

A toolkit for city regions and local authorities



Climate action co-benefits

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Guide to this toolkit

This toolkit is primarily intended for use by local authority officers when briefing elected members, mayors and senior managers. Each of the co-benefits sections includes facts and figures, links to data for local areas, the business case for taking action, opportunities for action and inspirational examples of successful initiatives from around the country. Case studies are shown in boxes with Ashden Award winning organisations indicated via the Ashden logo.



These can be used as the building blocks for making the case for action in your area; the intention is that users can pick and choose the messages and examples that will resonate in their areas.

The links to films in this toolkit are designed to bring to life some of the challenges that people in towns and cities face. The aim is to facilitate conversations around the co-benefits of climate action, ‘multi solving’ climate and social issues.

Acknowledgements

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Ashden’s work on co-benefits

Ashden is working with UK cities to help them realise their sustainability ambitions. Our vision is of healthy, liveable cities where people want to live and work. Through our Liveable Cities programme, we created the Sustainable City Region Network – to help sustainability leaders to realise this vision and tackle common challenges. Realising the wider benefits of climate change such as better homes, more money in local economies, clean air, healthier travel options, and new employment opportunities is essential to connect climate policy to the needs of all citizens, demonstrating that

Foreword

If we are to stay within 1.5°C of warming and avoid catastrophic climate change, we need to move with a sense of urgency that we have not seen since the second world-war. But this cannot just be imposed on citizens and communities. In order to create the consensus that local, regional and national governments need and the funds to deliver the work, we have to take citizens with us.

Protests by Extinction Rebellion, the remarkable wisdom of Greta Thunberg and the powerful film making of David Attenborough have got citizens thinking about climate change and its implications. However, much of the discussion is still about giving things up. At Ashden we have a different view.

By engaging people through structures like citizens' panels and connecting climate policy to the needs of everyone, we can demonstrate that the consequences of climate action improve lives, not diminish them. Better jobs, more money in local economies, clean air, healthier travel options, green spaces, and warm and cheap-to-heat homes – all these engage peoples' values.

By looking at these wider benefits we can solve climate and social issues at the same time and use housing, transport, infrastructure or economic development budgets in a smarter way that delivers urgent climate action. Reducing levels of air pollution, for example will massively reduce the costs of NHS treatment and in turn free-up money to be spent on home energy efficiency improvements or sustainable green transport.

Engaging the population in this way shows them that responding to climate change makes their lives better, and in turn, this gives governments, be they local, regional or national, the agency to implement more radical carbon-cutting measures and the funds to do so.

This co-benefits approach is at the heart of Ashden's liveable cities programme and at the heart of this toolkit.

We need to re-frame climate change to show how it improves quality of life for all of us. There is no better time than now.

Local authority action on climate change

Local authorities are well placed to drive and influence action on climate change through the services they deliver, their regulatory and strategic functions, and their roles as community leaders, major employers, large-scale procurers and social landlords.

Action on climate change can deliver many local benefits, including lower energy bills, economic

regeneration and creation of local jobs, reductions in fuel poverty and improved air quality.

Furthermore, increasing resilience to climate change risks can result in avoided costs from flood damage to buildings, infrastructure and services, enhanced green spaces and improved health.

” *Our vision is of healthy, liveable cities where people want to live and work. Cities that are unpolluted, well-planned, powered by sustainable energy and clean technologies. And cities where a transition to a low carbon economy protects the wellbeing of all citizens.*

The co-benefits of action on climate change

Taking action on climate change is beneficial in many ways:









- Health and wellbeing are improved as a result of improved air quality through reduced use of combustion engine vehicles, increased activity from people walking or cycling more, as well as through reduced fuel poverty from more energy efficient homes.
- Action on climate change can improve equity and social cohesion through focusing on the most vulnerable in society, such as action to alleviate fuel poverty.

