



# FROM AMBITION TO ACTION: THE DECADE OF DELIVERY

Dr. Sam Gardner Chair Edinburgh Climate Commission





# Edinburgh Climate Commission

Independent group working together to **accelerate climate action and impact in Edinburgh.**

Launched in February 2020 it aims to:

- Identify and address Edinburgh's challenges to meeting climate targets
- Support the city's transition to net zero emissions by 2030
- Catalyse action, challenge the city's decision makers and convene stakeholders
- Act as a forum where organisations can exchange ideas, findings and best practice on carbon reduction and climate resilience

The work of the Commission is co-sponsored by the [City of Edinburgh Council](#) and the [Edinburgh Climate Change Institute](#) at the University of Edinburgh. We are also part of the [Place-based Climate Action Network \(PCAN\)](#).

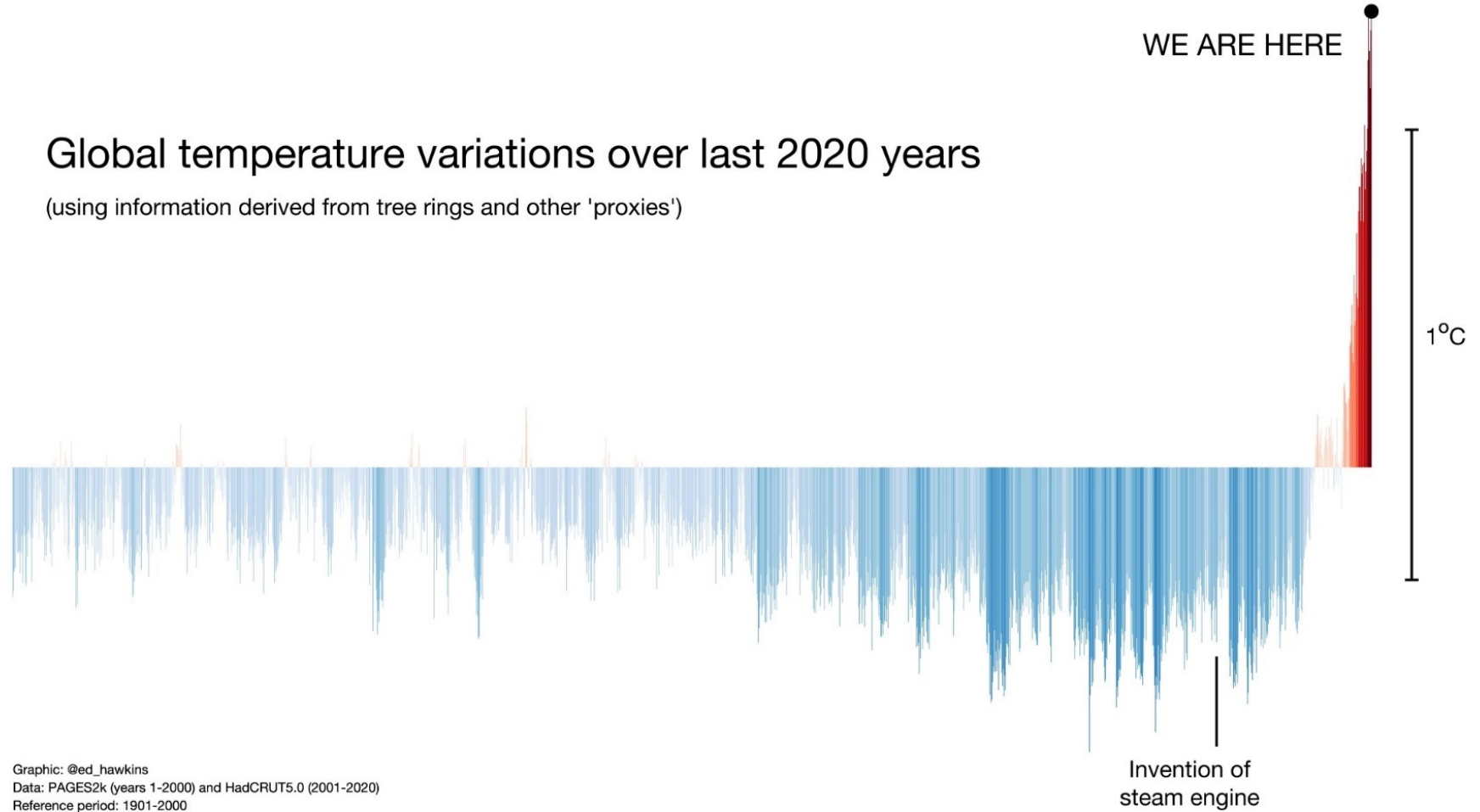




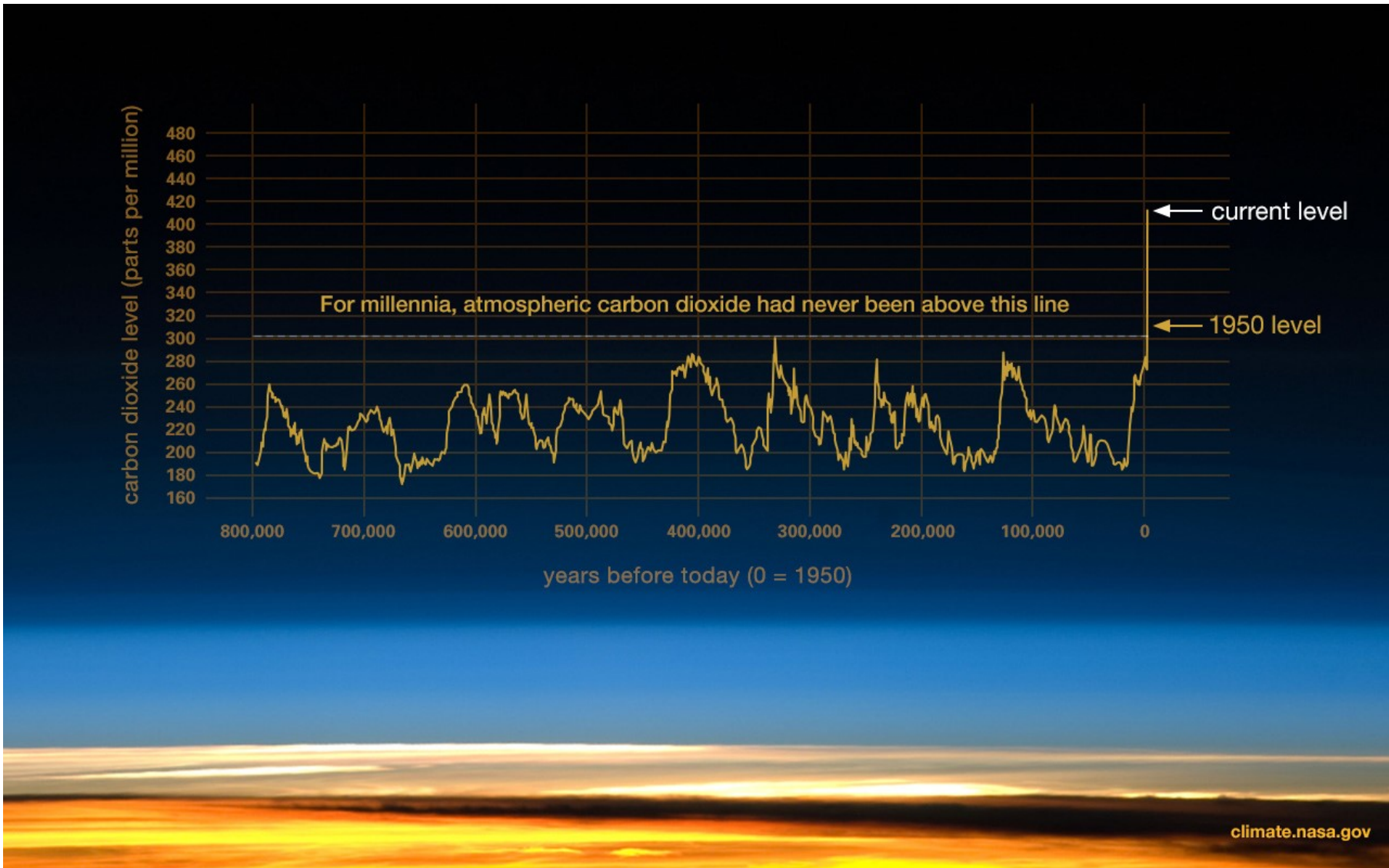


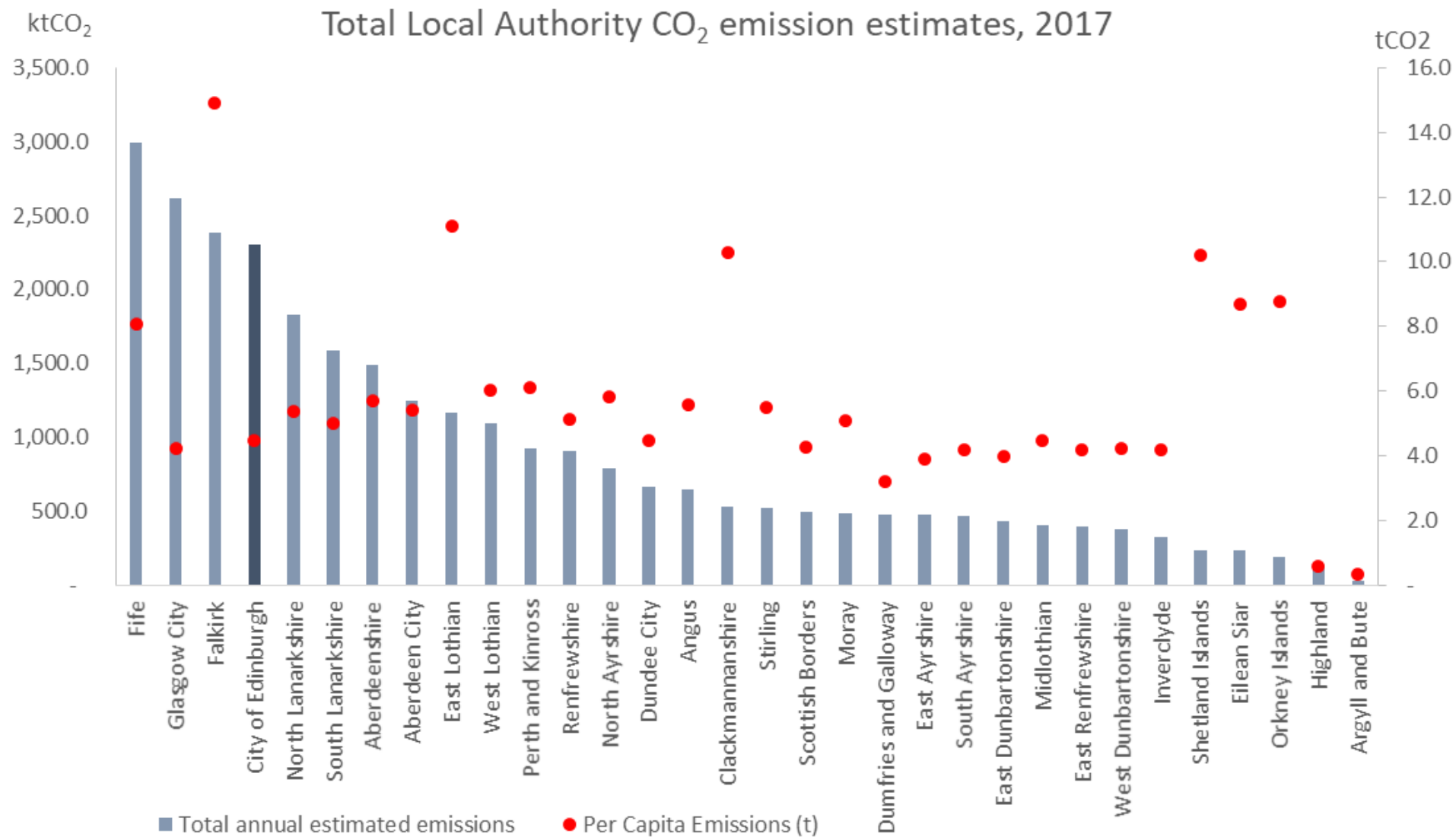
## Global temperature variations over last 2020 years

