



**Nottingham**  
**City Council**

Energy  
Services



**Jonathan Ward**  
**Principal Energy Policy Officer**

**Nottingham's approach to sustainable  
carbon neutrality**

**Local Authorities & the Climate Emergency**  
**16th March 2020**



**@nttmenergycity**

**Nottingham**  
**2028**



# Nottingham's operational approach



- Partners
- Commercialism / in-sourcing
- Assets
- Innovation
- Maximising value
- Policy & strategy

# Nottingham's key actions

- Low-carbon District Heat Network supplies heat to over 5000 homes and businesses
- Carried out over 40,000 energy efficiency improvements to local homes
- Established a green not-for-profit energy company - Robin Hood Energy
- Intro UK's largest electric bus fleets and the world's largest biogas bus fleet, alongside 20-mile electric tram network
- Solar PV rollout



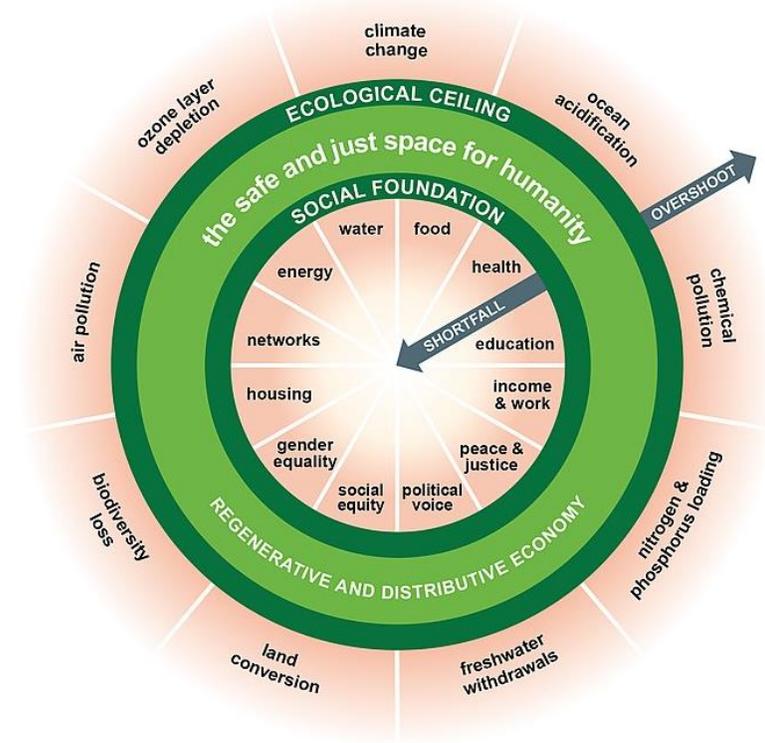
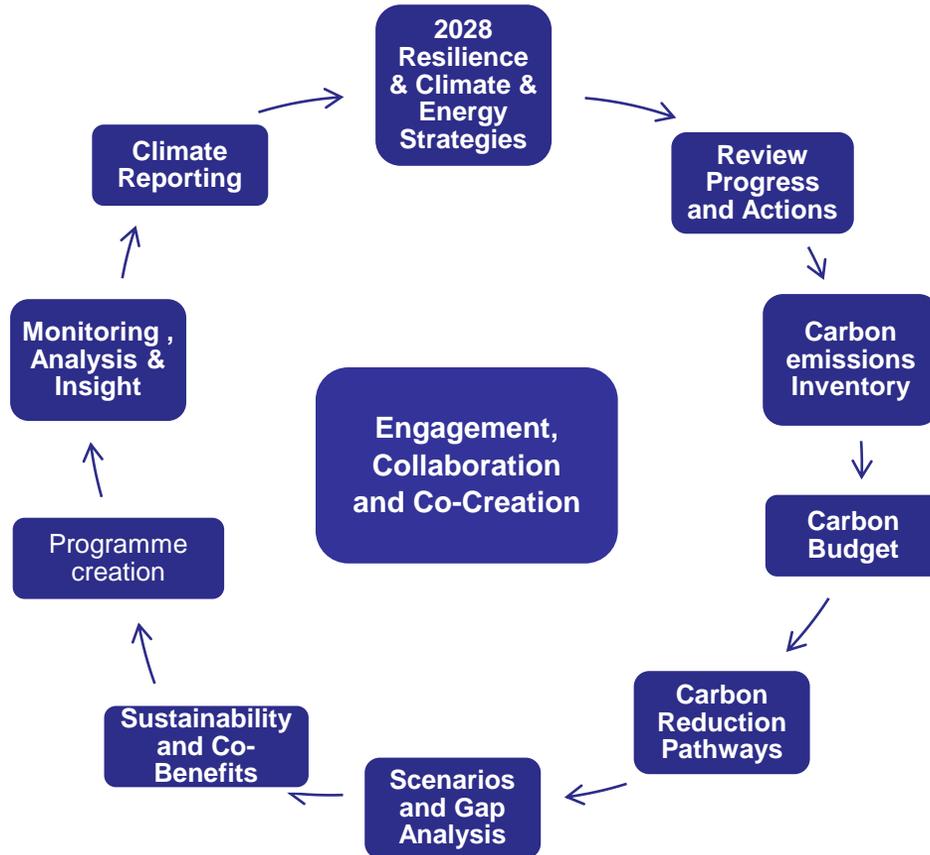
# Climate & Ecological Emergency

