

Environment & Climate Change Overview and Scrutiny Committee

Briefing on Environment Strategy and Carbon Commitments

3rd September 2021

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Director of Environment & Transport**



- Background
- Why Take Action on Environmental Issues
- Links to Strategic Plan
- Environment Strategy
- Main Areas of Activity
- Carbon Reduction LCC & Leicestershire
- Action for Nature
- Key Partnerships
- Horizon Scanning

- Environment Strategy 2018-30 originally approved July 2018
- Leicestershire County Council declared Climate Emergency - 15 May 2019
- Carbon neutrality by 2030 for LCC's own operations
- Work with others and to lobby government to make the wider 2030 target possible and to limit global warming to less than 1.5°C
- Carbon neutrality by 2050 (now 2045) or before for the county's emissions
- Signed up to UK 100 and are part of the Countryside Climate Network
- Already achieved 67% reduction in our greenhouse gas emissions since 2008-09 (based on 2019-20 figures)
- Environment Strategy 2018-30 and Strategic Plan revised to take account of carbon commitments
- Revised Environment Strategy 2018-30 approved July 20

Why take action on environmental issues?

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[Extracts from Environment Strategy 2018-30 (p29-31)]

- Increased risk of disruption to our critical services from extreme weather events
- Vulnerable people in the community are particularly susceptible to the effects of climate change
- Increased risk of damage to the Council's highway assets
- Increased costs to Public Health and the NHS due to rise in illnesses and deaths caused by air pollution
- Increased costs for Social Services supporting people living with debilitating diseases caused by air pollution
- To reduce the cost of managing the Council's waste and the County's household waste
- Reputational and financial cost of dealing with a pollution event

- The Council has a statutory responsibility to take due regard of biodiversity in all its decisions and activities
- Leicestershire is a rural county, and the food sector is one of the county's main industries so will be affected by any reductions in crop yields and difficulties in food production
- To protect Leicestershire residents from the consequences of food shortages and the health effects of biodiversity loss
- To protect the most vulnerable in our society from harm
- To avoid / reduce increased future costs on the council

As part of the 2020 interim review of the Strategic Plan the Council's environmental and carbon commitments were embedded into the relevant outcomes.

The Strategic Plan is currently going through a full review and the intention is to have a separate Environment outcome which picks up the Council's environmental commitments and objectives on climate change, carbon reduction, nature, the local environment, sustainable resource use, low carbon economy etc.

A draft of the revised Strategic Plan will be taken to the November meeting of Scrutiny.



Environment Strategy 2018-30

The Strategy consists of 15 aims & 37 objectives set across six themes:

- ❖ Carbon and Climate Change Impacts
- ❖ Resource Use and Low / Zero Carbon Energy
- ❖ Travel and Transport
- ❖ Biodiversity, Habitats and Local Environment
- ❖ Community and Wellbeing
- ❖ Local Economy

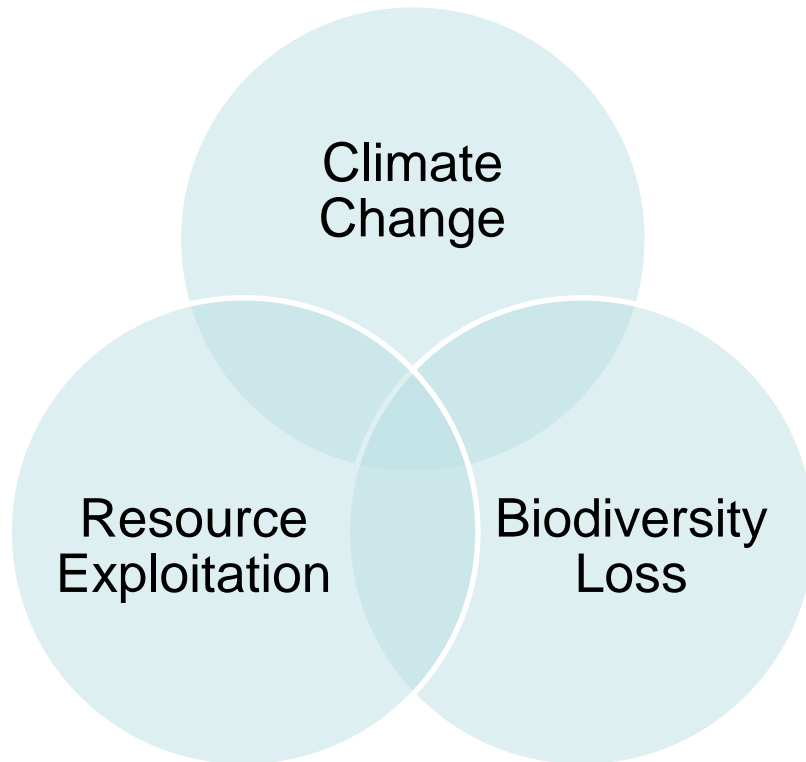
<https://www.leicestershire.gov.uk/environment-and-planning/conservation-and-sustainability/environmental-policies-and-reports>



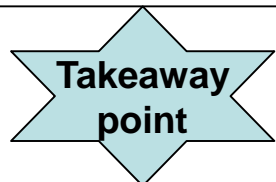
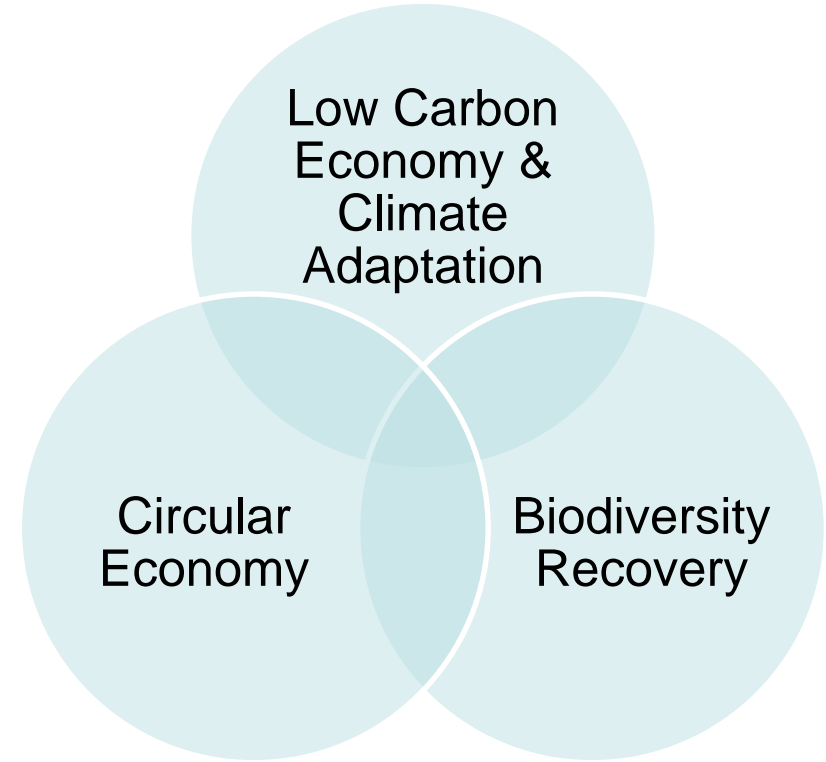
Figure 1: Environment Strategy – At a glance