- Investing in initiatives to reduce carbon emissions can create a wealth of economic opportunities and jobs in the low carbon economy.
- Action to reduce carbon emissions can also increase the resilience of cities and their communities to future changes in energy prices and energy systems, as well as potentially increasing resilience of communities and infrastructure to the impacts of climate change.



A video providing an introduction to the concept of climate action co-benefits can be found [here](#).

Multiple co-benefits from climate action – some examples

Action	Carbon	Health	Economy	Equity	Resilience
 <p>Insulating homes</p>	 <p>Cuts energy demand and cuts carbon emissions</p>	 <p>Reduces fuel poverty as people stay warmer</p>	 <p>Creates jobs for local people, and people save money on their energy bills which they may spend locally</p>	 <p>Increased access to affordable warmth</p>	 <p>Households are better placed to withstand future energy price rises as well as overheating during heatwaves</p>
 <p>Car sharing</p>	<p>Reduced fuel consumption cuts carbon emissions</p>	<p>Reduced NOx improves air quality. Improved wellbeing through social interaction</p>	<p>People save money on their fuel, which they may spend locally. People can make journeys (e.g. to work) that they may not otherwise be able to do. Reduced congestion</p>	<p>Brings people together; can reduce isolation and loneliness</p>	<p>Increased resilience to impact of future fuel price rises</p>
 <p>Cycling</p>	<p>Reduced fuel consumption cuts carbon emissions</p>	<p>Reduced NOx from combustion engines improves</p>	<p>Money saved on petrol. Reduced congestion</p>	<p>Increased connections to local community through cycling</p>	<p>Resilience to future increase fuel costs</p>

“Cities and local authorities are well placed to understand the needs and opportunities in their local area, although there are questions over whether they have sufficient resources to contribute strongly to reducing emissions. They have important roles on transport planning, including providing high-quality infrastructure for walking and cycling, provision of charging infrastructure for electric vehicles, and ensuring that new housing developments are designed for access to public transport. They can improve health outcomes for people who live and work in the area by implementing clean-air zones that discourage use of polluting vehicles and other technologies⁶.

Committee on Climate Change

The potential for local authorities to take action on climate change

Local authorities are directly accountable to their constituents for their decisions and are better placed to take swift action than national officials. Cities progressing devolution deals can also set the agenda both for their communities and for national government.

Local authorities have powers in relation to planning, transport and skills; these vary depending on the type of authority (see table below). In England, there are ten combined authorities, of which seven have an elected metro mayor and devolution deal. Separate to these, London also has an elected mayor and a combined authority in the form of the Greater London Authority (GLA).



In addition to their formal powers, local leaders can have enormous influence, using their democratic legitimacy, leadership skills and negotiation to achieve outcomes beyond what can be achieved solely through their own legal powers and duties.

The Committee on Climate Change Net Zero report recognises the role of cities and local authorities in achieving net zero.



Our city region network

Through our Liveable Cities programme, we created the Sustainable City Region network – to help sustainability leaders to realise this vision and tackle common challenges. Network participants told us that a better understanding of the co-benefits of a low carbon economy would enable them to make a more convincing case for climate action to city leaders, who face a range of competing priorities. So we have created this toolkit for local and combined authorities, particularly those that have declared a climate emergency.

We have also been working with the Grantham Institute who recently published a paper on the co-benefits of climate mitigation in the UK⁸. Through our work with city regions we were able to contribute to the paper's recommendations for policy makers.



The Ashden Awards process discovers city-wide low carbon solutions

Ashden winners represent pieces of the jigsaw puzzle of solutions that are required to decarbonise our cities. Our work with cities is identifying missing pieces in the jigsaw puzzle – which we can help find through our Awards programme. We have over 90 winners in the UK who we support, helping them to scale up and replicate their work.