*Nottingham is aiming to become a carbon neutral city by 2028, meeting this target by reducing all carbon dioxide emissions from direct and indirect energy use to net-zero.*

<https://www.nottinghamcity.gov.uk/cn2028>

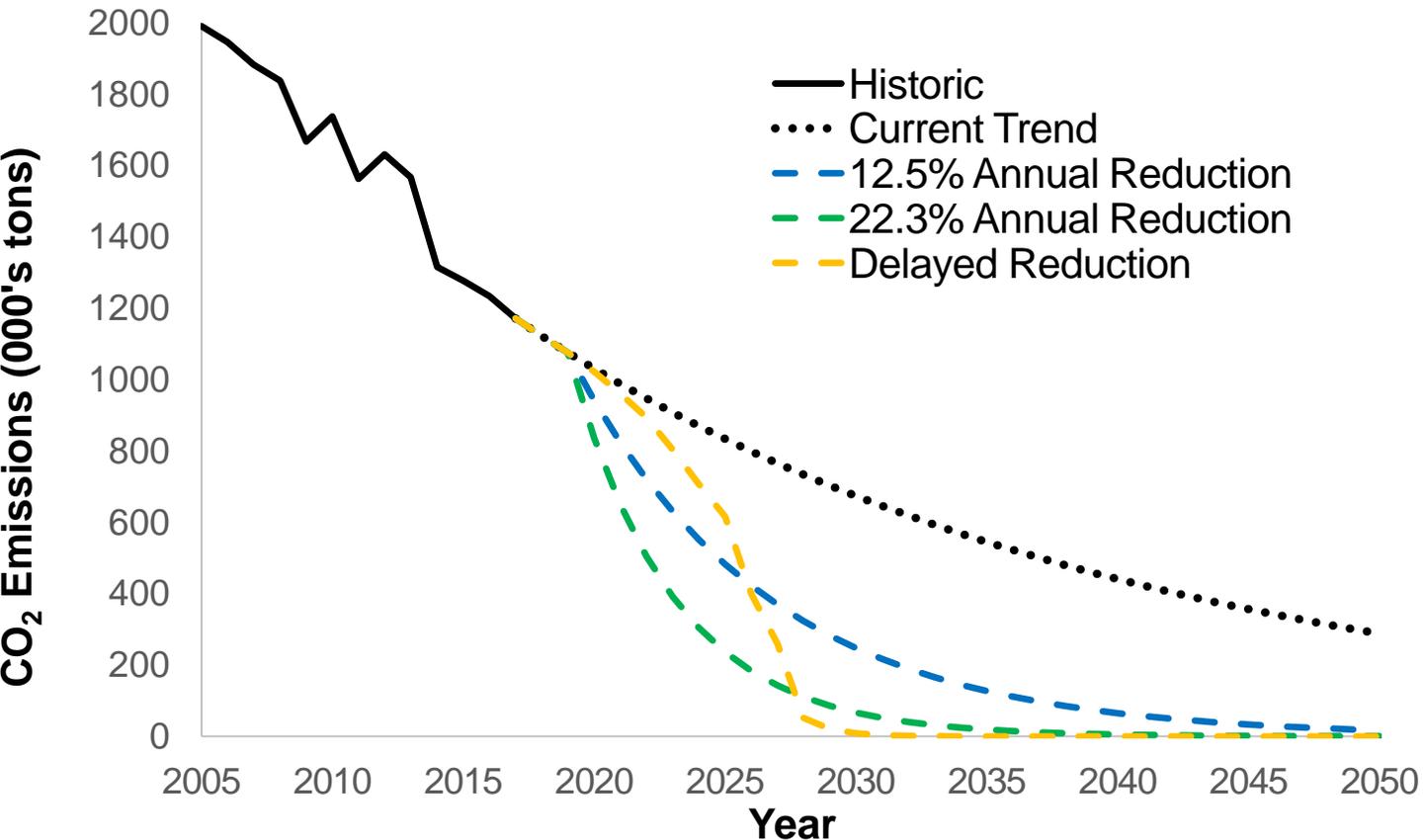


# Sustainable Carbon Neutrality



Doughnut economics model <https://www.kateraworth.com/doughnut/>

# Nottingham 2028 Charter

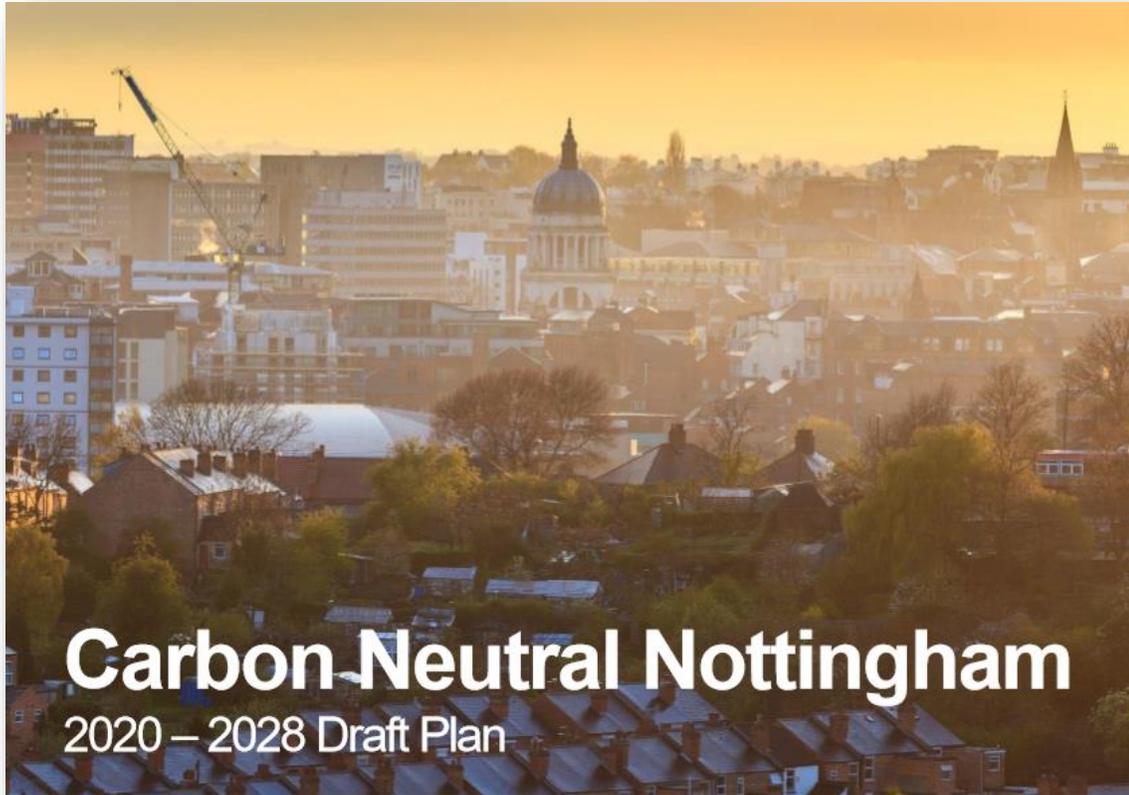


### The Charter includes Nottingham's:

- Climate change impacts
- Approach to sustainable carbon neutrality
- Historic emissions trends analysis
- City-wide carbon footprint analysis
- Business as usual projections
- Carbon budget analysis
- Future emissions pathway analysis
- Co-benefits
- Partnerships



# Nottingham 2028 Action Plan



## Key Themes:

- Transport
- The Built Environment
- Energy Generation
- Waste and Water
- Consumption
- Carbon Offsetting
- Resilience and Adaptation

Public consultation 20<sup>th</sup> January – 15<sup>th</sup> March 2020

Available here: [www.nottinghamcity.gov.uk/CN2028](http://www.nottinghamcity.gov.uk/CN2028)

Energy Services supports organisations to switch to renewable and low carbon energy solutions

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## What is SCATTER?

- S Setting
- C City
- A Area
- T Targets and
- T Trajectories for
- E Emissions
- R Reduction

SCATTER is a local authority focussed emissions tool, built to help create low-carbon local authorities. SCATTER provides local authorities and city regions with the opportunity to standardise their greenhouse gas reporting and align to international frameworks, including the setting of targets in line with the Paris Climate Agreement. Its use is free of charge to all local authorities in the UK.

Please listen to the podcast below for an introduction to the tool, including its aims and key benefits.

▶ 0:00 / 9:28

### What's new?

The tool now also offers the modelling of emissions reduction pathways to 2050, based on the ambition of several emissions reduction measures that can be set by the user.

Tyndall<sup>o</sup>Centre  
for Climate Change Research



<https://www.scattercities.com>

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# Local Authorities and the Climate Emergency



## Challenges faced by LAs

Lack of resource/funding/time  
Difficulty in data collection and  
assessment

In the frontline of responding to citizens

Differing levels of influence over  
processes and operations in the city



## Helps alleviate challenges by:

- Providing emissions data and emissions scenario modelling for each LA for free
- Does not require significant data collection and analysis
- Can be used to inform response to climate emergency declarations
- Can help identify high emissions areas for prioritization of efforts

