

Climate ACTION PLAN

for the new Mayor of Greater Lincolnshire

10 priorities to protect
people and planet

We're facing a climate and ecological emergency – the biggest threat we've ever seen to humanity's existence. The latest report from the UK's Climate Change Committee shows that we urgently need to ramp up delivery of the solutions, and that many of these solutions will require local action. The UK is also failing to build resilience to the worsening impacts of climate change, putting people at growing risk from extreme weather, health issues, food insecurity and more.

Whoever is elected as the new Mayor can't single-handedly solve the crisis, but they must use the powers they have to make as big a difference as possible. They have a very important role to play in providing a guiding vision for the area, and will need to work with councils, businesses, local communities and the national government.

Tackling the climate and nature crisis must be done in a way that benefits everyone, no matter their income, race, age or background. It's important to address the sheer scale of inequalities that exist.

People who are most marginalised – both here in the UK and across the world – have done the least to cause climate breakdown but are the least able to recover from its impacts.

People on lower incomes and people of colour suffer most from the lack of nature and green space in our towns and cities. This is also true of air pollution, despite a lower proportion of people on lower incomes and people of colour owning cars than others.

Young people's futures are most at risk from climate breakdown and the decline of nature, and they're also economically disadvantaged, for example by the cost of housing.

The constituent councils that make up the new Greater Lincolnshire Combined County Authority (GLCCA) have existing climate plans in place, but with varying targets and levels of commitment to the actions required. Compared with other county councils, Lincolnshire County

Council scored very poorly according to analysis by Climate Emergency UK. North Lincolnshire Council scored below the average for single tier councils, while North East Lincolnshire had an average score overall but performed well on buildings and poorly on transport. It's clear that the new Mayor will need to take a leading role in co-ordinating and accelerating climate action across Greater Lincolnshire.

The new Mayor must build on existing commitments across the area, accelerate delivery of the actions committed to and tackle inequalities. They must also regularly report on progress towards carbon reduction and nature restoration goals.

This Climate Action Plan will help the new Mayor do this using the devolved powers and funding granted to them. They'll also have an important role in influencing and co-ordinating action by constituent local authorities, local businesses and other stakeholders.

Even with the additional powers and resources available to the new combined county authority, we acknowledge that some barriers to action remain due to unhelpful national policies and inadequate powers to raise funds locally. To address this, the new Mayor should use their voice to campaign for national government to put the climate crisis at the heart of devolution deals and give local government the powers and resources needed to act at the scale required.

10 priorities the new Mayor of Greater Lincolnshire should commit to

The 10 priorities listed below build on those we set out for the combined authority mayoral elections in 2021. In the following section, we explain in more detail what each means for Greater Lincolnshire in practice.

- 1** Ensure all plans, programmes and investment decisions are in line with what's needed to address the climate and ecological emergency and are aligned with international, national, regional and local carbon reduction targets.
- 2** Ensure that the voices of those most impacted by climate breakdown and nature loss are heard and given centre-stage in decision making.
- 3** Support new green jobs. Protect workers and communities through a just transition to a low-carbon, nature-rich, circular economy, including linking skills training to low-carbon jobs.
- 4** Ensure new development is zero carbon and served by sustainable transport using their influence on constituent local planning authorities. Use brownfield regeneration and affordable housing funding to deliver zero-carbon homes in locations accessible by public transport and active travel.
- 5** Take a leading role in accelerating action to bring existing homes and buildings in the area up to high energy efficiency standards (EPC rating C) to reduce emissions and put an end to fuel poverty. Ensure that existing homes, buildings and infrastructure are protected from extreme weather events.
- 6** Set targets and strategies to at least double public transport use and increase walking and cycling fivefold in 10 years. This includes improving the quality, connectivity and affordability of public transport services, with a rapid move to bus franchising as a key measure to restore bus services to at least 2010 levels.
- 7** Lead the development of a Local Area Energy Plan (LAEP) to increase the supply of clean, renewable energy, including support for community energy initiatives and the roll-out of heat pumps. Avoid carbon capture and storage (CCS) and hydrogen as far as possible.
- 8** Ensure that the Local Nature Recovery Strategy (LNRS) for the area increases tree cover, protects and enhances nature, eliminates green space deprivation, and helps the area become more resilient to the impacts of climate change.
- 9** Lead the development of a circular economy strategy for the region with local businesses and local authorities to both cut waste and resource consumption and boost the green economy, including encouraging alternatives to cement in construction.
- 10** Use their convening role with Defra and the UK Food Valley partnership to ensure the sustainability of food production in Lincolnshire, including enhancing flood protection and resilience.