A toolkit for city regions and local authorities:

Chapter 2: Health and wellbeing



Climate action co-benefits

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Accessing facts that relate to your area

Topic	Source	Description	Link
Travel	Gov.uk – National Travel Survey and Active Lives Survey	National walking and cycling statistics, including local authority-level data	https://www.gov.uk/government/collections/walking-and-cycling-statistics
Air quality	UK Air: Air Information Resource	A library of data on air quality including local air pollution forecasts and modelled data	https://uk-air.defra.gov.uk
	London Atmospheric Emissions Inventory (LAEI) 2013	Borough-level emissions and concentrations data	https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory-2013
Fuel poverty	Fuel poverty sub-regional statistics	Includes local authority-level data on the number and proportion of households in fuel poverty	https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics
Excess winter mortality	ONS – Excess winter mortality in England and Wales	Excess winter mortality figures by local authority and other demographics	https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/excesswintermortalityinenglandandwales/referencetables
Green space	Ordnance Survey Green Space Map	Depicts the location and extent of spaces such as parks and sports facilities that are likely to be accessible to the public and, where appropriate, their access points	https://data.gov.uk/dataset/5d009d8a-702b-4a88-bf71-d4d6df87df53/os-open-greenspace
Flood risk	Flood risk map	Map showing degree of flood risk (from rivers and sea, and from surface water) by place or postcode	https://flood-warning-information.service.gov.uk/long-term-flood-risk/map

Why it matters

Taking action on climate change can have substantial benefits for public health and wellbeing:

- Decarbonising the transport sector has the potential to make considerable improvements to air quality and public health;
- Improving the energy efficiency of homes can help to alleviate fuel poverty;
- Access to good quality green space and nature is a significant contributory factor for mental and physical wellbeing, particularly in urban areas;
- Changing weather patterns, more frequent extreme weather episodes and rising temperatures have direct implications on our health and pose challenges to the way in which the public health and social care systems

What role can decision makers play?



Leadership – Councils can then play a leadership role through declaring a climate emergency and through encouraging and supporting residents and businesses on health and wellbeing improvements.



Partnership – Councils can work with different partners to encourage coordinated action. Organisations like the NHS and local community groups can be key partners in the delivery of fuel poverty and health improvement projects.



Communicating – Councillors can explain the opportunities to improve health and prosperity e.g. by raising awareness on air quality mitigation and reduction.



Public health – Councils can use public health responsibilities and powers to support and encourage action on improving health and the environment.



Planning – Councils can use planning powers to improve access to green space and improve infrastructure for active travel modes.



Signposting – Councils can signpost households and organisations to existing support, as necessary.



The UK's low carbon economy – driving regional growth

- **Scotland:** Turnover of the low carbon economy was £5.5 billion in 2015, supporting 31,000 jobs and 20,000 businesses

- **North:** Low carbon investment has encouraged innovation and generation of clean energy, and developed local supply chains, all of which has helped drive regeneration

- **North East:** Low, environmental goods and services sector supports around 20,000 jobs in the North East, with high proportions of the national employment in offshore wind, geothermal, hydroelectric, and biomass energy, alternative fuels, heat networks and electric vehicles

- **Northern Ireland:** Turnover was almost £1 billion, supporting 5,000 jobs and 4,000 businesses