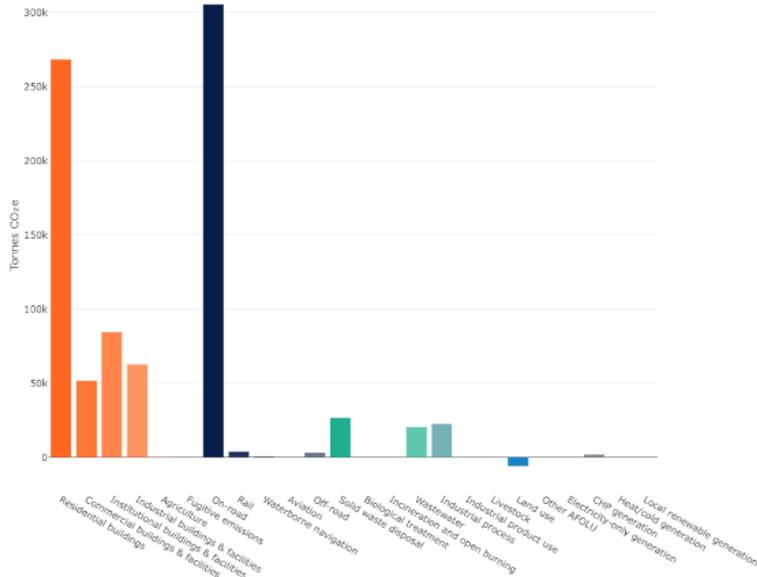


# SCATTER functionality



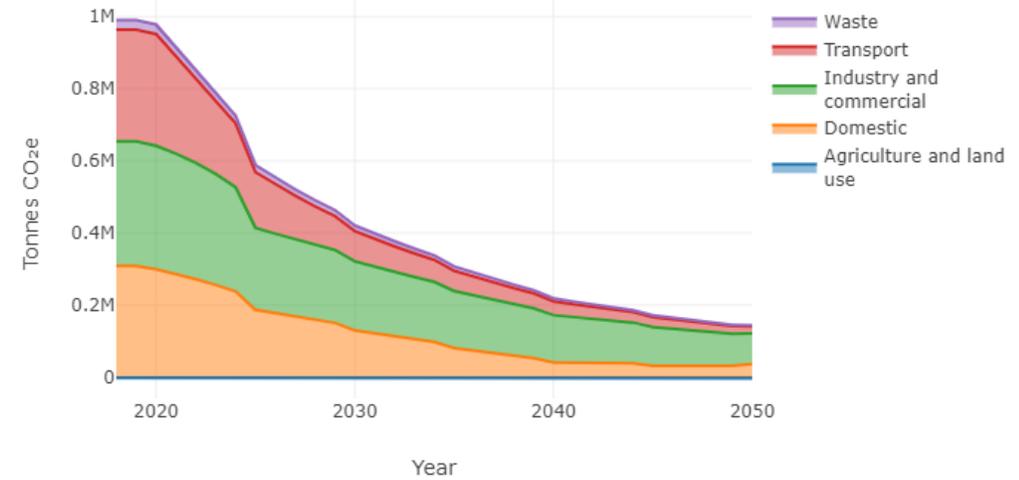
## GHG Inventory

Subsector inventory summary for Nottingham with Scope 1 (Direct)



## Pathways tool

Emissions Summary by end use, 2020 - 2050 (tCO<sub>2</sub>e)



# SCATTER Inventory and Reporting

## Summary GHG inventory

Local Authority: Nottingham  
Year: 2017



The Global Covenant of Mayors' [Common Reporting Framework \(CRF\)](#) is a globally recognised GHG reporting standard for cities. The summary categories map directly to the [GHG Protocol for Cities](#) categories. CDP accept this reporting framework as part of the submission to their annual Cities Questionnaire.

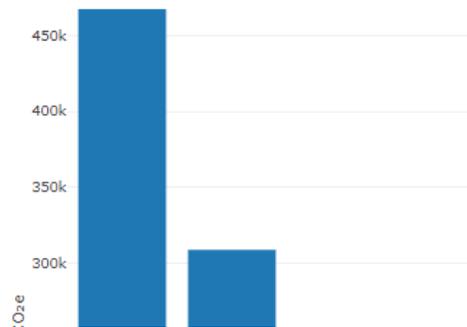
### Inventory Summary

Generate a Greenhouse gas Inventory for your chosen local authority. The Greenhouse gas tCO<sub>2</sub>e (gases CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> are included, reported in CO<sub>2</sub>-equivalent)

Some sectors and subsectors will have very low emissions and not be clearly visible on the numerical results.

#### Definitions of sectors and subsectors

Filters: Local authority: Nottingham Sector choice: Sectors Scope choice: Scope 1 (Direct)



Sector	Sub-sector	Total tCO <sub>2</sub> e			
		DIRECT	INDIRECT	OTHER	TOTAL
Stationary energy	Residential buildings	268,160.53	158,041.27	69,049.14	495,250.94
	Commercial buildings & facilities	51,607.20	30,531.08	13,718.37	95,856.64
	Institutional buildings & facilities	84,337.75	154,279.94	38,485.57	277,103.25
	Industrial buildings & facilities	62,641.72	89,433.24	25,620.05	177,695.00
	Agriculture	455.30	IE	IE	455.30
	Fugitive emissions	0.00	0.00	0.00	0.00

