



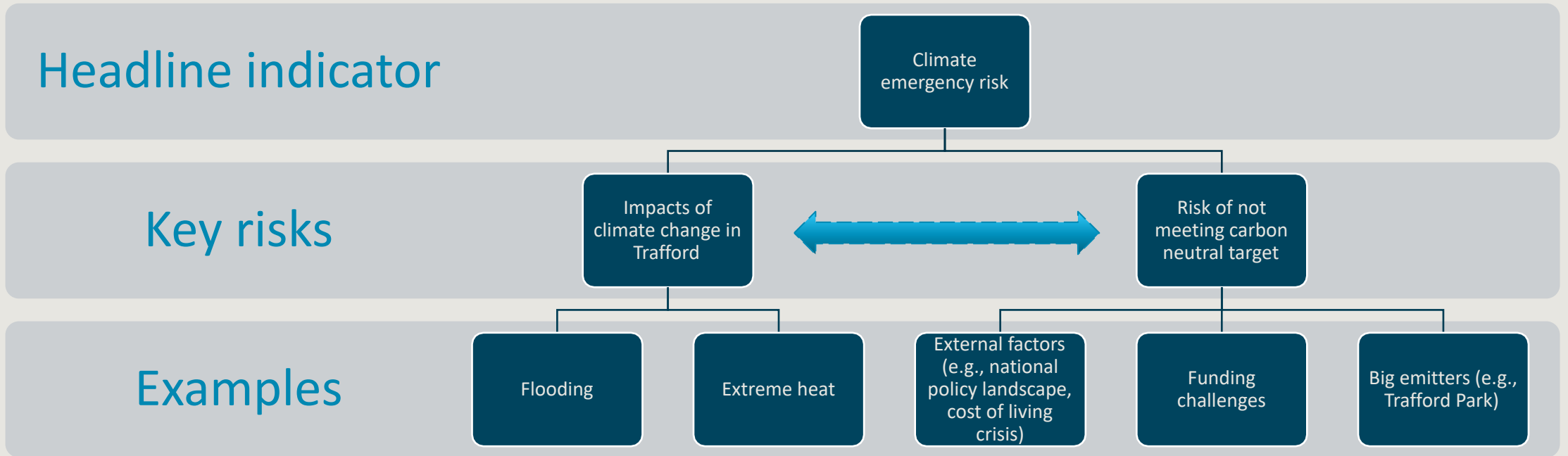
TRAFFORD  
COUNCIL

# Climate Emergency Risk

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Update for Accounts and Audit Committee – 19 March 2024