(using information derived from tree rings and other 'proxies')



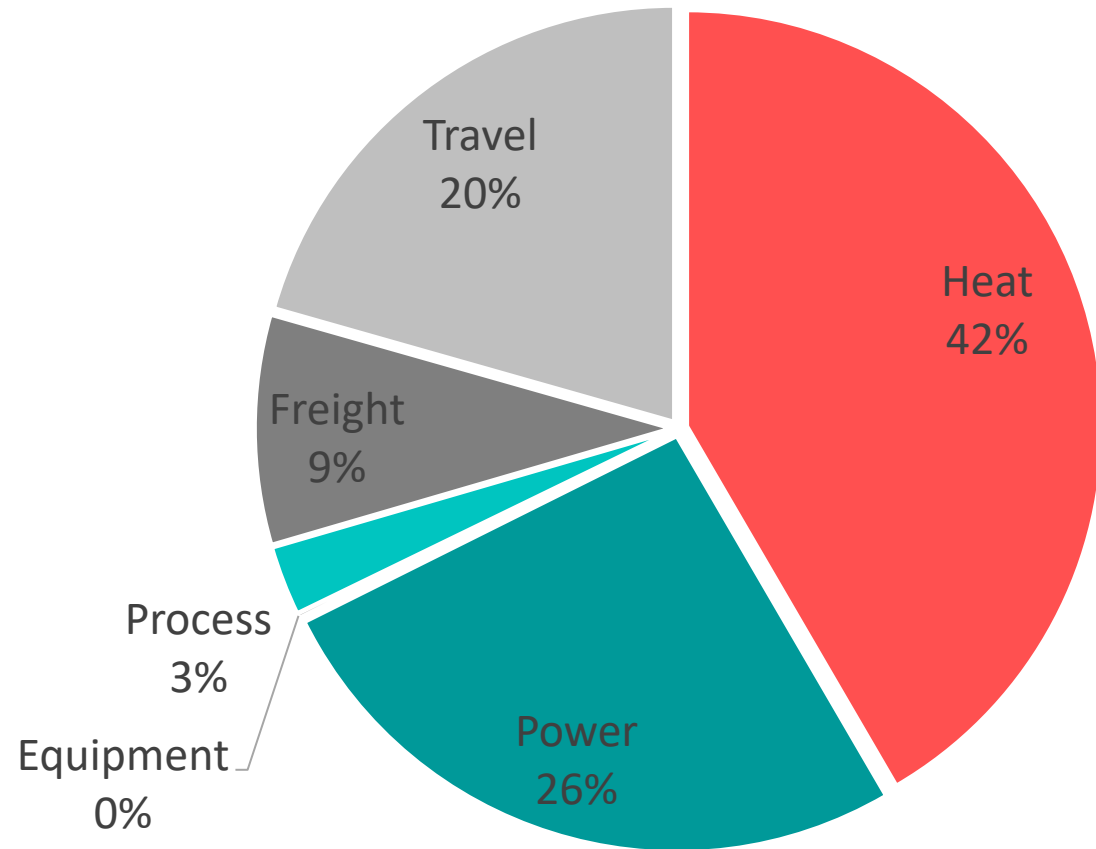
Graphic: @ed\_hawkins  
Data: PAGES2k (years 1-2000) and HadCRUT5.0 (2001-2020)  
Reference period: 1901-2000





