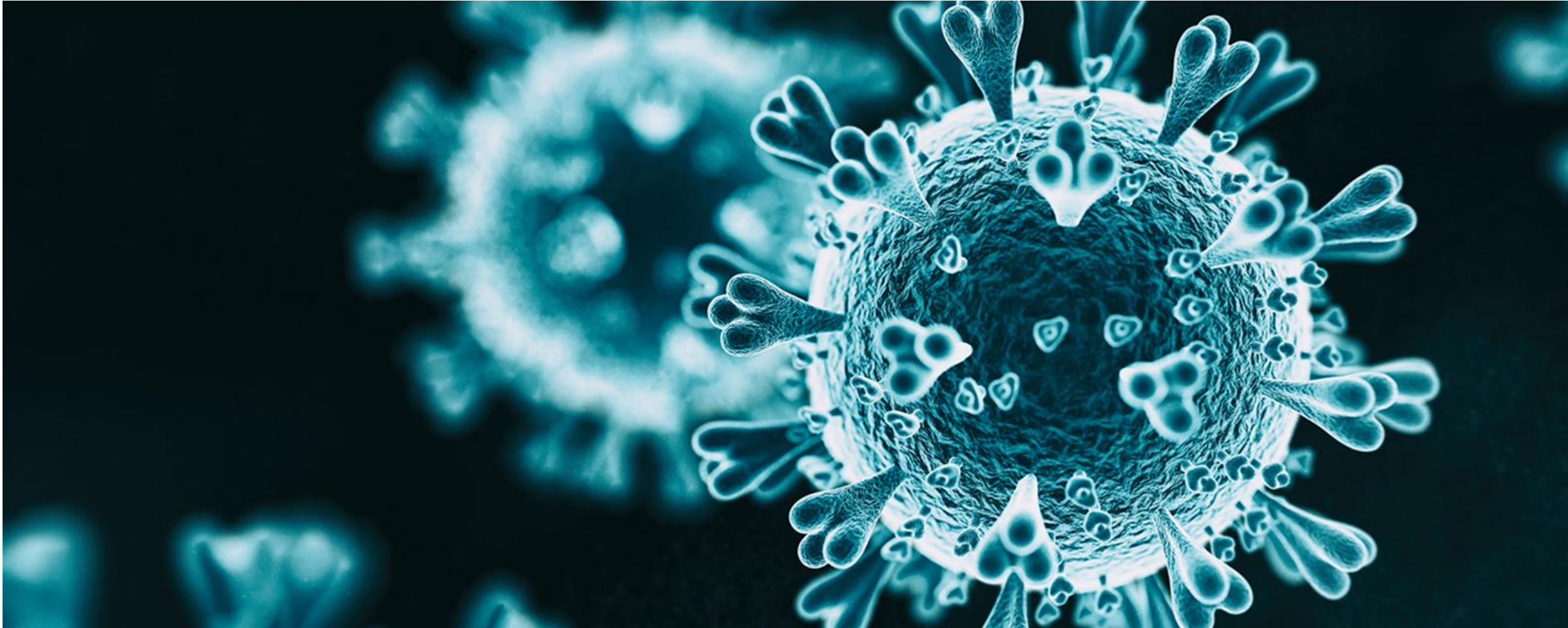
**... hold the increase in global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C**



# Sheffield's response

- Climate Emergency declared – February 19
- Commissioned Tyndall Centre report – 16 mt CO2 – June 19
- Stated ambition to be **net zero carbon by 2030**
- Jointly commission a zero carbon evidence-base with our **Green City Partnership Board**
- Develop a Zero Carbon Plan
- Taking action

# Covid-19



# Our City Carbon budget

- Total recommended carbon budget 16MtCO<sub>2</sub>e for period 2020 – 2100
- Sheffield uses this entire budget in less than 6 years (2017 levels)
- Rapid decarbonisation required, commencing 2020 and averaging 14% year-on-year reduction
- Zero Carbon by 2038 at the latest

A close-up, high-angle photograph of solar panels. The panels are dark blue or black with a grid of silver lines. The perspective is from above, looking down at the panels, which are arranged in rows and columns. The lighting creates a slight shadow and highlights the texture of the panels.