3 interconnected global emergencies



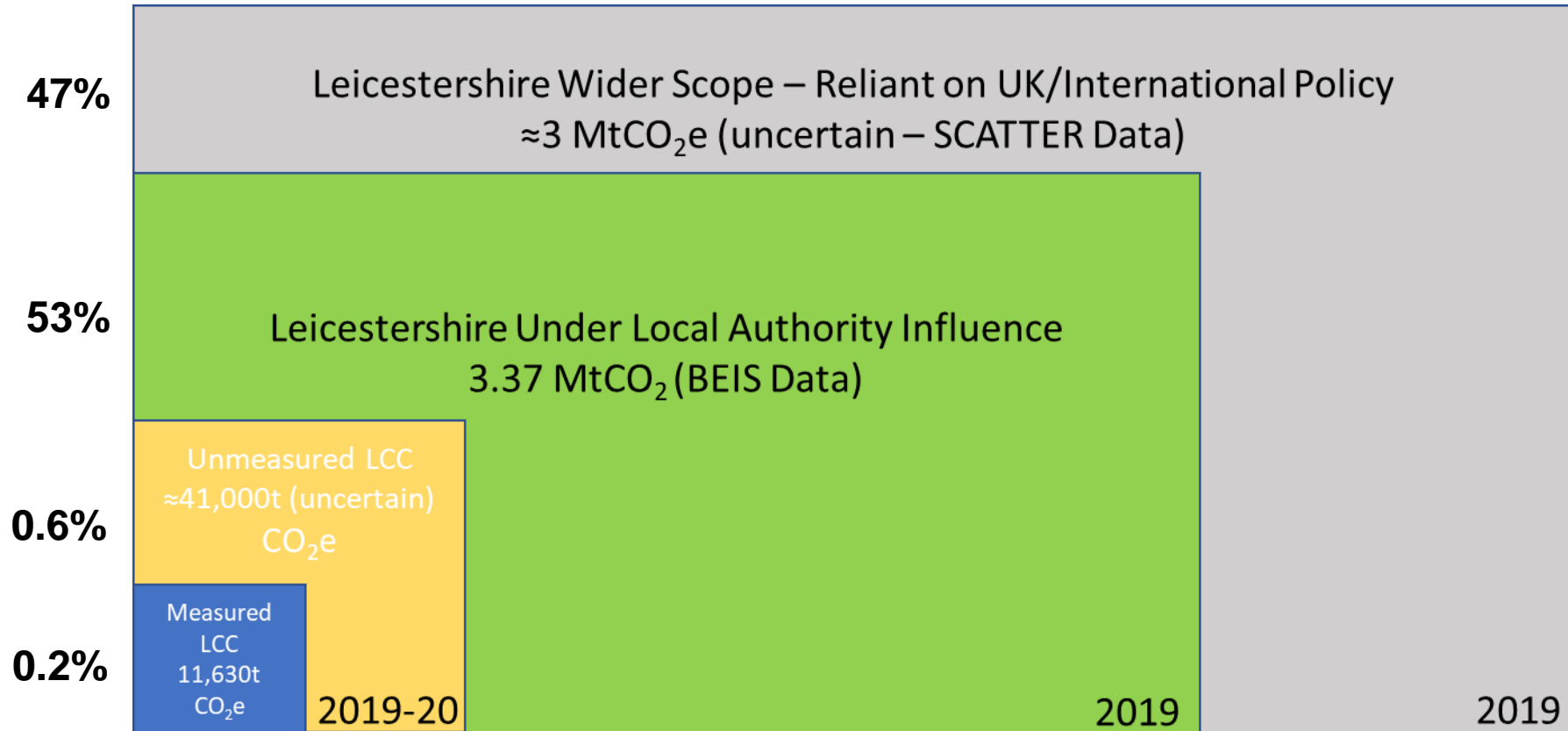
3 interconnected global solutions



Everything is interconnected. It will require a new way of thinking and working to solve the problems

- **Carbon Reduction – LCC & Leicestershire**
 - Decarbonising Energy
 - LCC Strategic Property Energy Strategy
 - Renewable Energy
 - Decarbonising housing – new builds / retrofitting – Public Health
 - Decarbonising Travel & Transport
 - Electric vehicles & EV Infrastructure
 - Walking and Cycling
 - Carbon Literacy Training
 - Air Quality – Co-benefits - health
- **Biodiversity & Natural Capital**
 - Action for Nature
 - Ash Dieback
 - Tree Management Strategy
 - Nature Recovery Strategy
- **Climate Adaptation & Resilience** – dealing with existing and future impacts of climate change
- **Waste management & resource use**
- **Environmental Management System & Environment Performance Monitoring**