What this looks like for Greater Lincolnshire

1

Ensure all plans, programmes and investment decisions are in line with what's needed to address the climate and ecological emergency and are aligned with international, national, regional and local carbon reduction targets.

All decisions need to be in line with what's needed to address the climate and ecological emergency. Commitments to tackle the crisis are meaningless if they're contradicted by spending on and support for high-carbon activity. All plans and investment spending must align with the need to cut emissions and increase the resilience of the area to climate impacts. Local government pension schemes must also stop investing in climate-wrecking gas, oil and coal companies.

Practical action

The Mayor must ensure that spending of the mayoral investment fund, and any devolved funding pots under their control, is aligned with moving to a low-carbon economy.

The Mayor should ensure that all plans, including the Local Growth Plan, set the area on a path of fair transition to clean, green industry that will help cut climate change emissions and boost growth in green jobs. In Lincolnshire this will mean accelerating the development of renewable energy infrastructure – wind and solar farms – to which the topography of this county is ideally suited, as well as implementing measures to lower the carbon emissions of the farming and food industries. This investment in both the rural and industrial economy should benefit all citizens.

This also means ending the promotion of or investment in high-carbon infrastructure such as new roads. Additional actions to promote low-carbon transport and buildings are set out in the relevant sections below.

The Mayor should make public statements calling on the local government pension scheme to divest from fossil fuels. They should engage directly with the local authorities that control these funds, encouraging them to make immediate commitments to divest from all fossil fuels.

2

Ensure the voices of those most impacted by climate breakdown and nature loss are heard and given centre-stage in decision making.

The Mayor should recognise that those who've done the least to contribute to climate breakdown are often the most vulnerable to its impacts.

In the Greater Lincolnshire area, 608 neighbourhoods have been identified by researchers as having a significant surface water flood risk due to their location, with 51 of these neighbourhoods being particularly vulnerable due to the demographics of the community (for example, age or income). According to the research, 37% of people in Greater Lincolnshire live in flood risk areas and 36% in

areas without any flood defences. In addition, 49 neighbourhoods have been identified as being particularly vulnerable to the impacts of extreme heat. Flooding and extreme heat will both be exacerbated by climate breakdown.

Practical action

The Mayor must commit to involving all citizens, but especially young people and the most vulnerable communities, in decision making and action planning.

The Mayor must also recognise the impact of decisions made today on the wellbeing of future generations and commit to having youth representation on the governance structures within the region.

Deliberative democracy approaches, such as citizen juries, citizen assemblies, and participatory mapping and budgeting, should be used, especially for complicated or contentious choices.

Climate change adaptation and nature restoration spending should be focused on the most vulnerable communities.

3 Support new green jobs. Protect workers and communities through a just transition to a low-carbon, nature-rich, circular economy, including linking skills training to low-carbon jobs.

Green jobs and training will both be necessary to achieve any credible sustainable vision and economic plan for the region. The green economy is already the fastest growing part of the UK economy, and action in this area will benefit the region.

Mayors will need to make sure they understand the projected demand for green skills in their areas, including for the development, construction and servicing of wind turbines and solar farms, fitting insulation and heat pumps, installing electric vehicle charging points and restoring nature. These skills should be a key focus of adult education budget spending.

Practical action

The Mayor should invest in green jobs, apprenticeships and sustainable enterprise. This means prioritising investment in sectors such as renewable energy, housing retrofit, sustainable transport, nature restoration and the circular economy.

The Mayor should use their control of the area's adult education budget to ensure the labour force has the necessary skills to enable the transition to a low-carbon economy.