# Two main risks

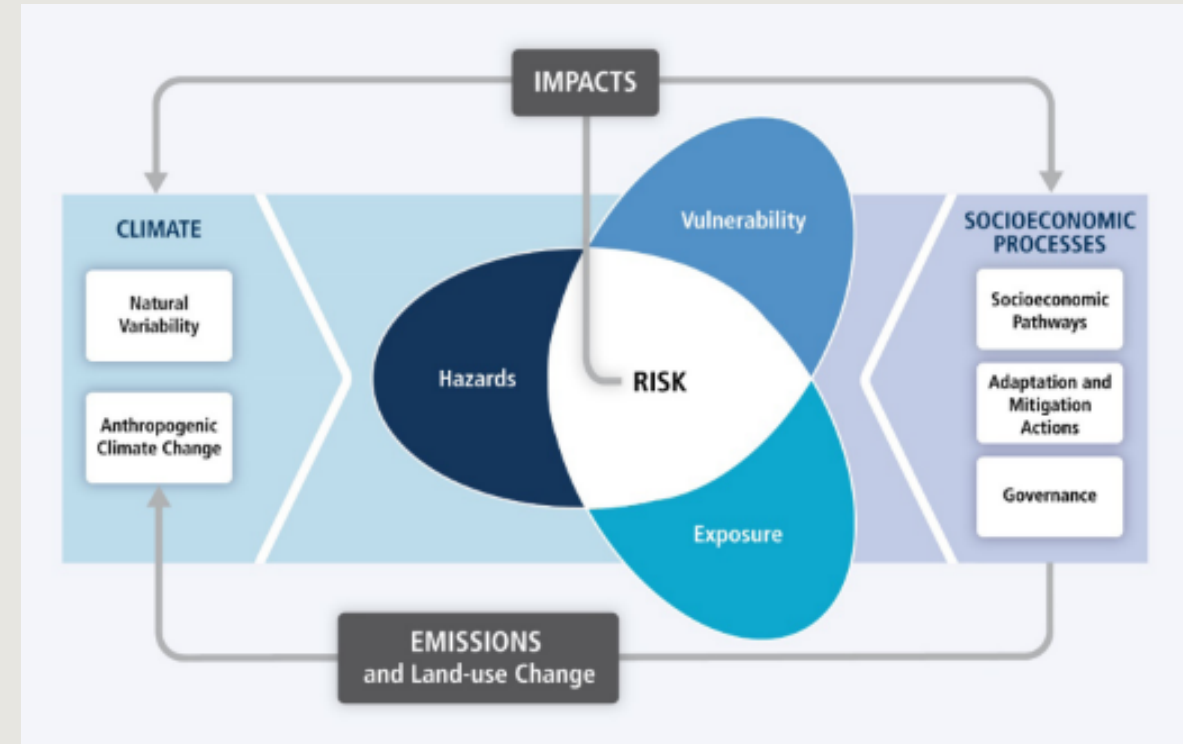


>> Focus for this presentation – climate change impacts <<

# Climate change impacts

# Introduction

- **Risk of climate impacts is a function of:**
  - **Climate hazards** (e.g., flooding, extreme heat, water stress etc)
  - **Exposure** to those hazards
  - **Vulnerability** to the hazards
- **Examples of climate risks...risks to:**
  - Natural environment and assets
    - Species and habitats
    - Soil quality
  - Infrastructure
    - Risks to bridges and pipelines from flooding and erosion
    - Risks to energy generation from reduced water availability
  - Health, Communities and the Built Environment
    - Risks to health from high temperatures
    - Risks to cultural heritage
  - Business and industry
    - Risks to businesses from flooding or water scarcity
    - Risks to UK finance sector from climate change overseas



<https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18-guidance---how-to-use-the-land-projections.pdf>

# Costs of inaction

- If current policies are maintained, total costs of climate change damages are projected to be ~2.5% of Greater Manchester's GDP by 2050 and ~6.5% by 2100
- Climate change will increase the frequency and intensity of climate hazards, and so the costs
- Adaptation actions can help reduce impacts and costs