Understanding LCC & Leicestershire emissions



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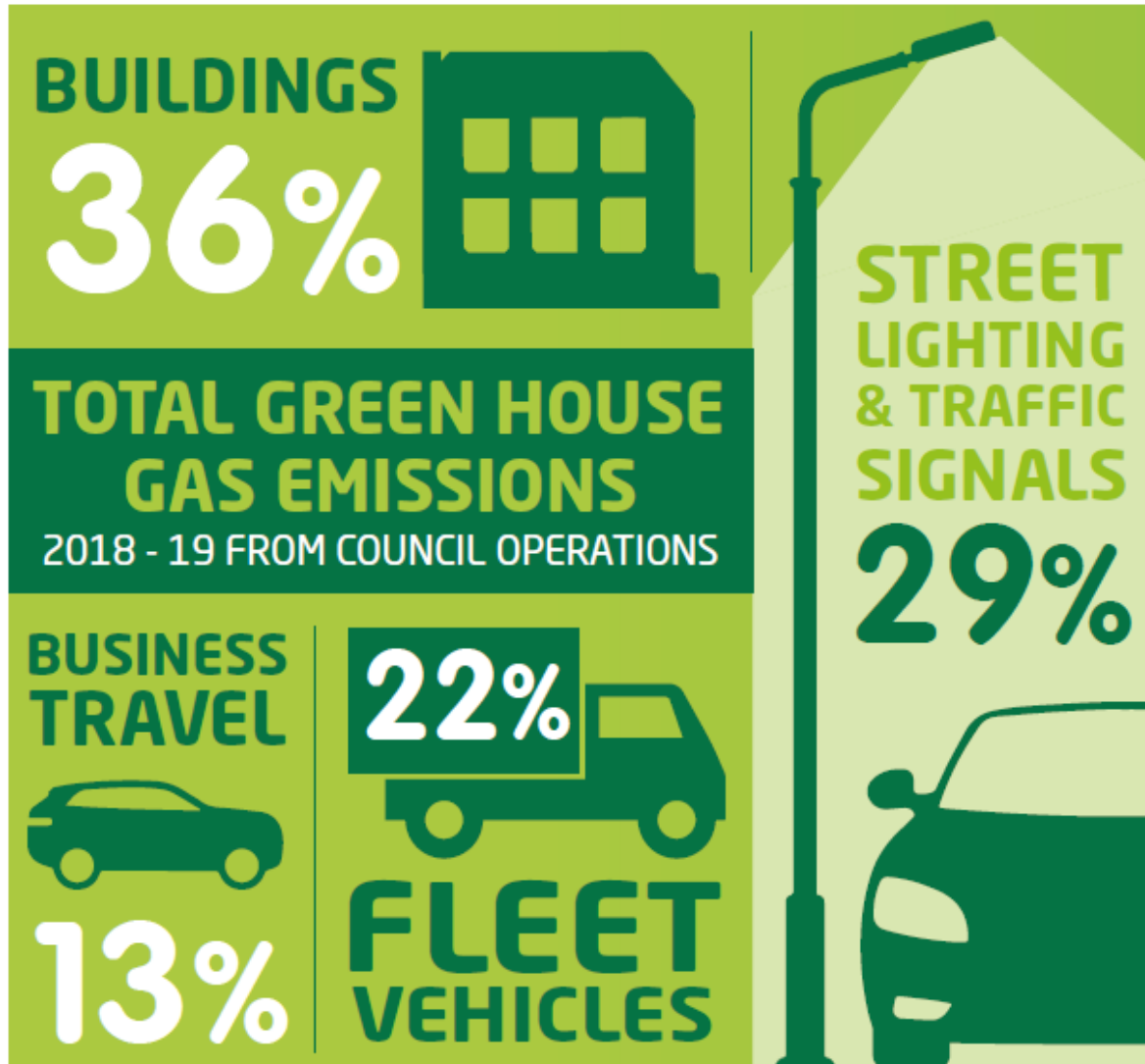
**Takeaway
point**

LCCs emissions are only a fraction of Leicestershire's emissions

Understanding Leicestershire's Emissions

	Council's Own Operations	County-wide Emissions
In Scope	<p><u>Net Zero by 2030</u> Scope 1: Fleet vehicles, Air conditioning gases, gas use (e.g. heating of buildings)</p> <p>Scope 2: Purchased electricity (e.g. lighting in buildings & streetlights)</p> <p>Scope 3: Business mileage</p>	<p><u>Net Zero by 2045 - Under LA Control</u> CO₂ emissions from: Industry, Commercial, Public Sector, Domestic and Transport</p> <p>Does not include: large industrial sites, railways, motorways and land-use</p>
Out of Scope	<p><u>Wider LCC Emissions</u> Scope 3: Purchased goods & services, transportation and distribution, investments, downstream leased assets, employee commuting (?), waste generated in operations (?), business travel (?), upstream leased assets (?)</p>	<p><u>Wider County Emissions</u> Includes additional greenhouse gasses (not just CO₂)</p> <p>Includes aviation, rail, motorways, waterborne navigation, all industry emissions and land use</p>

Main Sources of LCC GHG emissions

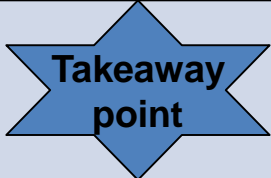


Note: This does not include emissions from sources such as waste, procurement and staff commuting (unmeasured emissions – **est. 41,000 tonnes CO₂e**)

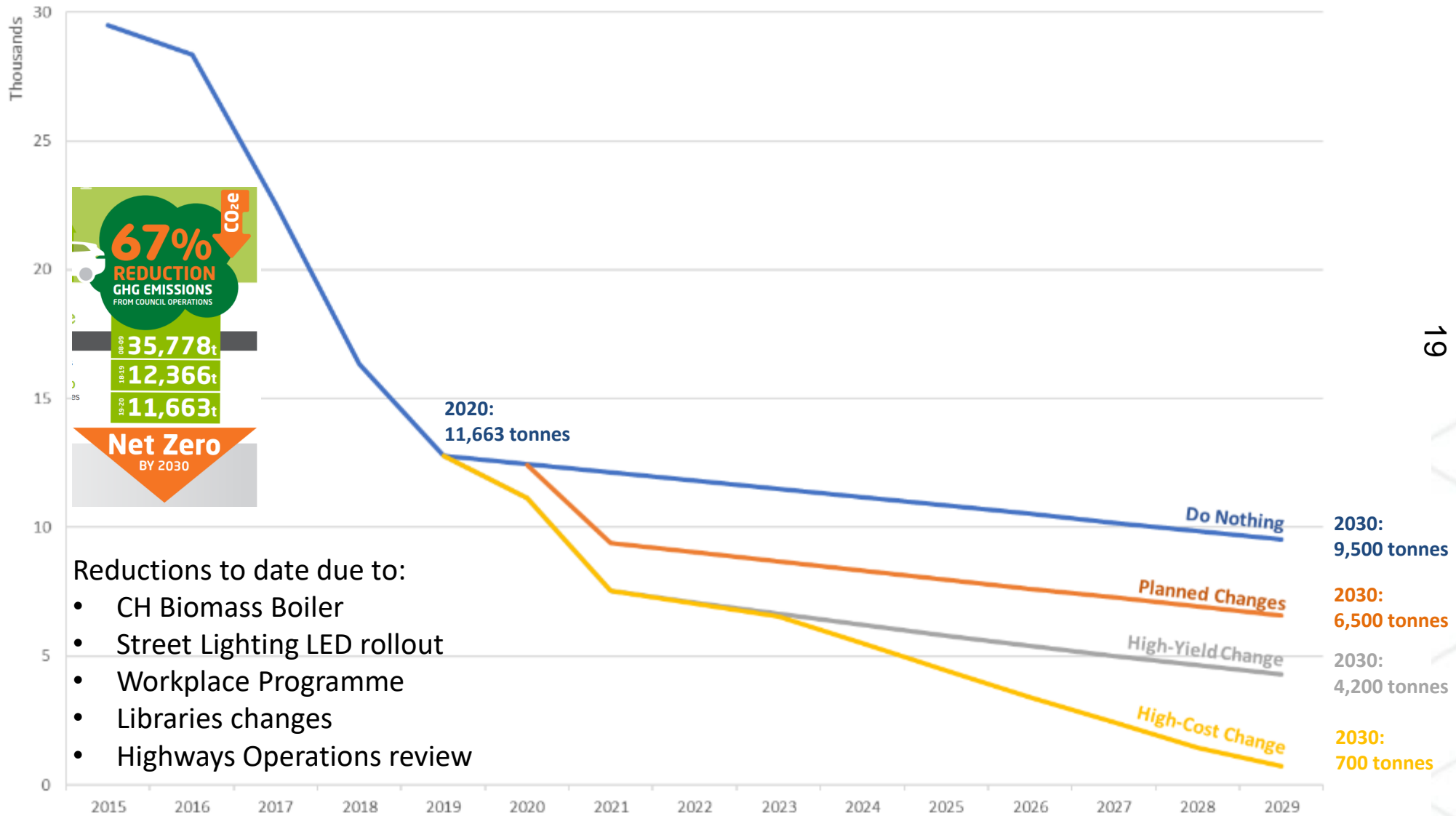
Work taking place to better understand, define and quantify these.