The Mayor should also work with youth representatives, trade unions, colleges, training providers, businesses and the youth climate movement to devise an ambitious programme of developing technological expertise, skills training and apprenticeships for the green economy.

4

Ensure new development is zero carbon and served by sustainable transport using their influence on constituent local planning authorities. Use brownfield regeneration and affordable housing funding to deliver zero-carbon homes in locations accessible by public transport and active travel.

It makes no sense to build new homes today that will need retrofitting in the near future or that are dependent on cars for transport. Although mayoral authorities don't make planning decisions, they can set out expectations for their areas, which can set environmental standards for new development.

Practical action

The Mayor should use their influence to ensure planning policies in the area are fully aligned with national carbon reduction targets and carbon budgets – including requiring new housing to be zero carbon.

The Mayor should also co-ordinate spatial and transport planning at the regional level to ensure that new developments are accessible by sustainable transport and have access to nature-rich green space.

Funds for new housing such as the Brownfield Housing Fund must be used to deliver affordable, healthy homes that are built to high energy efficiency standards, are protected from overheating and flooding, aren't built around transport by car, and result in an overall gain in green space and biodiversity.

5

Take a leading role in accelerating action to bring existing homes and buildings in the area up to high energy efficiency standards (EPC rating C) to reduce emissions and put an end to fuel poverty. Ensure that existing homes, buildings and infrastructure are protected from extreme weather events.

Most of the buildings that people will use over the next 50 years have already been built. Only 41% of homes in Greater Lincolnshire are currently well insulated. This represents a shocking waste of energy, with high greenhouse gas emissions and unnecessarily high energy bills, especially for more vulnerable low-income renters.

44,570 homes need to be insulated every year in Greater Lincolnshire to ensure all homes are properly insulated by 2030. It's estimated that it'll cost a total of £2.1 billion to get all homes to EPC band C. A significant proportion of this will need to be publicly funded because a large proportion of householders are unable to pay themselves. In addition, the transition from gas-fired boilers to eco-heating systems needs to be well underway in our homes. In Greater Lincolnshire, at least 23,620 heat pumps need to be fitted every year until 2030.

As well as ensuring that homes are well insulated to end fuel poverty and improve health, we need to move to electric heating that's powered by renewable sources. Hydrogen isn't a sustainable or effective solution for heating homes and shouldn't have any place in GLCCA's net zero plans.

Practical action

The Mayor will have a key role to play in working with local authorities, housing associations and other partners, helping to secure government funding to retrofit cold homes that are expensive to heat. The Mayor is uniquely placed to co-ordinate a street-by-street retrofit programme across all types of housing tenures, prioritising neighbourhoods with high levels of fuel poverty.

Mayoral authorities should also support private homeowners and landlords who are unable to pay for retrofit themselves – for example by establishing retrofit hubs for energy saving advice as well as information on financial support and reliable suppliers.

The Mayor should take a leading role in protecting against extreme weather, working with partners across the area to ensure that homes are more resilient to the impacts of climate change such as flooding and overheating.

6

Set targets and strategies to at least double public transport use and increase walking and cycling fivefold in 10 years. This includes improving the quality, connectivity and affordability of public transport services, with a rapid move to bus franchising as a key measure to restore bus services to at least 2010 levels.

In mainland Europe, many places provide much [better and more integrated public transport](#). As a result, levels of public transport use are much higher than in the UK's combined authority areas. Far too few journeys are being made on public transport in the Greater Lincolnshire area. For example, only 4% of commuter journeys are made using public transport. Bus services have declined by 31% when compared with 2010 levels, which is likely to disproportionately impact those on low incomes.

Shifting journeys from cars to public transport and active travel is more challenging in rural areas, and the new Mayor must make this a priority. Greater Lincolnshire must dramatically transform transport infrastructure and travel habits so that using public transport or cycling and walking become the default. Everybody should be able to live decently and get about without having to own a car. In Greater Lincolnshire, 18% of households don't have access to a car or van. Access to decent car alternatives is a social justice and cohesion issue, as well as an environmental issue.