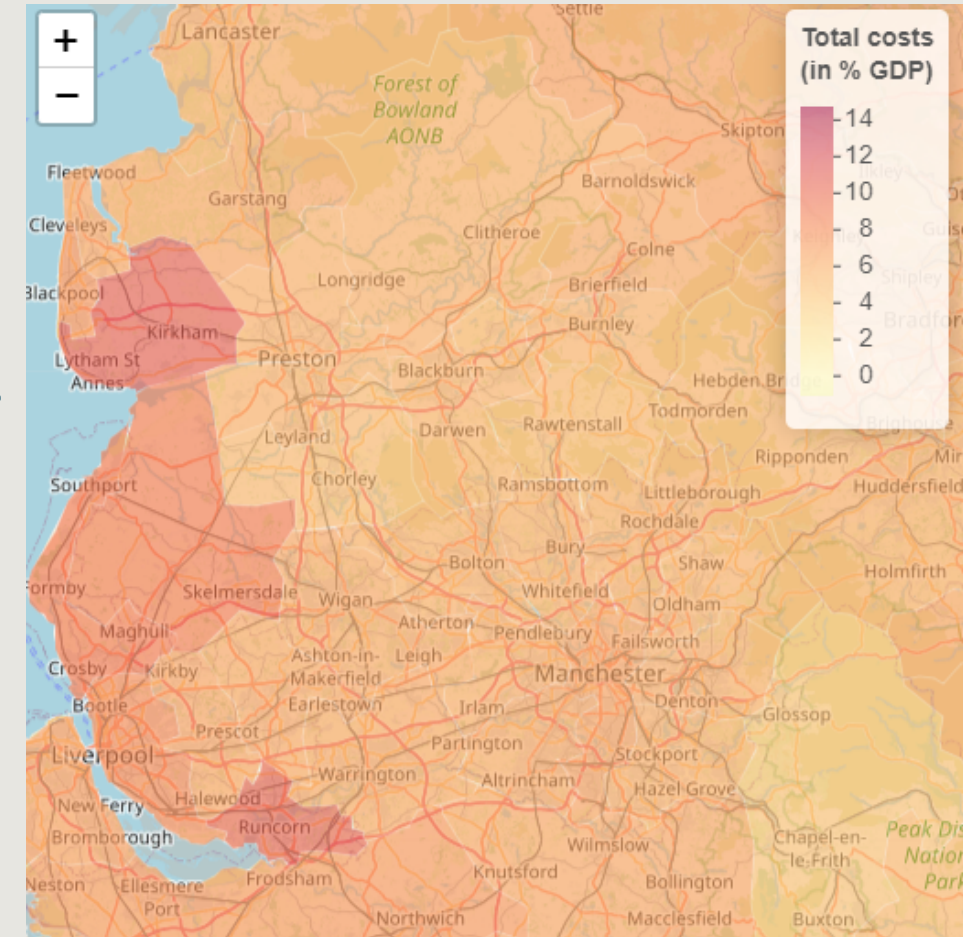
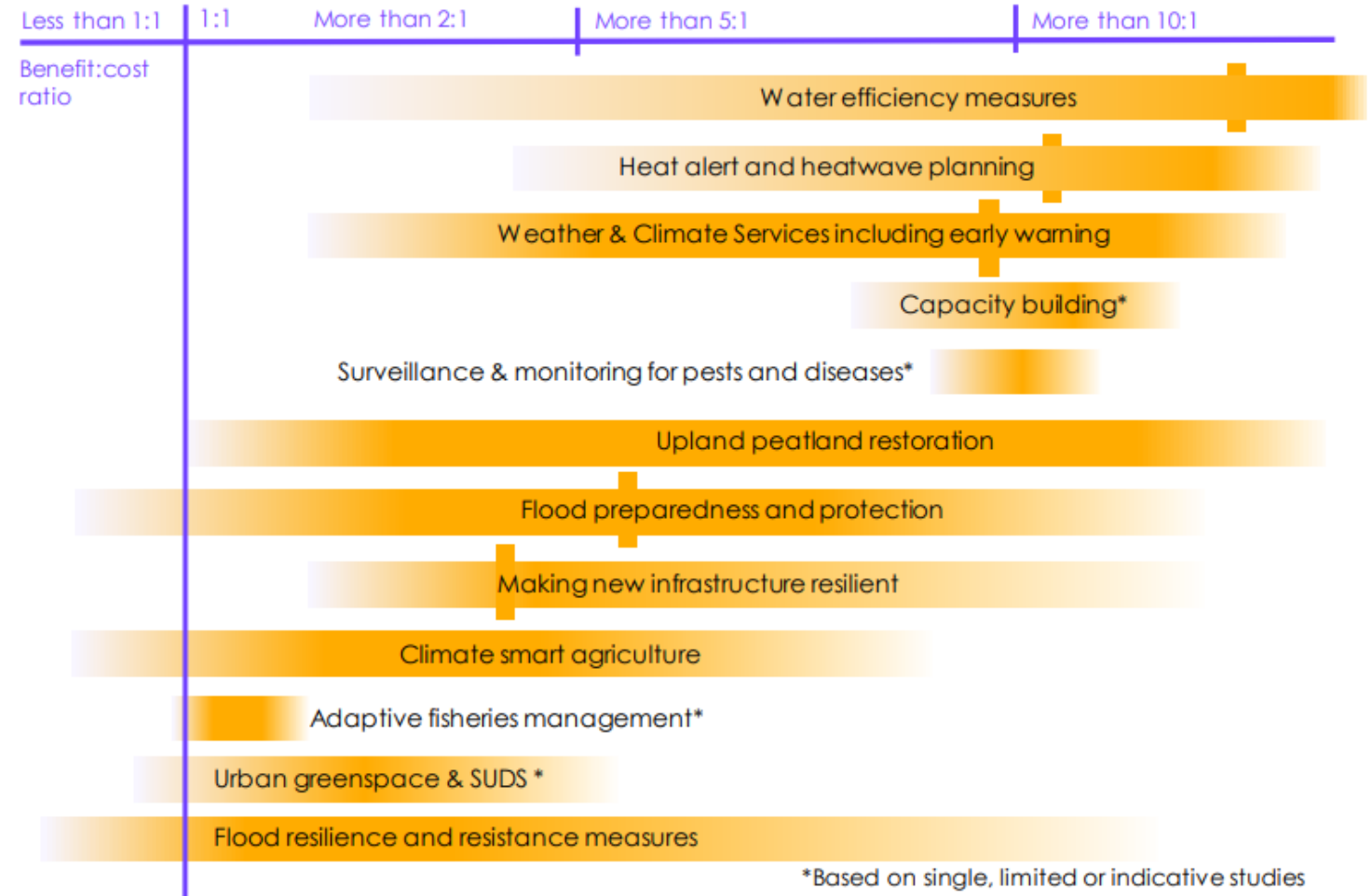