Main sources of LCC measured emissions of c.12,000 tonnes CO₂e
(Based on 2019-20 figures)

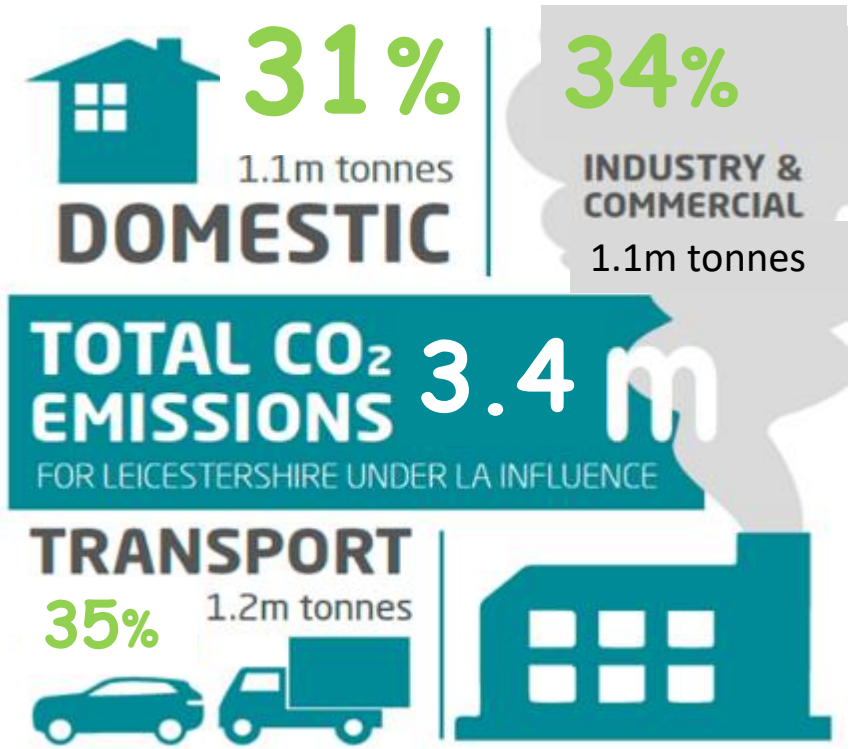
Measured LCC Emissions: Carbon Reduction Roadmap Programme – Tranche 1

Do Nothing	Planned Changes	Simple / High Return	Complex / Low Return
<ul style="list-style-type: none"> Impact of national changes 	<ul style="list-style-type: none"> Buildings LED lighting upgrades Improved equipment Quorn Solar Farm 	<ul style="list-style-type: none"> Improved fuel use and management Embankment House Broadening EV Pool Car offer Partial fleet EV replacement Automation of mileage claims Low level streetlighting management Buildings insulation improvement Further solar/wind farms (not included in tonnages below) 	<ul style="list-style-type: none"> Bio-mass/ Ground or Air source heating Traffic Signals LED upgrades Broader fleet EV replacement Formal offsetting (not included in tonnages below)
<div style="border: 1px solid black; padding: 10px;">  <p>Takeaway point There is a good plan in place for reducing LCCs measured emissions</p> </div>			
3,200 tonnes CO2e saved	3,000 tonnes CO2e saved	2,300 tonnes CO2e saved	3,500 tonnes CO2e saved