# **Green City Partnership Board**

**Amey**

**Arup**

**Community Energy England**

**Sheffield Chamber of Commerce and  
Industry**

**Sheffield Climate Alliance**

**Sheffield City Council**

**Sheffield Hallam University**

**University of Sheffield**

**Veolia**

# The Zero Carbon Commission



**Baseline emissions**

Establishing the current position

**Business-as-usual projections**

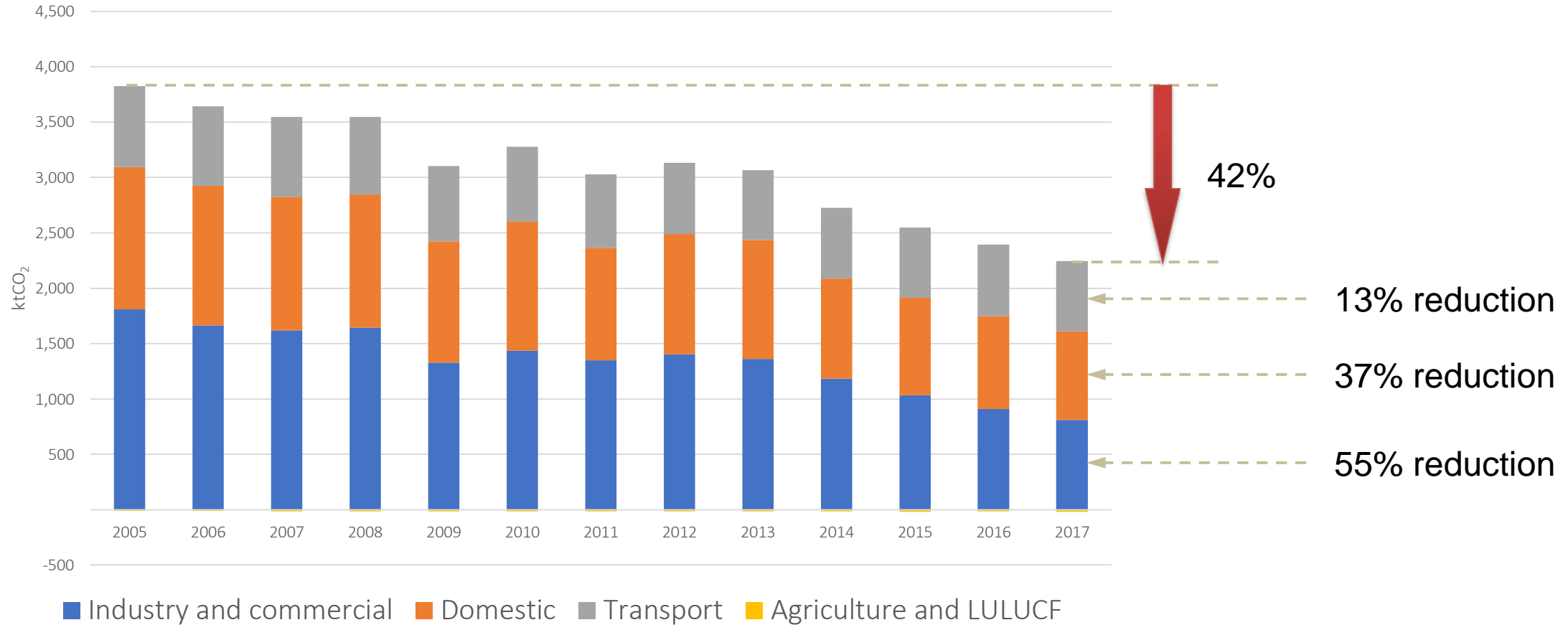
Predicting the effect of current policies