Figure 4 Benefit-cost ratios of adaptation measures included in CCRA3



- **Some adaptation actions have extremely high net benefits**
  - Vertical bar shows the average Benefit-Cost Ratio, where this data exists



# Examples of local impacts

## Heatwaves

- July 2022 extreme heat event led to ~3000 excess deaths in England
- Rail infrastructure failure, agricultural impacts, over-heating in hospitals etc.
- Number of 'Met Office Heatwave' events per year projected to increase from ~1/year in 2020, to between 2-5 events/year by 2100, under medium emissions scenario

## Floods

- GM Boxing Day Floods 2015
- 2,250 homes and 500 businesses in the city-region were flooded
- More than 31,200 properties lost power supplies
- Damage to infrastructure totalled £11.5m
- Winter precipitation projected to increase by ~8% for most of GM by 2070s, under medium-emissions scenario
- North-West GM >10% increase

# Work so far

- Trafford adaptation strategy published 2009.
- Work already being taken to address climate risks:
  - Flooding
  - Protecting green spaces
  - Planning policy
  - Impact on public health

ADAPTING TO CLIMATE CHANGE IN TRAFFORD  
A strategy to identify and deal with the new risks and challenges.





# Flooding

- We work in partnership with organisations and individuals responsible for managing flood risk from other sources (EA, UU, Canal & River Trust, Residents & Businesses, Riparian landowners)
- Recording and investigating any significant flooding
- Establishing and maintaining a flood risk asset register
- Identifying potential flood risk/alleviation projects and funding avenues
- Amey a statutory consultee on surface water drainage proposals for planning applications
- Regulating drainage strategies to ensure they accommodate storm events up to and including the 1 in 100 year + 45% allowance for Climate Change, whilst providing betterment on surface water run-off rates on the pre-development scenario.
- Pushing and actively promoting green SuDs on all developments. The implementation of Schedule 3 of the Flood and Water Management Act 2010 will assist greatly with this.

# Adapting our green spaces

- Using nature-based interventions to manage flooding, provide shading, prevent soil erosion etc.
- **For example – William Wroe former golf course**
  - Fields in Trust status to protect the site
  - Carrying out feasibility work on wetland reclamation



- **Street tree and woodland creation in line with GM Tree and Woodland Strategy.**

# Planning policy and place shaping

- **Climate resilience reflected in planning policy**
  - 2012 Local Plan. E.g., core policy L5 (climate change) – developers required to demonstrate that account has been taken of flood risk and that the proposed development incorporates flood mitigation and management measures.
  - PfE – specific policies on resilience (JP-S 4), flood risk/water environment (JP-S 5), biodiversity and geodiversity (JP-G 8).
- **Component of place shaping plans, e.g., Civic Quarter Area Action Plan, Trafford Wharfside Masterplan etc.**

# Impacts on public health

- Monitor monthly temperatures in GM/Trafford to see if there is a link to increase in numbers of E-coli blood stream infection and Clostridioides difficile.
- Work with Adult Services on importance of hydration messages in summer (e.g., to tackle increase in UTIs)
- Considering scope for public health needs assessment on climate change

## THE HEALTH EFFECTS OF CLIMATE CHANGE

### STATE OF EVIDENCE 2023

A comprehensive and authoritative summary of the scientific evidence on the health effects of climate change, potential implications of these risks for public health, and research gaps

**A LARGE & GROWING EVIDENCE BASE**

highlights diverse and substantial threats to health from climate change

**MANY RISKS ARE PREVENTABLE**

through adaptation at low levels of warming

**EFFECTIVE INTERVENTION**

Despite substantial evidence of risk, the evidence base on effective interventions is less developed and should be prioritised

**HEATWAVES**

Extreme heat will lead to an increase in the number of deaths and other health effects due to warming temperatures and an ageing population: up to 10K deaths per year due to extreme heat by the 2050s under a high-warming scenario without adaptation

**Chikungunya virus  
Dengue virus  
West Nile virus**

Infectious vector-borne diseases that could become transmissible in London and other parts of the UK with the establishment of the Asian tiger mosquito *Aedes albopictus* and spread of *Culex* mosquitoes