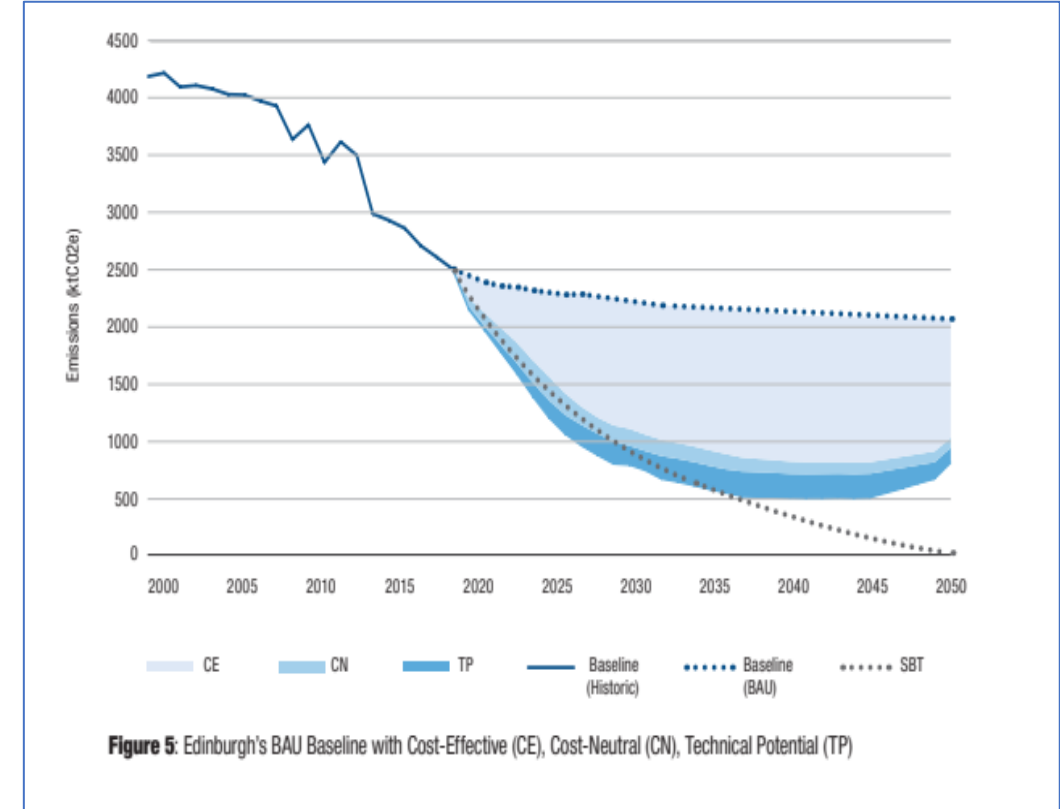
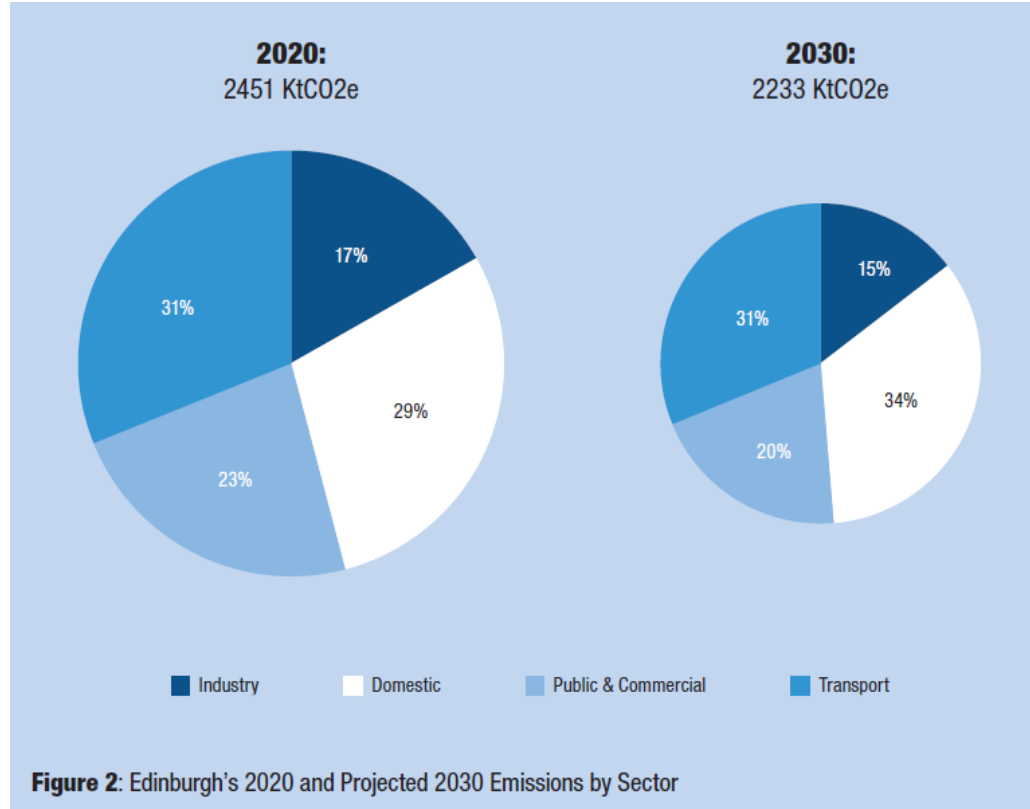
# Split of footprint by activity