#### Notation keys:

NO: Not Occuring

IE: Integrated Elsewhere

NE: Not Estimated

C: Confidential

#### Colour keys:

Green: Required

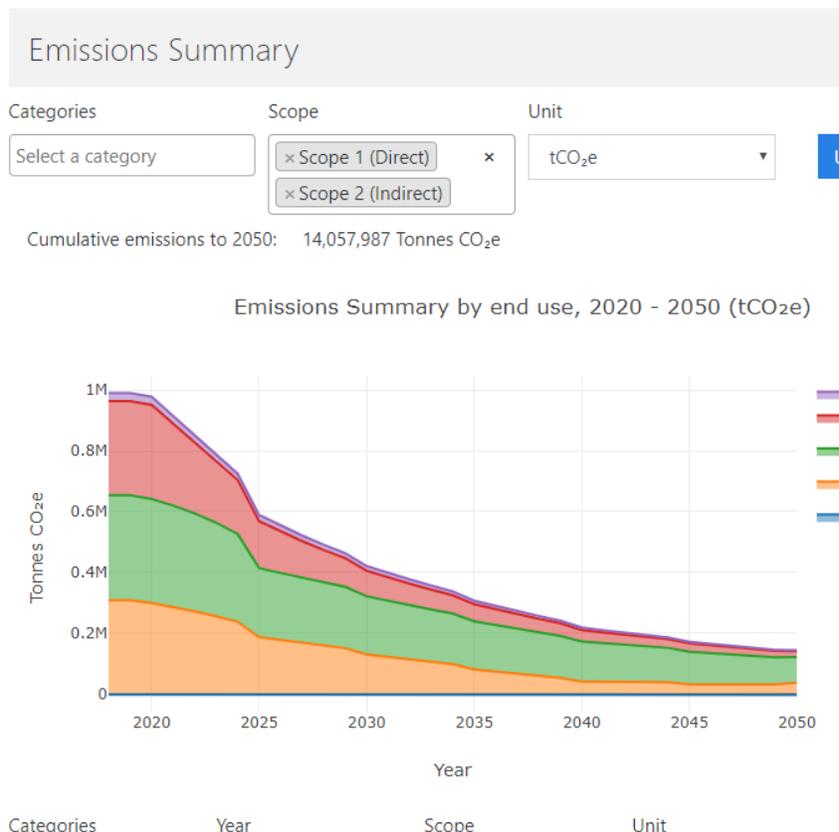
Blue: Optional

Grey: Not Applicable



# SCATTER Pathways tool

- Agriculture and Land Use ▼
- Domestic ▼
- Energy ▼
- Industry and Commercial ▼
- Transport ▼
- Waste ▼
- Save Pathway
- Update all charts



## What does Pathways do?

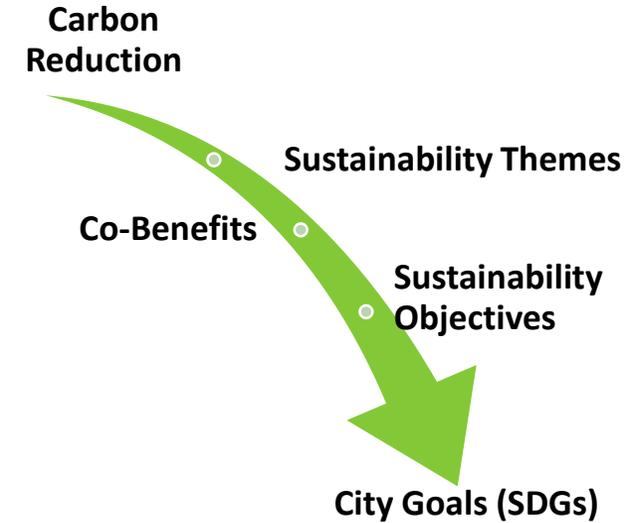
- Show possible trajectories based on measures and ambition
- Allow comparison with your carbon budget
- Understand how far and fast LA area's ambition will take it
- Engage with decision makers and citizens on the scale of the challenge