**FLOODING**

The greatest health impacts of flooding in the UK are on mental health: people who experience flooding are at higher risk of depression, anxiety, and post-traumatic stress disorder

**FOOD SECURITY**

Our dependence on food from highly climate-vulnerable countries is projected to increase, potentially impacting stable food supplies, particularly for fresh fruits and vegetables

**WIN-WIN STRATEGIES**

- Nature-based solutions, early action
- Reducing existing health inequalities
- Supporting behavioural transitions
- Supporting for vulnerable populations
- Embedding health in climate planning
- Embedding climate in public health practice

**WIDER BENEFITS FOR HEALTH**

Mitigation and adaptation actions can generate further health benefits, for example:

- Reduced air pollution
- Safer and healthier homes
- Shade protection from heat
- Greenspaces for mental health
- Healthy behavioural shifts
- Less pressure on health and care services

**RESEARCH GAPS**

Advance understanding of intervention effectiveness including economic assessment

Advance research into mental health & behaviour

Improve climate-health modelling

Increase emphasis on equity and vulnerable populations & settings

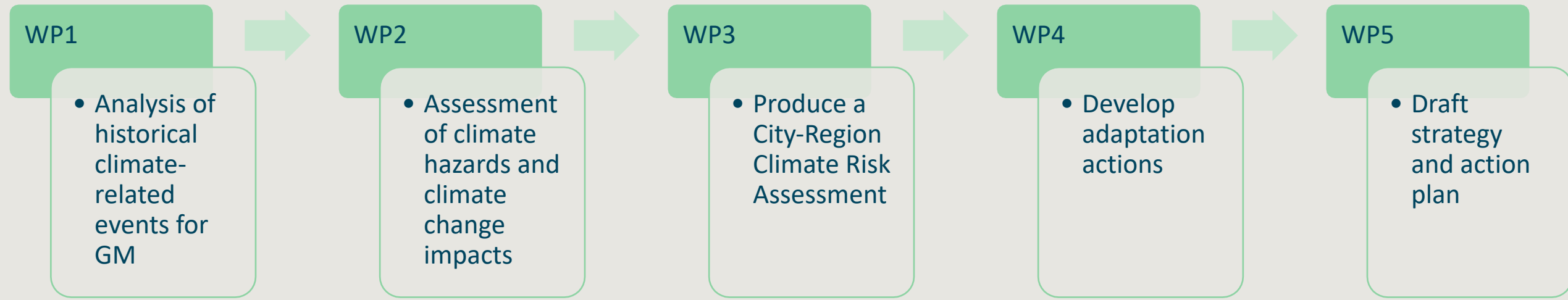
Develop & coordinate standardised metrics & indicators

Assess co-benefits, cascading & compound risks

# Overall climate adaptation strategy

- **This year – GMCA working with districts to develop a GM-wide Adaptation Strategy and Action Plan**
- **Aim:**
  - To create a shared vision, strategy and action plan for an adapting Greater Manchester City-Region.
  - To develop a strategic framework for adapting Greater Manchester to climate change.
  - To support and enable the city-region to effectively adapt to climate change, with key pillars of collaboration, transformative action, and just adaptation.
  - To ensure joined-up thinking by connecting in GM-wide adaptation action with existing and upcoming key plans, policies and activities, including mitigation-related, to enable delivery of adaptation actions

# GM-wide Adaptation Strategy and Action Plan



- **Due to conclude by end of year**
- **Feeding in to next GM five year environment plan**