GHG Emissions Profile 2015 - 2030



Leicestershire Emissions

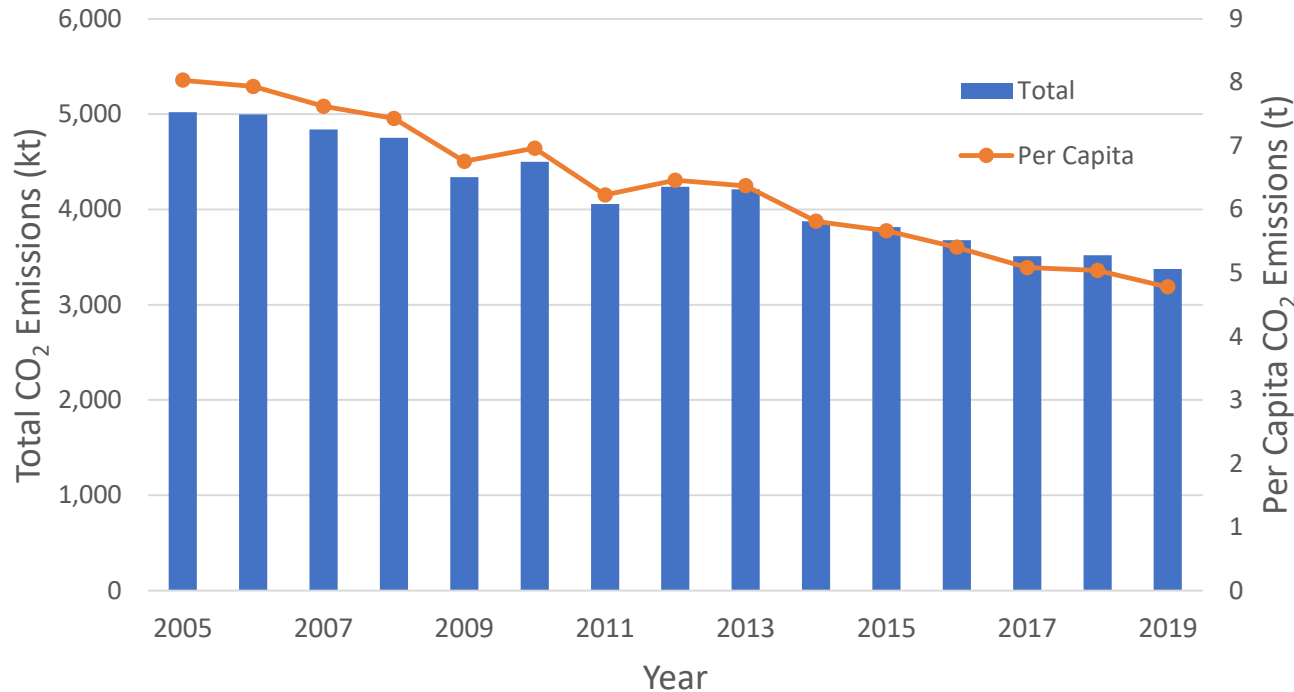


Tonnes of carbon per person by District and County

2019	LA Influence	Wider
LA Area	Per Capita Emissions	Per Capita Emissions
Blaby	3.6	5.8
Charnwood	4.0	4.4
Harborough	4.5	6.1
Hinckley & Bosworth	4.3	5.4
Melton	5.7	5.6
North West Leicestershire	8.6	10.9
Oadby & Wigston	3.0	3.1
Leicestershire	4.8	5.9

Takeaway point There is some variation in emissions per person across Leicestershire

County Emissions Under LCC Influence



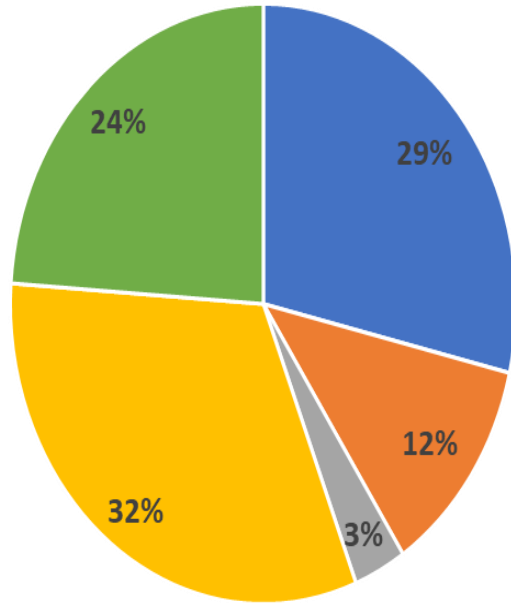
In 2019, the County emitted 3.37 million tonnes of CO₂

Since 2005, the County has achieved:

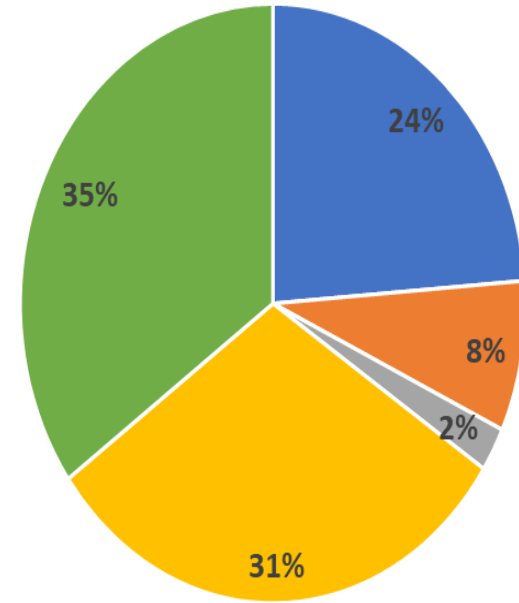
- ✓ 33% reduction in total emissions (1.6 million tonnes of CO₂)
- ✓ 40% reduction in per capita emissions
- ✓ An annual average emissions reduction rate of 2.7%

County Emissions Sources

Leicestershire Emissions Mix (2005)



Leicestershire Emissions Mix (2019)



■ Industry ■ Commercial ■ Public Sector ■ Domestic ■ Transport

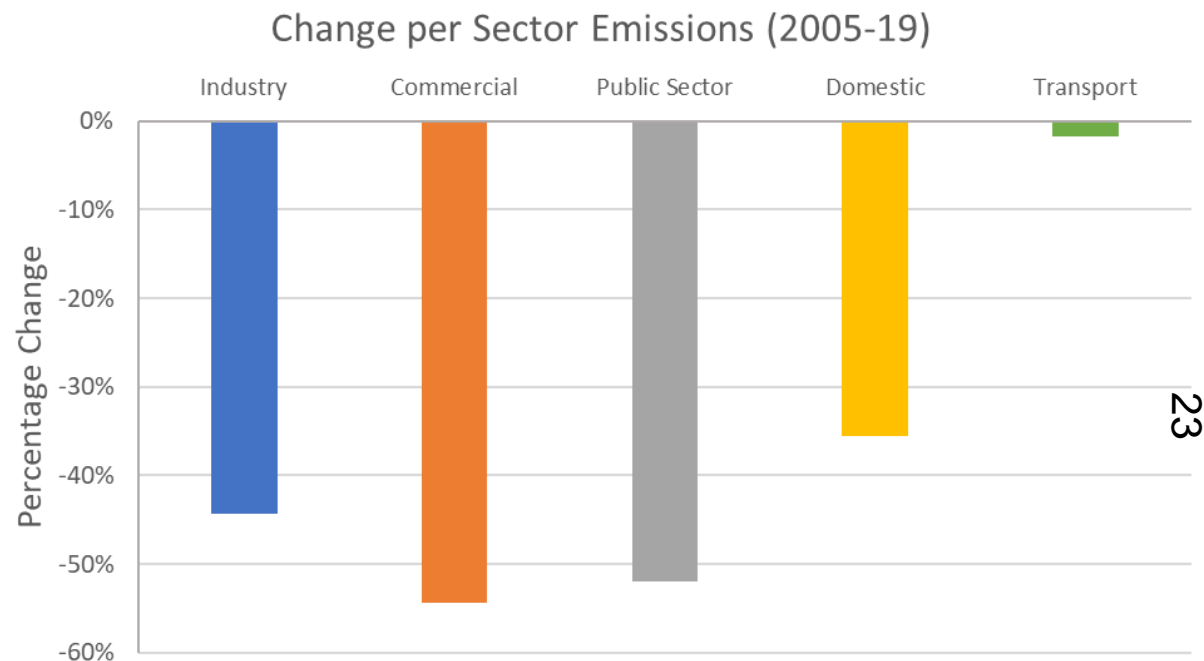
■ Industry ■ Commercial ■ Public Sector ■ Domestic ■ Transport