## What does Pathways not do?

- Provide differing target dates
- Show how to get to your area to zero carbon
- Give the specific interventions needed or which should be put in place
- Provide you with exact carbon savings for a particular policy

# Co-Benefits Agenda

- Cost Benefits Analysis
- Sustainable approach
- Delivering against key council outcomes
- Quality of life
- New business models

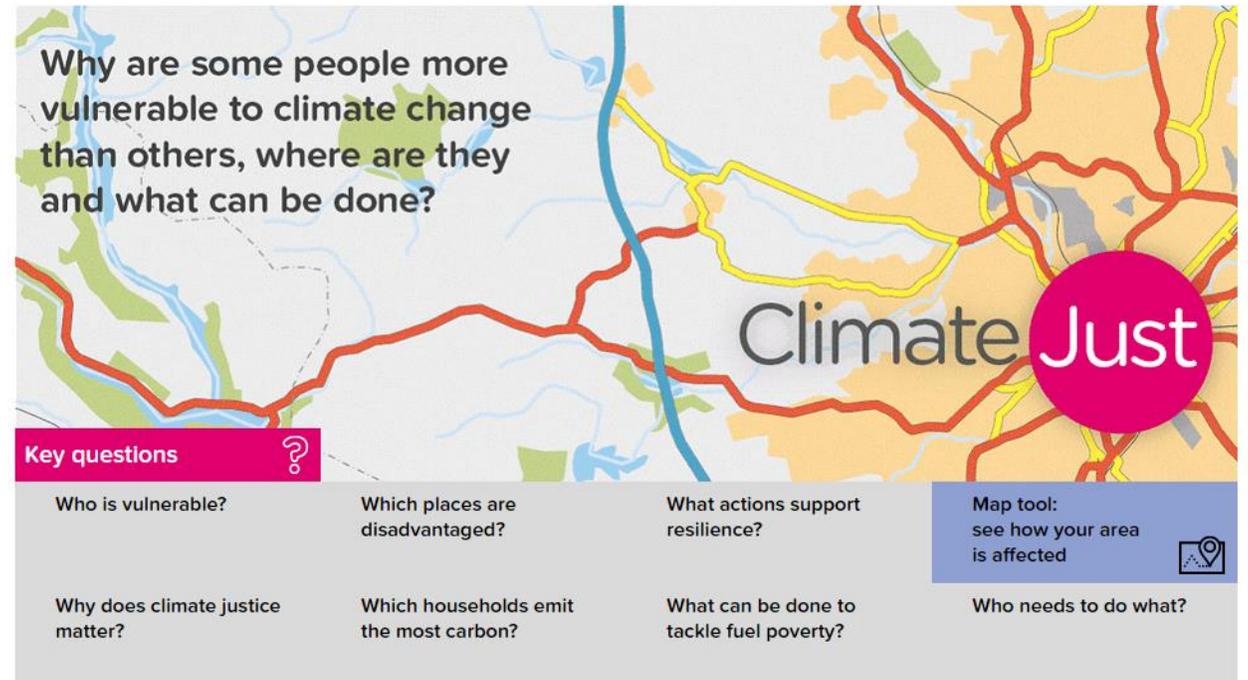


# Resilience and Climate Adaptation

The risks of climate change to people depend on their exposure to events and environmental characteristics of where they live (exposure), social and institutional context (ability to adapt) and their personal situation (sensitivity).

<https://www.climatejust.org.uk/who-vulnerable>

- Business continuity
- Protecting services
- Protecting assets and infrastructure
- Protecting people



Why are some people more vulnerable to climate change than others, where are they and what can be done?

Climate Just

Key questions

Who is vulnerable?	Which places are disadvantaged?	What actions support resilience?	Map tool: see how your area is affected
Why does climate justice matter?	Which households emit the most carbon?	What can be done to tackle fuel poverty?	Who needs to do what?