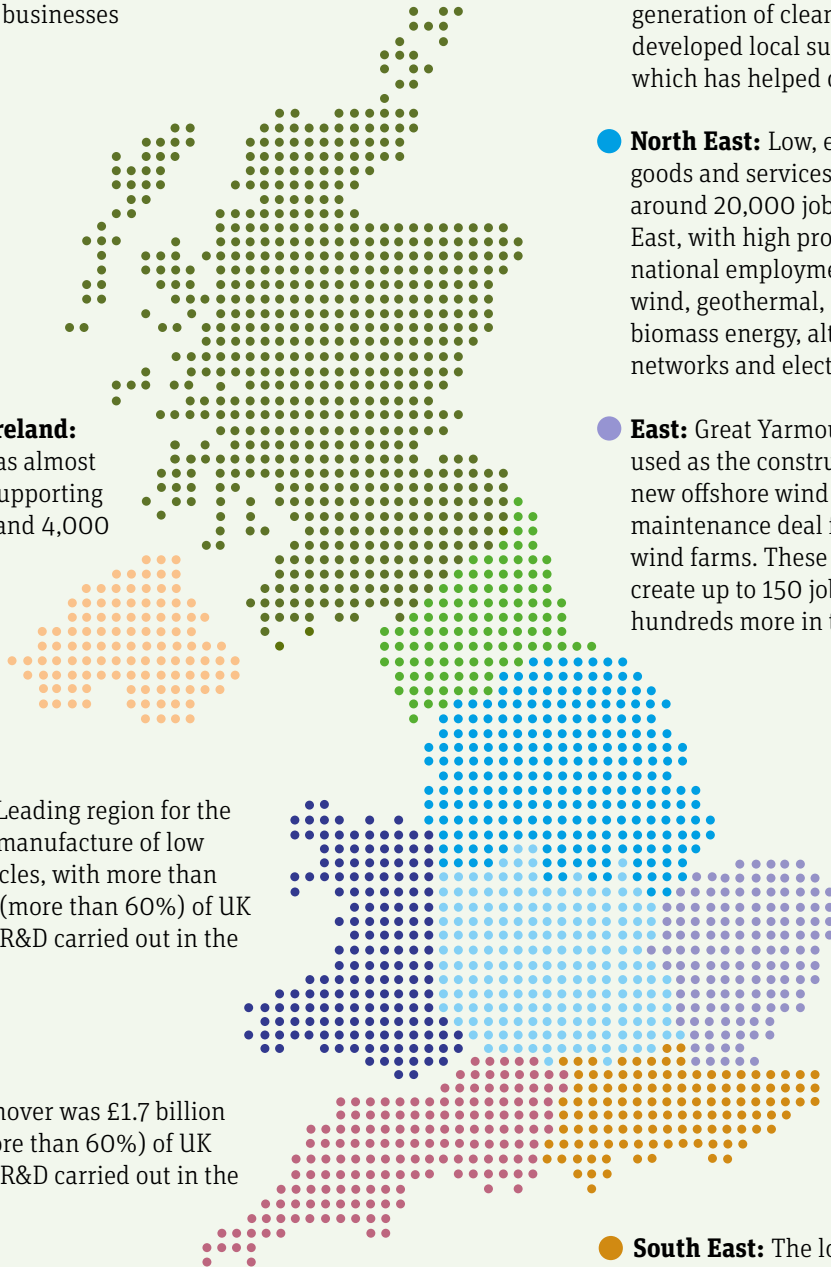
- **East:** Great Yarmouth port is being used as the construction base for a new offshore wind farm, and has a maintenance deal for another two wind farms. These contracts will create up to 150 jobs for 25 years, with hundreds more in the supply chain

- **Midlands:** Leading region for the design and manufacture of low carbon vehicles, with more than £1.5 billion (more than 60%) of UK automotive R&D carried out in the region

- **Wales:** Turnover was £1.7 billion in 2015 (more than 60%) of UK automotive R&D carried out in the region

- **South West:** The low carbon sector in Bristol employs over 9,000 people and over 19,000 in the whole of the West of England, generating £2.4 billion

- **South East:** The low carbon economy in Oxfordshire has a turnover of £1.15 billion supporting 8,800 jobs, and is 7% of the local economy



Saving money on energy bills

A key economic benefit of energy efficiency programmes is reducing expenditure on energy. This leads to healthier balance sheets (for organisations) and increased disposable income (for non-fuel poor households). In a single street of 100 ‘average’ homes, the combined spend on energy will be around £140,000 a year, of which around £28,000 a year could typically be saved through cost effective measures; money that could then potentially be spent in the local economy. Similarly, a secondary school or college spending £100,000 a year on energy could save around £20,000 a year through implementing low cost energy efficiency measures.