County Emissions Reduction Progress

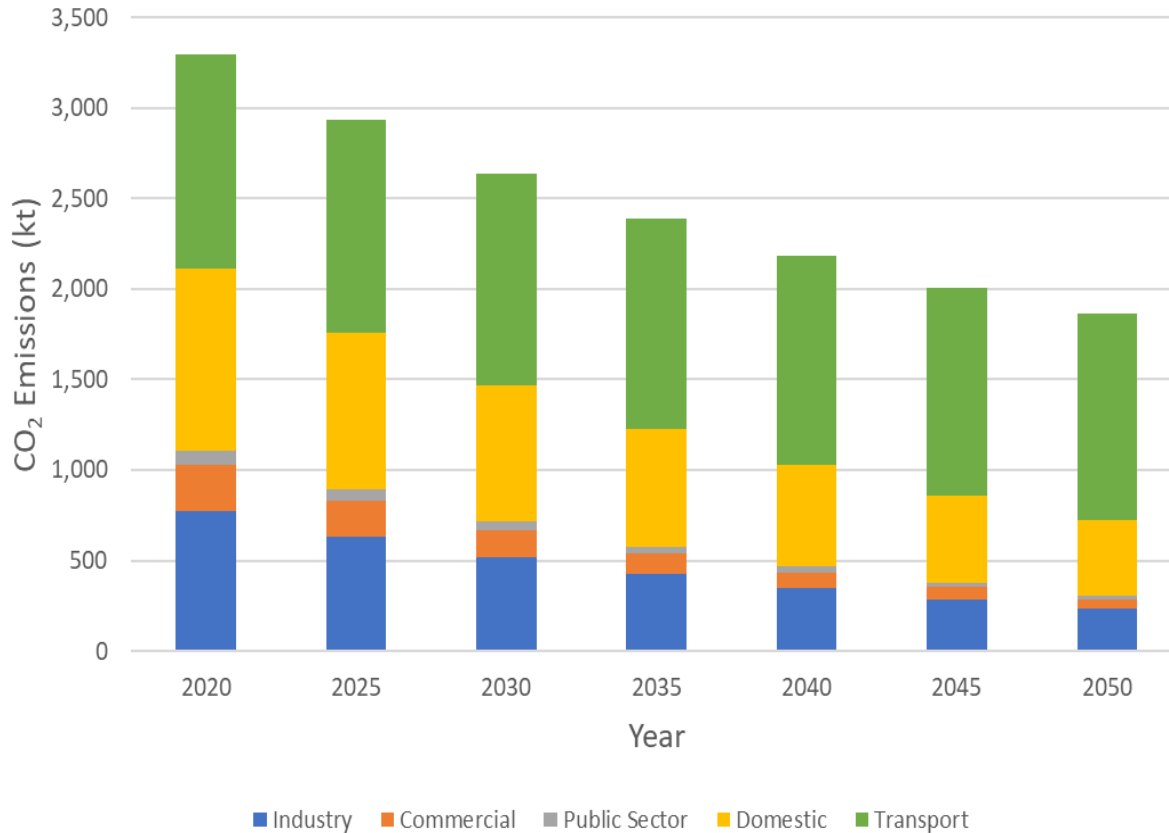
Since 2005, four of the five emissions sectors have reduced considerably.

Transport though has only reduced by 1.7%

Of the total emissions reduction 2005-19 (1.6 million tonnes of CO₂):
Industry contributed 39%, Domestic 35%, Commercial 20%, Public Sector 5% and Transport 1%.