The image shows a screenshot of the 'Climate Just' website's map tool. At the top, a map of Nottingham is displayed with various colored lines (red, orange, yellow, blue) representing different data layers. A large pink circle with the text 'Climate Just' is overlaid on the map. Below the map, there is a section titled 'Key questions' with a question mark icon. This section contains a grid of eight questions related to climate vulnerability and resilience. To the right of the grid is a blue box labeled 'Map tool: see how your area is affected' with a location pin icon.

# Monitoring and Reporting

The city will be disclosing its reporting through international reporting frameworks to be transparent and benefit from additional insight that this can bring

- New internal governance structure
- PIs in Council Plan
- Monitoring in strategies
- Partner data crucial
- Working with national organisations to improve data



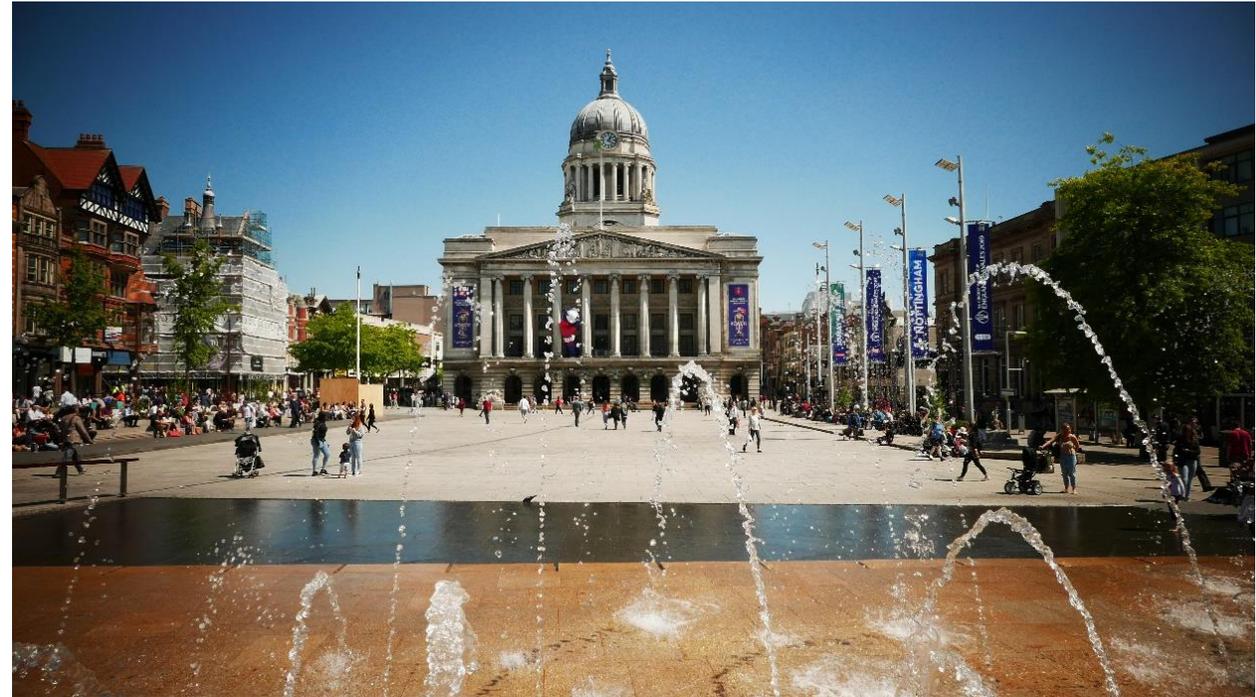
# Engagement and communications

- Listening to and involving citizens
- Dialogue with campaign groups
- Improving carbon literacy
- Year of Carbon Neutral Thinking
- Citizen panels: consultation to co-creation
- Social acceptability of interventions
- Tailored messages, benefits of action
- Reaching out to SMEs



# Benefits of leadership on climate response and clean growth

- Less exposed to risks and costs from a changing climate and the price of carbon
- Competitive advantage from increased self-sufficiency, efficiency and productivity
- Attracting investment & new businesses
- Greater control over the city's future
- Ability to share and export knowledge





For further information please contact:  
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