Enabling people to get around with minimum impact on the environment will also bring about big improvements in air quality. World Health Organization (WHO) standards are set to reduce the health impacts of air pollution – they're evidence based and regularly updated in line with new research. Our analysis shows that air pollution is a real problem across the area. WHO guidelines for the toxic gas nitrogen dioxide (NO₂) are breached in at least 33 locations (5% of neighbourhoods), and there are 20 schools in neighbourhoods that have concerning levels of air pollution.

Practical action

The Mayor should use the additional franchise powers gained by devolution to re-regulate buses so that services are improved and delivered by low-emission buses, fares are affordable, and routes match what local people need. In addition, there needs to be better join-up across different modes of public transport, such as unified ticketing systems.

The Mayor has a key role to play working with local authorities to co-ordinate the provision of joined-up active travel infrastructure. Greater Lincolnshire needs to do much better on providing safe cycling routes. Research shows that with good cycling infrastructure, such as segregated cycleways, and the uptake of e-bikes, 29% of commuter journeys in the area could be made by bike. A comprehensive network of safe, segregated cycle routes should be the goal for urban areas – like those in

Copenhagen, Denmark, where [49% of journeys for work and education are made by bike](#). Efforts should be made to build community support for these changes and to consult in advance about new routes and measures.

The Mayor must protect the health of local people and commit to taking the necessary action to ensure air quality standards are met across the whole region. This will require measures to stop the use of the most polluting vehicles and to encourage the take-up of electric vehicles, as well as measures to facilitate alternative ways to travel.

Additional money to achieve this transformation in transport can be raised through schemes like the Workplace Parking Levy successfully pioneered by Nottingham City Council.

7

Lead the development of a Local Area Energy Plan (LAEP) to increase the supply of clean, renewable energy, including supporting community energy initiatives and the roll-out of heat pumps. Avoid carbon capture and storage (CCS) and hydrogen as far as possible.

A rapid growth in renewable energy is needed to wean the UK off electricity produced by fossil fuels and to increasingly provide the electricity needed to heat homes, cut fuel bills and power transport. By making space for renewable energy like rooftop solar panels and onshore wind turbines, a proportion of this clean and affordable energy can be provided in Greater Lincolnshire.

Currently, 1,308,790 MWh of onshore renewable energy is generated in Greater Lincolnshire each year. This is enough to meet the current electricity needs of 484,740 homes, but more clean energy will be needed as heating, transport and industry are electrified. Lincolnshire is one of the areas with the [greatest potential for new onshore wind and solar projects](#) in England.

Practical action

The Mayor should lead the development of a LAEP for the area – drawing on analysis from the [Local Energy Asset Representation \(LEAR\) produced by Energy Systems Catapult](#) – to deliver sustainable energy infrastructure and renewable energy production in partnership

with local authorities, communities and energy utilities. Community ownership of renewable energy should be particularly encouraged and supported.

The LAEP should be linked to the spatial development strategy and Local Plans for the area to ensure that opportunities for new renewable energy generation are identified. The LAEP should also identify priority locations for the roll-out of heat pumps, including where grid infrastructure can handle these now and where they need to come later.

hydrogen and deploy this where it's an appropriate, effective technology. CCS projects shouldn't be supported as it's an expensive, unproven technology that's not 100% effective. Instead, the focus should be on electrification and ramping up renewable energy. In addition, all public purchasing of energy should be from 100% renewable power.

The Mayor should also ensure that Greater Lincolnshire Hydrogen plans only use "green"

8 Ensure that the Local Nature Recovery Strategy (LNRS) for the area increases tree cover, protects and enhances nature, eliminates green space deprivation, and helps the area become more resilient to the impacts of climate change.

Nature in England is in decline. Pressures from farming, pollution and badly located development continue to put our wildlife at risk and undermine the functioning of healthy ecosystems. Greater Lincolnshire and its vital agricultural sector also suffer serious impacts from flooding – see more on this under priority 10.

Access to quality green space is essential for people's physical and mental health. Green space, trees and other "green infrastructure" are also essential for nature. Friends of the Earth has used official data on green space, gardens and open access land to identify the neighbourhoods most deprived of green space in the region. Results show that low-income communities and people of colour are worst off when it comes to access to green space. In the Greater Lincolnshire area, there are 12 neighbourhoods (9%) rated E (most deprived).