County Business as Usual Projections



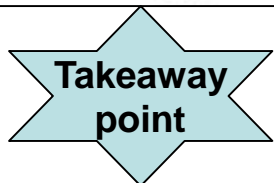
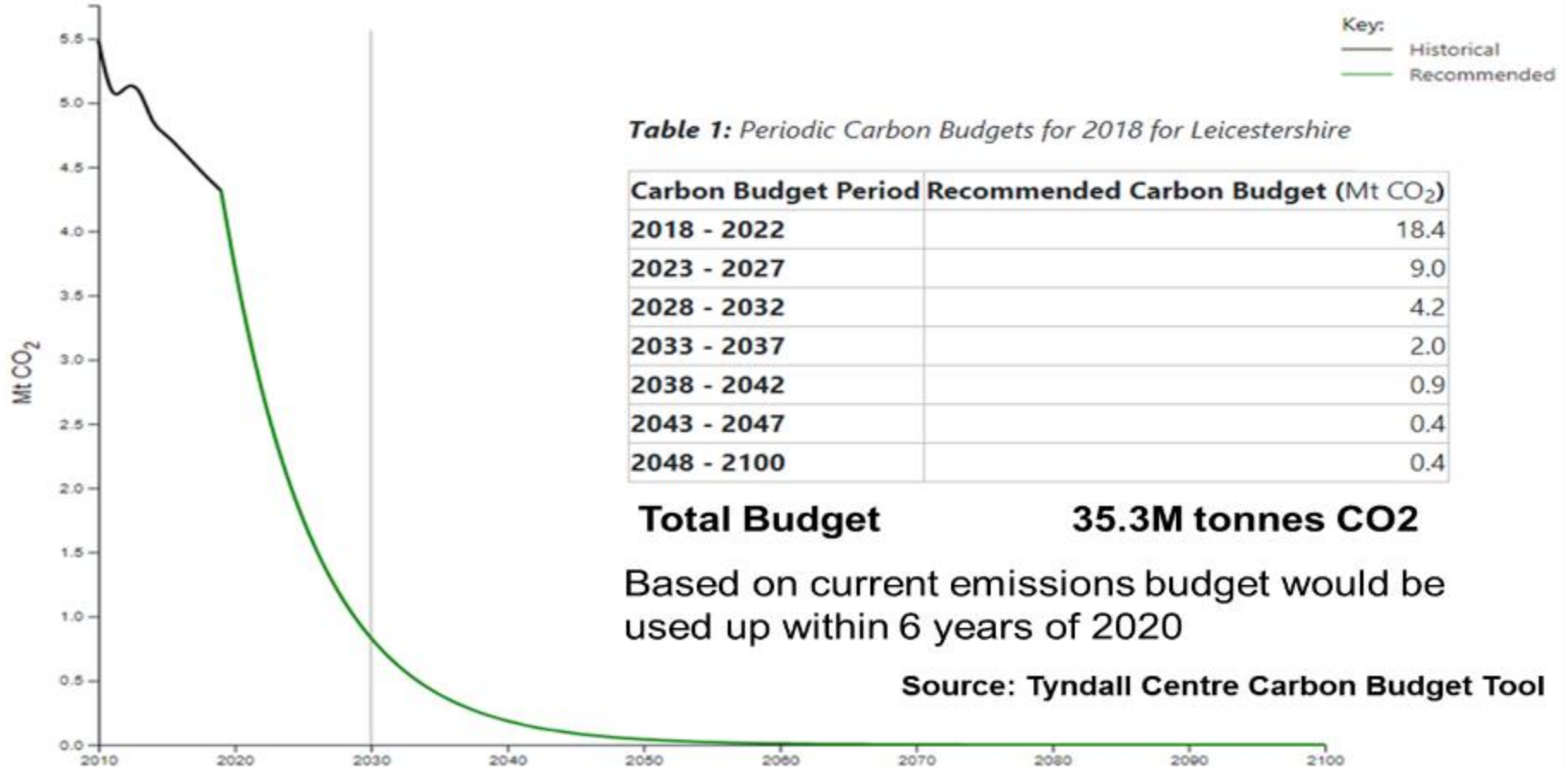
37% of the County's emissions remain in 2050

Emissions are 3 x higher than Leicestershire's indicative carbon budget

N.B. Business as usual projected based on average emissions reduction rates per sector between 2005 and 2019

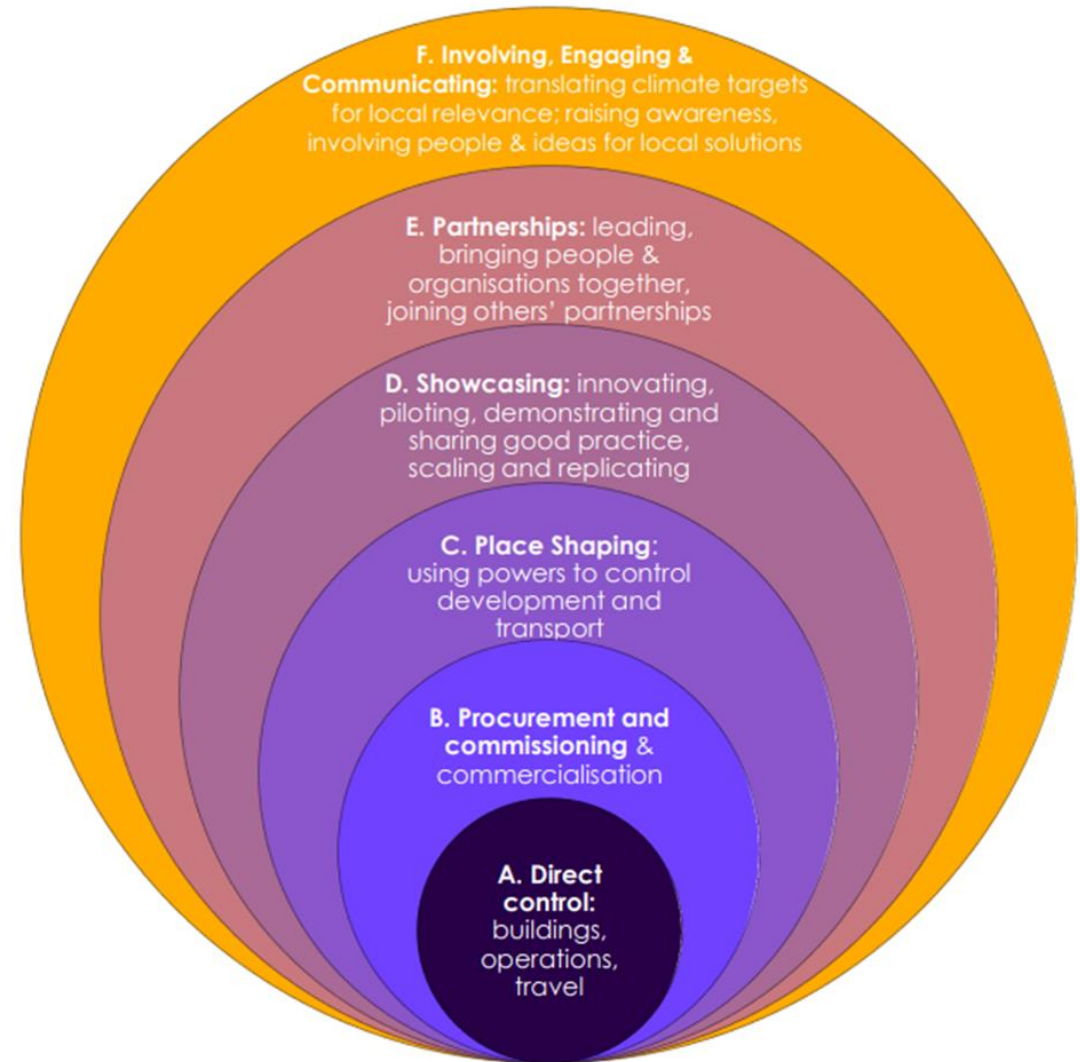
Emission trajectories for Leicestershire

Pathway projections for Leicestershire



The challenge to achieve net zero carbon by 2045 for Leicestershire is significant

**Demonstrates
greater
leadership**



In development, it will provide

- Emissions inventory
- Pathways to Zero
- Explore control and influence & identify lead partners
- Estimate costs
- Highlight gaps in existing powers and resources
- Identify co-benefits for the economy and health