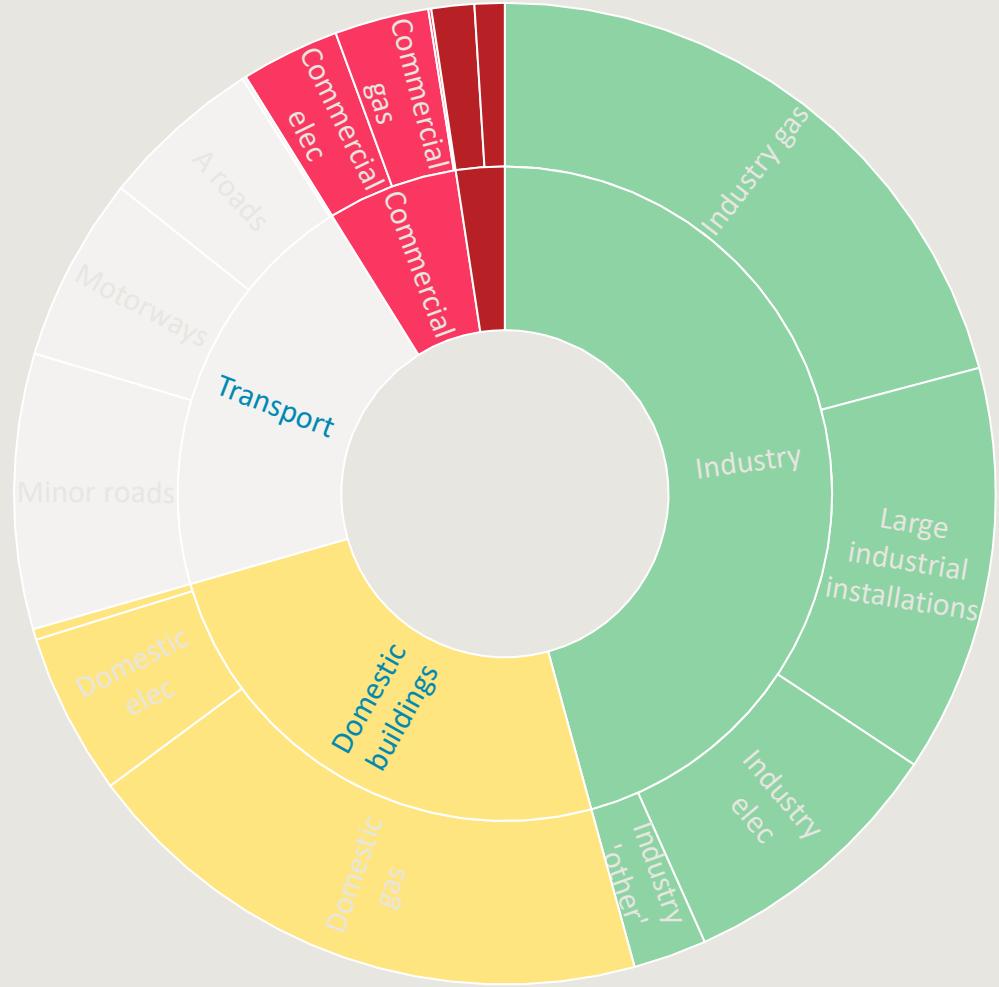
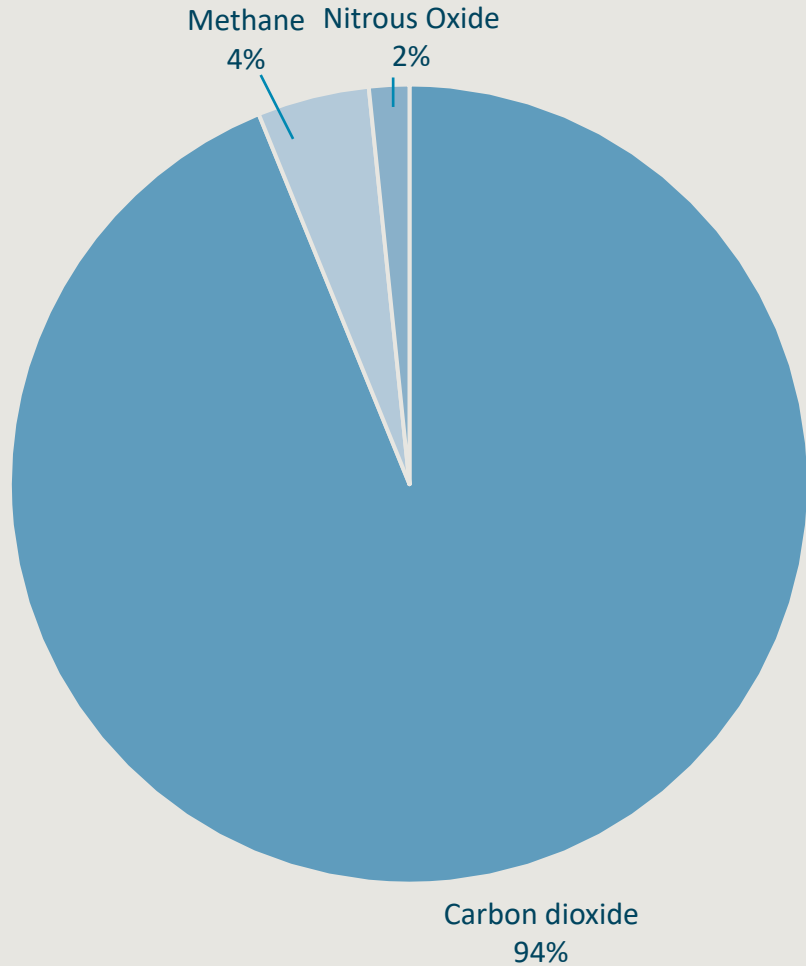
# Next steps