1. Largest source of emissions from heat
2. Travel and freight contribute 29%
3. Power and process contribute 29%
4. Total is 2.207 MtCO<sub>2</sub>e



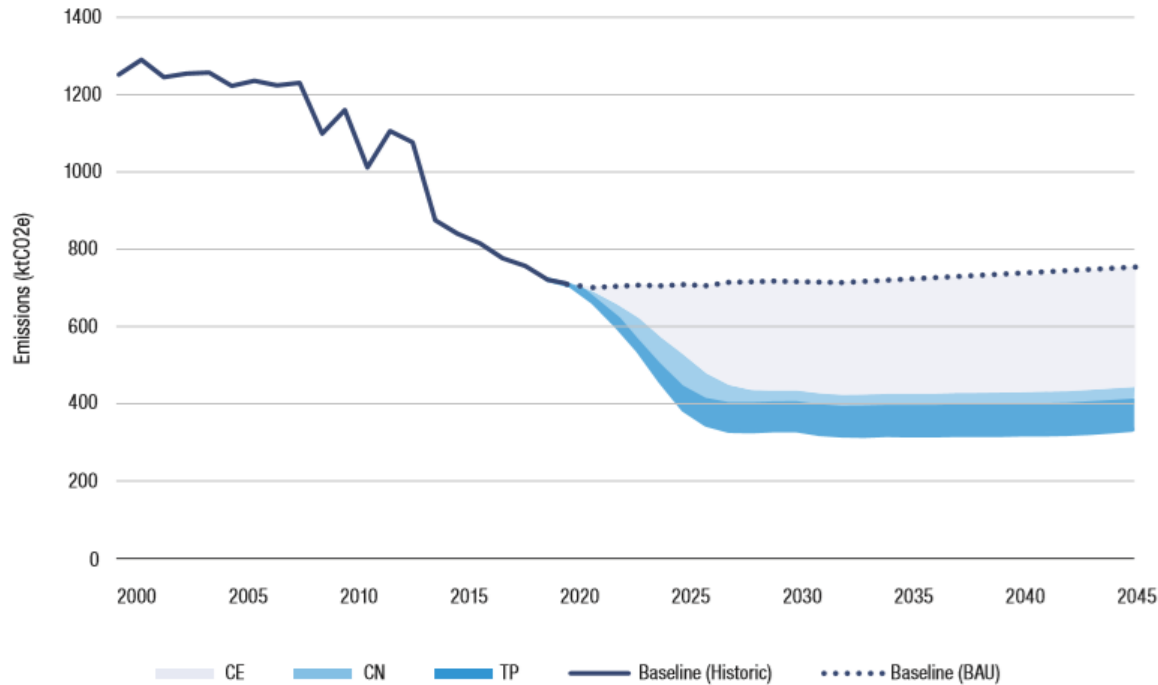


# Edinburgh's Emissions Footprint



# Reductions needed by sector

## Domestic housing



Reduction to date

- Decarbonising electricity grid
- Decreased gas and electricity use through efficiency

Future focus

- Accelerating home retrofit
- Decarbonising heat (heat pumps, heat networks).