**City-wide zero carbon pathway**

Setting out the actions that are needed to achieve zero carbon

# Baseline emissions

Progress has been made but variable across sectors

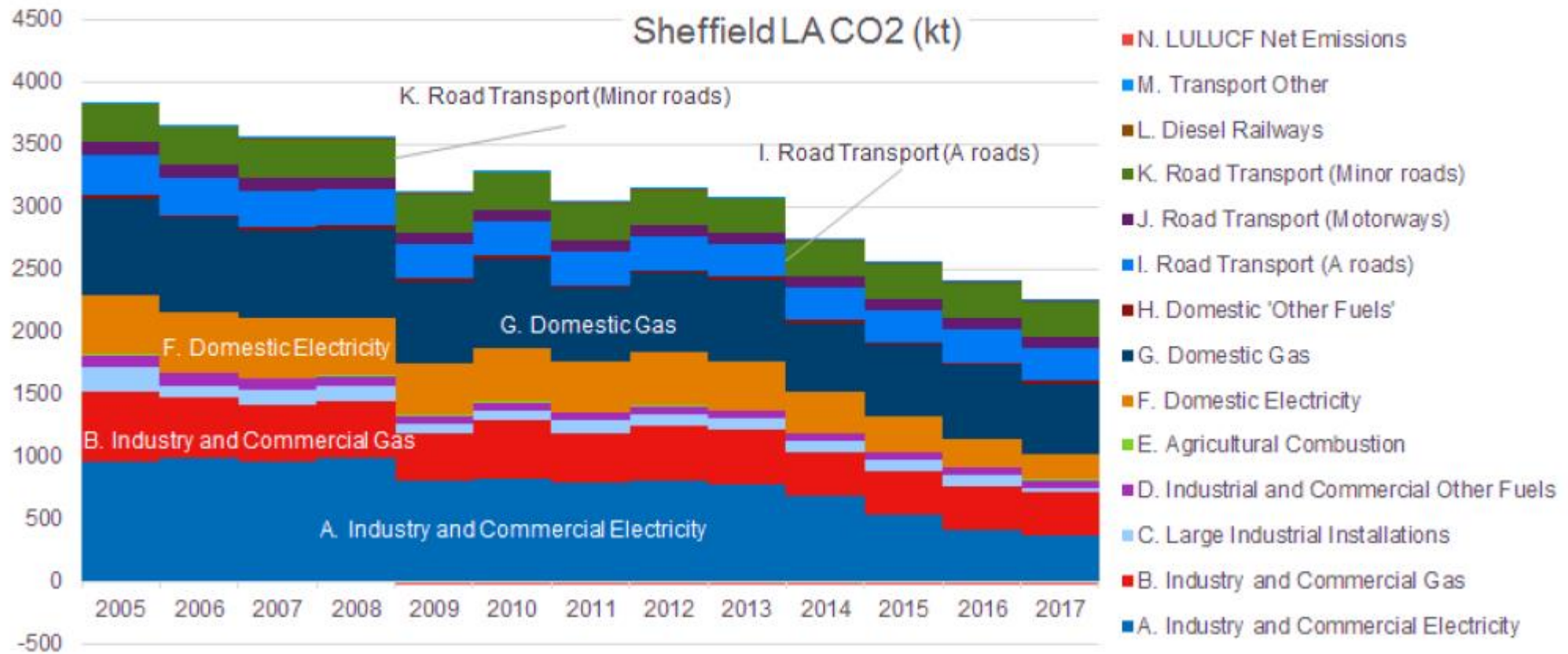




# Baseline emissions

Breakdown across sectors

Figure 6 CO<sub>2</sub> emissions (tonnes) timeseries by sector in Sheffield 2005 to 2017