West Midlands – calculating the potential for energy savings

There are 1.7 million homes in the West Midlands, forecast to increase to £1.9 million by 2030, which will add £100–300 million to the regional energy spending. In principle, energy bills and carbon emissions can be cost effectively reduced by 10–30%, equating to up to £600 million per annum for the region²⁹.

Cambridgeshire County Council – helping schools to slash energy bills and generate revenue

Cambridgeshire County Council has used the Ashden-award winning Re:fit Programme to deliver guaranteed energy-efficiency savings in schools across the county.

The council provides loans or managed service arrangements to pay for the energy saving measures and is able to draw down public sector capital from its Local Energy Investment Fund to pay for the works up front. The aim is to help schools plan for the future and manage their energy bills, as well as operate more efficiently and reduce their carbon emissions. For example: Great Paxton Primary School was spending £11,000 on energy each year. A range of energy efficiency and renewable solutions were installed through this programme, halving the school’s energy bill and generating over £4,500 in income each year. This represents a total saving on annual energy costs of almost 90%³⁰.

“*It’s been a huge success. After one year we are cash positive and our electricity and gas bills have halved. We have generated income and reduced our carbon footprint, but most importantly, we have provided a better environment for our children to learn in. With the savings made we are in a position to provide more for our pupils.*”

Lee Frost, Headteacher, Great Paxton Primary School

Air quality inequalities

Decarbonising the transport sector will provide health benefits that save the NHS money while simultaneously addressing health inequalities¹⁴.

Air pollution affects everyone, but the most socio-economically disadvantaged almost always suffer the most from the health effects of pollution. Other groups disproportionately affected include older people, children, pregnant women, individuals with existing medical conditions, and communities in areas of higher pollution.

There are strong geographical differences in the occurrence and concentration of pollutants. Analysis shows that these patterns, which vary by pollutant type, are related to measures of

socio-economic status, with pollution sources and higher concentrations of ambient pollution typically found in more socially disadvantaged areas¹⁵.

Those most affected by air pollution in the UK are often those least responsible for producing it – vehicles passing through neighbourhoods are primarily responsible for causing the pollution rather than travel by those living within the area, as low-income communities are more likely to use public transport than private vehicles¹⁶.



A video telling the story of someone whose health is affected by poor air quality can be found [here](#).



Climate action co-benefits – useful resources

Resource	Link
Ashden resources	
Co-benefits videos	
Detailed case studies on all the Ashden Awards winners	https://www.ashden.org/winners/awards-winners
Ashden news	https://www.ashden.org/news-and-events/news-and-opinion
The LESS CO ₂ sustainable schools programme is a free energy efficiency programme available to any UK school. Through a series of half day workshops spread through the year, peer mentoring, expert advice and resources, staff are empowered and equipped to make changes and improvements to their school to reduce their energy usage, save money on bills and lower their CO ₂ -emissions.	http://www.lessco2.org.uk/ 
Fit for the Future is an environmental sustainability network with over 100 charities, heritage organisations, cultural venues, public sector organisations and more in its membership. By collaborating and sharing knowledge, our members are becoming climate-friendly, adaptive and resilient.	www.fftf.org.uk 
Health and housing	
Citizens Advice and Cornwall Council have produced a Local Authority Toolkit: Supporting Fuel Poor and Vulnerable Households, for local authorities, health and third sector partners to work together to reduce fuel poverty in their localities through energy efficiency initiatives.	https://www.citizensadvice.org.uk/Global/CitizensAdvice/Local%20authority%20cold%20homes%20toolkit.pdf 
HACT have developed a social value toolset to help housing providers, their suppliers and partners understand and implement social value measurement and to use social value as a tool to inform decisions.	https://www.hact.org.uk/hact-value 
HACT have also produced a tool to calculate the social value and mental health impact of energy efficiency work.	https://www.hact.org.uk/mental-health-social-value-calculator 
NICE published guidance on how to reduce the	https://www.nice.org.uk/guidance/ng6/chapter/9-The-
homes.	Health and Care Excellence

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