Leicestershire County Council Net Zero Action Plan will outline the council's role and contribution in achieving the county target

Both documents will be produced during Autumn 2021

Action for Nature

**A Strategic Approach to Biodiversity, Habitat
& the Local Environment and
supporting Delivery Plan**

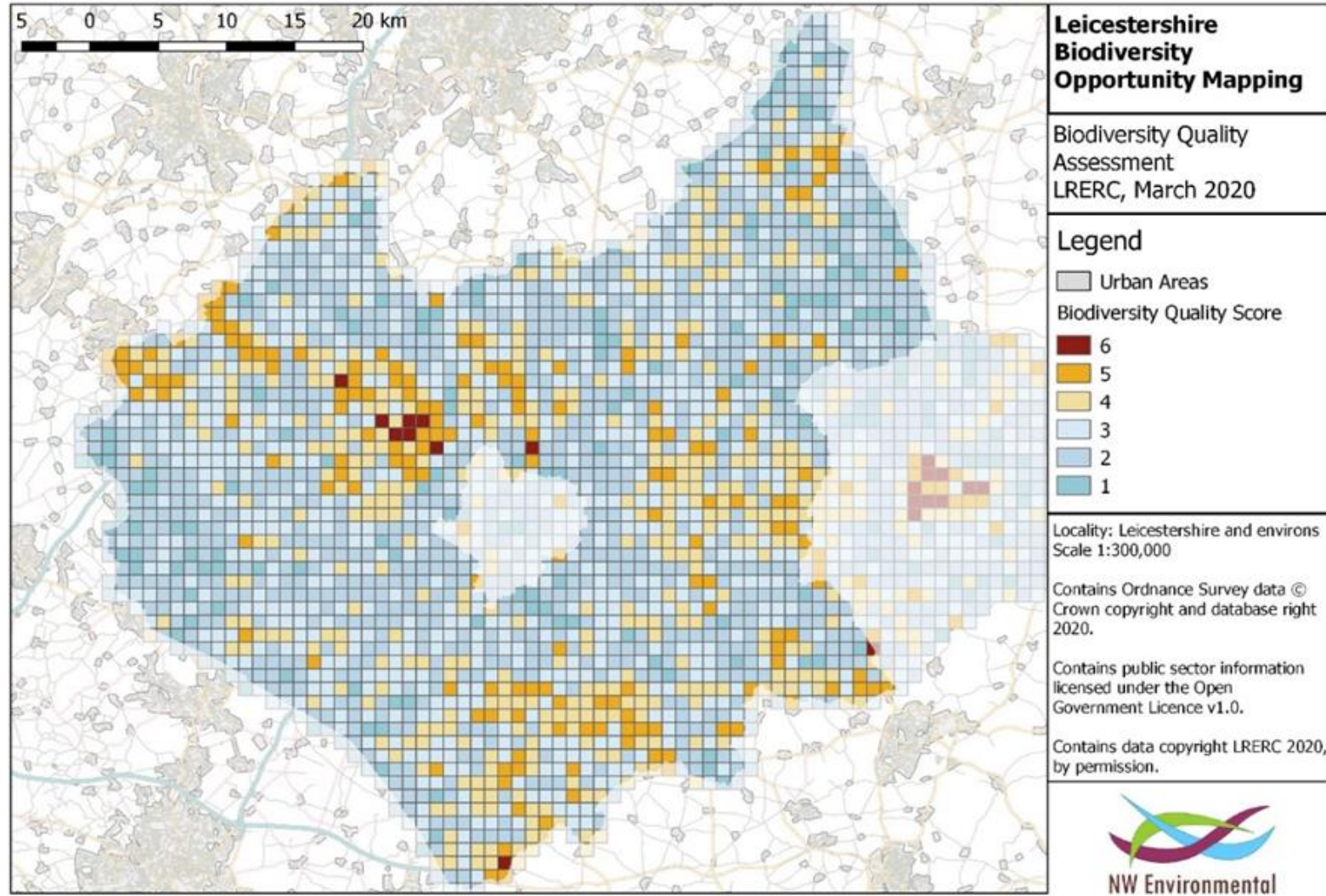
What does it do?

The 'Action for Nature' document builds on and supports the aims and objectives of the Environment Strategy 2018-2030 and seeks to compile into a single document:

- understanding of the **policy and legislative context** within which achievement of these aims and objectives is set;
- understanding of the current state of nature in Leicestershire;
- guiding **principles and rationale** of our approach;
- identification of the key **opportunities for action**;
- supporting **Delivery Plan** that provides more detail of the actions to be taken;
- **foundation** on which further action for nature can be taken as greater understanding of future legislative and other changes arise, such as the **Environment Bill**

Values the important and crucial role that eco-system services play in underpinning our economy and society

LRERC Biodiversity Quality Score



- Focus on areas of direct control and influence of LCC:
 - Improving the land management practices on land directly owned or managed by the Council;
 - Supporting the tenants of Council land to better manage this land;
 - Ensuring biodiversity is included in the development of Council policies, plans and projects
 - Influencing or adding value to the policies, plans and projects of others
 - Supporting awareness raising and education on biodiversity
 - Maintaining and developing local data on the ecology and historic environment of the county;
 - Identifying opportunities for realising eco-system service benefits on Council land, including carbon sequestration and storage

- UK100
- Charnwood Forest Regional Park Board
- Air Quality & Health Partnership
- Leicester & Leicestershire Enterprise Partnership (LLEP)
- Experts Reference Group
- Leicester Climate Emergency Partnership
- Environment Group – Green Agenda
- Soar Catchment Partnership
- River Soar & Grand Union Canal Partnership
- East Midlands Climate Action Network
- Leicestershire Rural Partnership
- The National Forest
- Leicestershire & Rutland Wildlife Trust

- Environment Bill and Planning Bill
- Ten Point Plan for a Green Industrial Revolution
- National Infrastructure Strategy, Energy White Paper, Heat and Buildings Strategy
- Decarbonisation of Transport Plan
- Electric Vehicle Infrastructure Strategy
- Net Zero Carbon Strategy
- Environment Principles consultation; integration, prevention, rectification, polluter pays, precautionary
- Climate Change Committee; Annual Progress reports and UK Climate Risk Climate – health and care priorities for action
- Highways Maintenance Self Assessment
- Sustainable Homes and Sustainable Buildings Standards
- IPCC Climate Change Assessment Reports (AR6)