# Gap analysis

Business as usual scenario



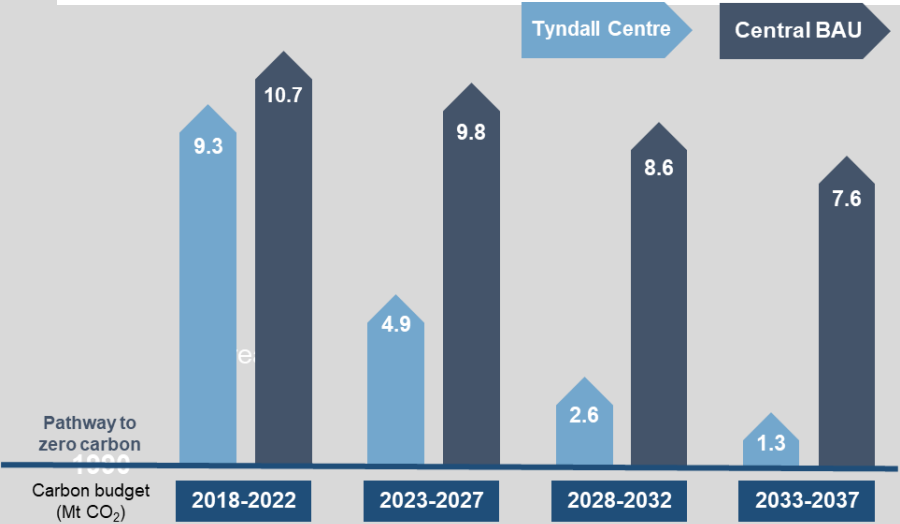
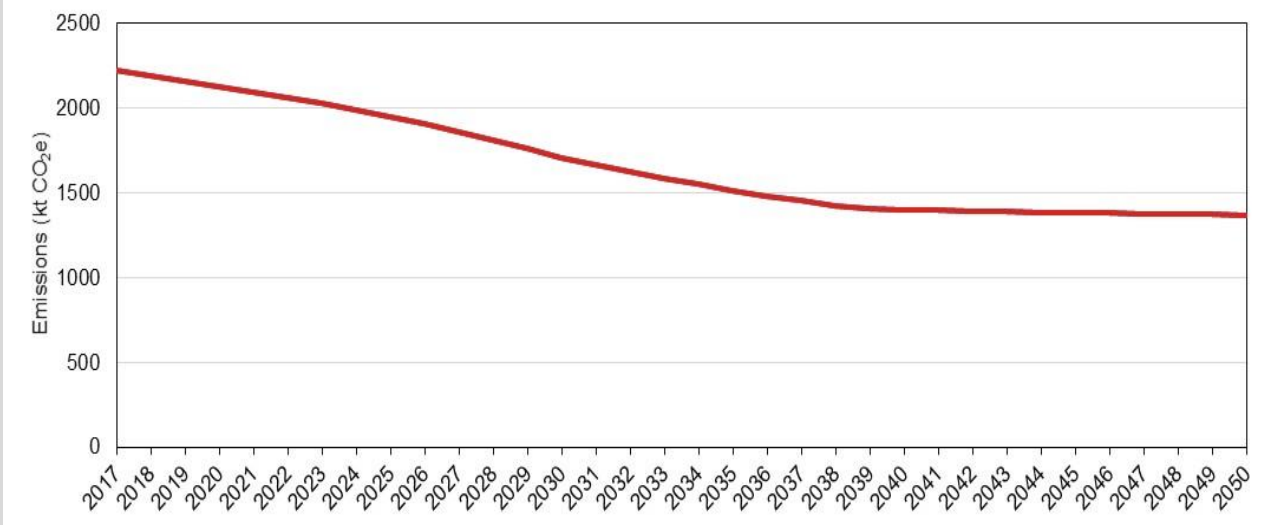
BEIS BAU  
Energy  
Projections

Ban on new  
sales of  
petrol/  
Diesel  
vehicles



COVID-19  
25% GDP  
reduction

The Future  
Homes  
Standard



# the path ahead...

what change on this scale *could* mean

- 100% of Sheffield's energy supply comes from renewable sources by 2030
- Significant shifts towards active travel
- Reduction in car-miles and a full switch to EV
- Phase-out the use of gas for heating and cooking
- A circular economy



# Wider opportunities



“As London and the rest of the world start to emerge from the COVID-19 lockdown, global collaboration between cities will be key to achieving a recovery that tackles climate change at a local and global level. We have a once in a generation opportunity to rebuild our cities and economies to be greener, fairer, and more sustainable. I look forward to working with fellow mayors around the world to implement the actions of this report, including championing the need for a green stimulus that boosts green jobs and divestment from fossil fuels to build a more sustainable economy.”

Sadiq Khan, Mayor of London

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