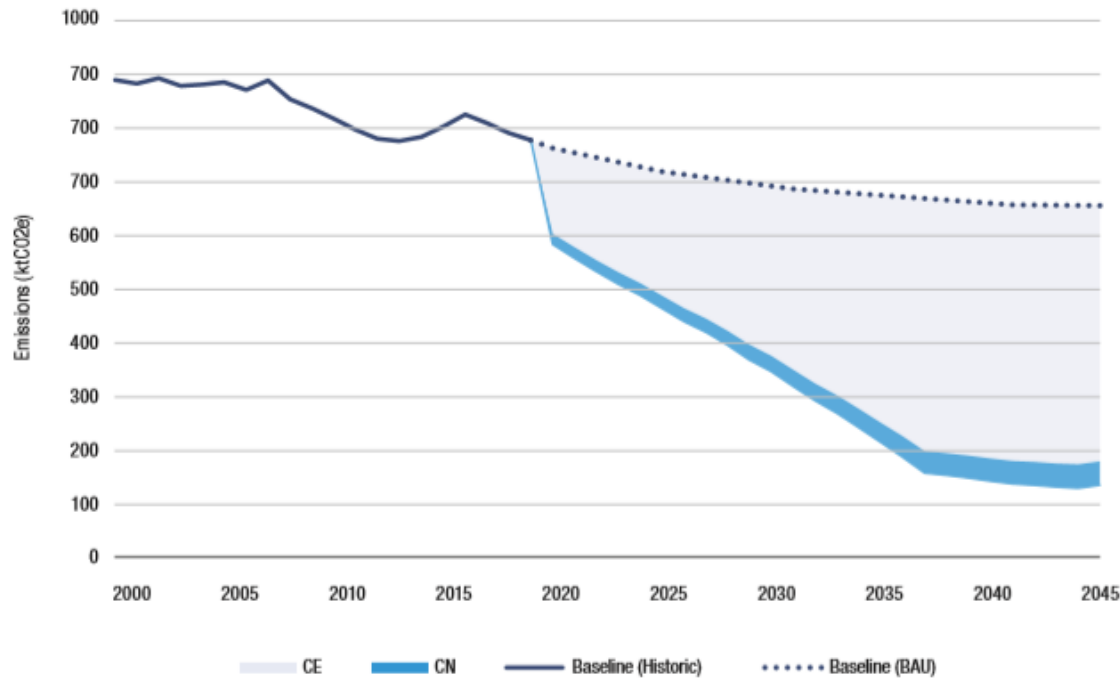
Pace increase needed

3x faster each year  
50x faster for installation rates

*Housing BAU Baseline with Cost-Effective, Cost-Neutral and Technical Potential Scenarios. (PCAN Net Zero Roadmap)*

# Reductions needed by sector

## Transport



**Reduction to date**

- Overall improved vehicle efficiencies
- Reductions from buses are highest
- Van emissions up 15% from 2010

**Future focus**

- Reducing the need to travel by car with improved active travel infrastructure
- Accelerating the transition to electric vehicles

**Pace increase needed**

- 12x faster each year to 2030

Transport BAU Baseline with Cost-Effective, Cost-Neutral and Technical Potential Scenarios. (PCAN Net Zero Roadmap)

# Cost Neutral Measures

<b>Climate Impact</b>	57% Reduction in Overall Emissions
<b>Return on Investment</b>	Economic Return on Commercial Terms £535M/year in Energy Cost Savings across the city Payback in 12.5 years
<b>Economic Opportunities</b>	18,235 Years of Employment Created Savings for Individuals, Businesses & Communities
<b>Social, Environmental and Economic Benefits</b>	Improved Public Health Reduced Fuel Poverty Improved Economic Productivity

**Investment Required £7.492 Bn**





# Criteria for delivery:

- Coordination
- Collaboration
- Learning while doing
- Acceleration
- Engagement
- Fairness



# Thank you and any questions?



@SamuelJGardner