- **Continue to engage with GMCA and other districts on the development of the GM-wide Adaptation Strategy and Action Plan**
- **Socialise and embed the strategy and action plan into Council operations and policy**
- **Consider what further work will be needed to build on and ‘Traffordise’ the strategy and action plan**

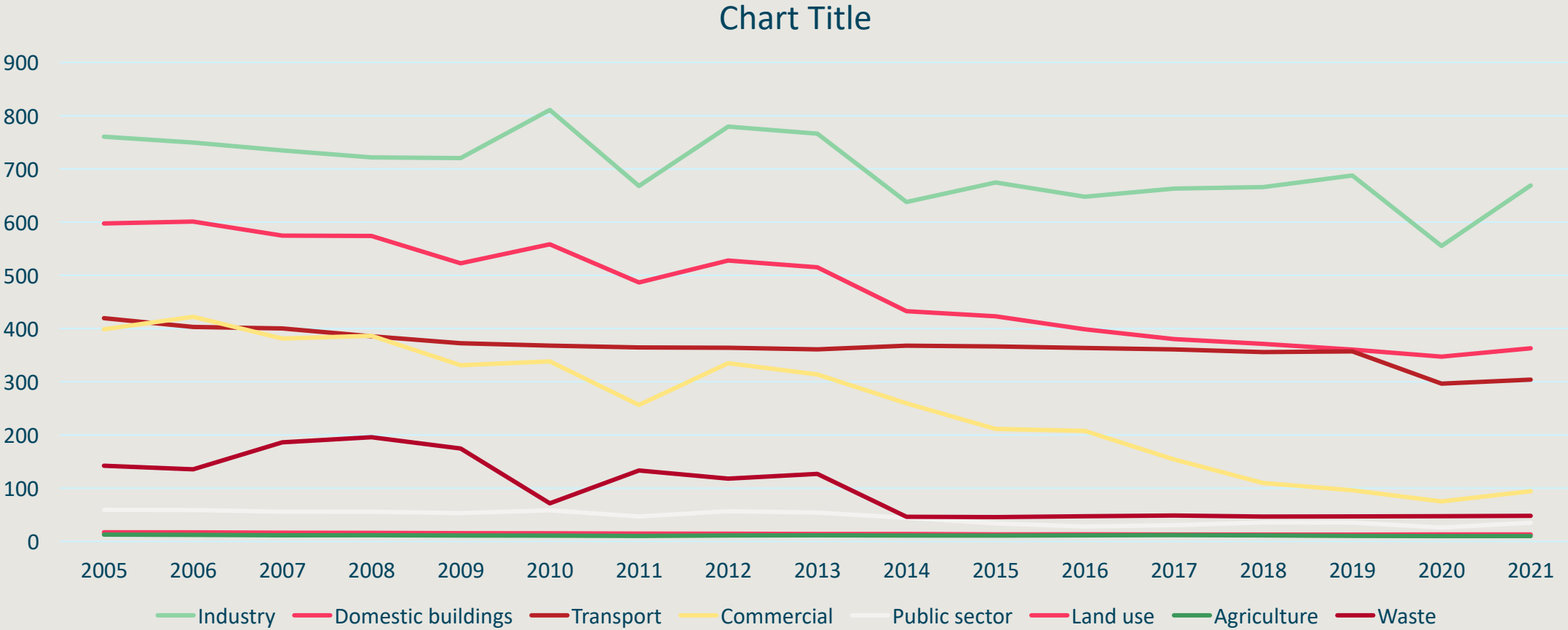
# Becoming carbon neutral



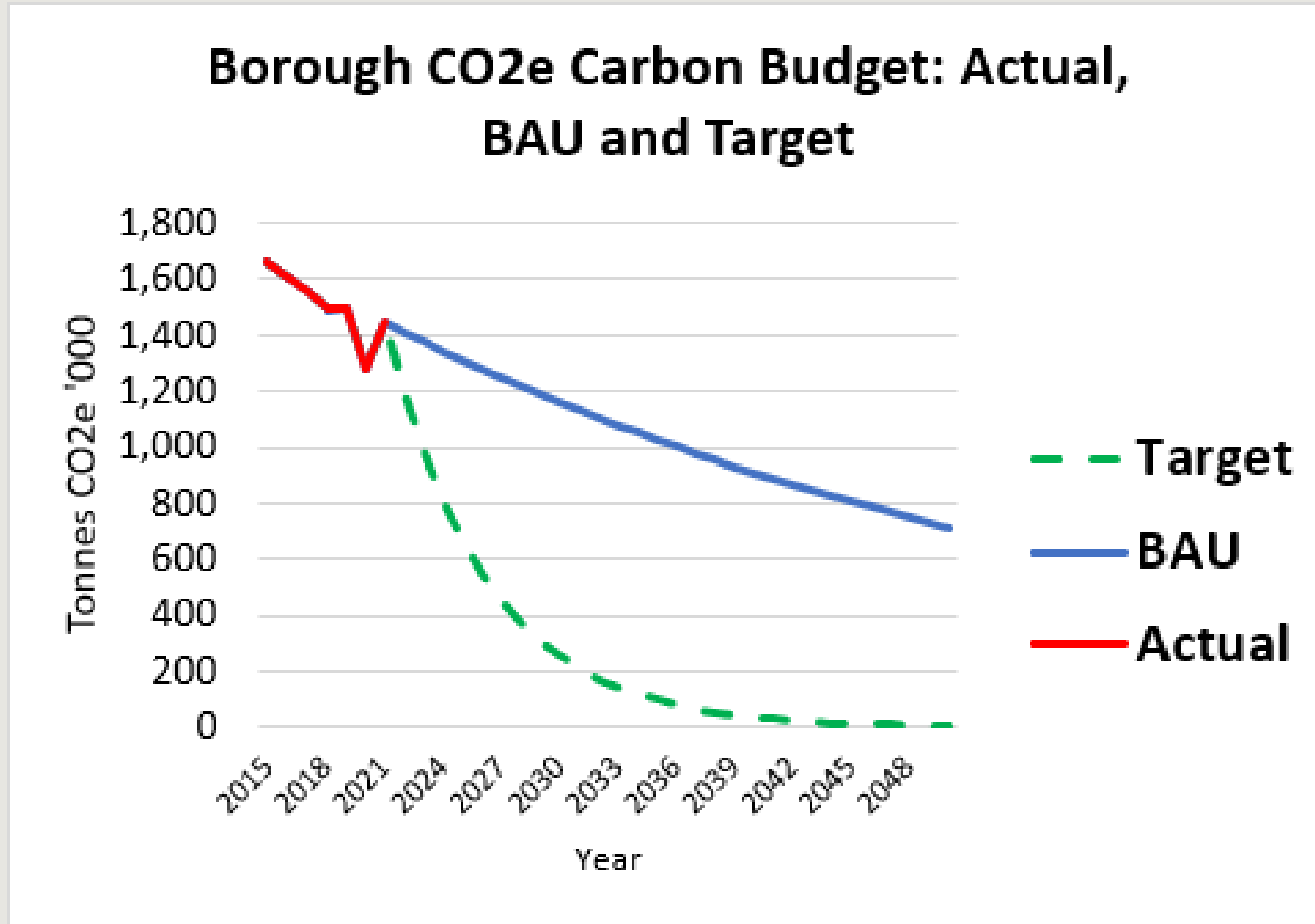
# Trafford's GHG emissions in 2021



# And since 2005, by sector



# Rate of emissions reductions needs to ramp up



# Examples of key actions

## Industry

- Launching Bee Net Zero Trafford Park Partnership
- Talking to partners about attracting investment to Trafford Park

## Public buildings

- Working with 2 primary schools to assess viability of solar PV
- Refurb of Altrincham Leisure Centre and applied for funding for Partington and Stretford

## Building retrofit

- Promoting support – ECO4 and Your Home Better
- Working with GMCA on devo deal

## Transport

- Investing in active travel infrastructure
- Supporting active travel options - bike libraries, schools streets, funding for cargo bikes
- Be.EV partnership delivering charging infrastructure

## Heat decarbonisation

- Assessing scope for heat networks, e.g., Civic Quarter.
- Working with GMCA on heat zoning pilot.