Practical action

In Greater Lincolnshire, the new mayoral authority will be responsible for developing a LNRS for the area. The LNRS should set out how it'll protect and manage nature sites that are important for people and wildlife, restore nature and ecosystems across the area, and increase flood protection. This includes planting more trees and woods on land owned by local authorities and in partnerships with local landowners. Friends of the Earth has produced a [map identifying where new woodlands could be planted](#) outside of urban areas.

The natural ecosystem across large areas of Lincolnshire is wetland. The LNRS should consider supporting the reinstatement of wet fenland on agricultural land prone to flooding to restore biodiversity, retain carbon and function as natural flood alleviation. The LNRS should also prioritise natural flood protection measures including riparian tree planting and leaky dams.

The Mayor should also aim to eliminate green space deprivation. This means ensuring everybody has access to enough quality green space. In some areas this might mean opening up school grounds outside of school hours or

converting some streets or car parks into public green space. It also means increasing tree cover with more street trees.

9

Lead the development of a circular economy strategy for the region with local businesses and local authorities to both cut waste and resource consumption and boost the green economy, including encouraging alternatives to cement in construction.

The GLCCA should aim to create a zero-waste, circular economy – in which resources are used for as long as possible, have the maximum value extracted from them, and are recovered and regenerated at the end of their service life.

Only 42% of household waste in Greater Lincolnshire is reused, recycled or composted. Incineration, also called Energy from Waste, isn't a sustainable alternative as it's more carbon polluting than even gas-fired power stations, and it also contributes to local air pollution.

Practical action

The Mayor should work with businesses and community groups to increase the reuse and repair of products in the area, including influencing businesses to select more sustainable materials, improve the design of products and extend product life cycles. Circular economy principles should also be applied to local authority procurement of goods.

The Mayor should also support and co-ordinate local authorities in the area to achieve zero waste by 2030. This needs to include initiatives to reduce food waste and introduce doorstep food waste recycling across the region, and make it easier for people and businesses to stop sending waste to landfill or incineration.

10

Use their convening role with Defra and the UK Food Valley partnership to ensure the sustainability of food production in Lincolnshire, including enhancing flood protection and resilience.

Lincolnshire, “the breadbasket of Britain,” produces 12.5% of the UK's total food supply, including 30% of England's vegetables. Sustainable food production in Lincolnshire is dependent on a stable climate and healthy, resilient natural ecosystems. But the fertile, low-lying fens are very vulnerable to the impacts of climate change.

Flooding and waterlogging during the winter of 2023-24 resulted in the loss of 15% of arable production in England, with farms in Lincolnshire hit particularly hard, and some even losing 100% of their crops. Furthermore, if the climate crisis isn't addressed, it's predicted that all of the county's Grade 1 agricultural land and a significant proportion of Grade 2 land will be lost to sea level rise during this century.

Lincoln University's Institute for Agri-food Technology is at the forefront of research needed to support the transition to sustainable food production. This locally based resource should be involved in developing sustainable food strategies alongside farming communities and government agencies.

Practical action

The new Mayor should use their convening role with Defra and the UK Food Valley partnership to provide technical and financial support to farmers, enabling them to:

- transition to farming practices that will improve soil structure to absorb more water and be more resistant to nutrient leaching and soil erosion during heavy and prolonged periods of precipitation and surface water flooding
- lower carbon emissions during crop production, food processing and transport
- reduce chemical inputs.

The Mayor should commission research to identify the crops and landscape management that will ensure the resilience and long-term sustainability of Lincolnshire's agriculture.

They should also take a whole-systems, multi-agency approach via the enhanced Lincolnshire

Flood and Water Management Partnership to improve flood resilience, limiting the impacts of extreme weather events. In particular, they should recognise the importance of agriculture in Greater Lincolnshire by calling for an expanded remit of the Environment Agency's work on farmland, increasing resources available for:

- managing watercourses that will increase natural water storage capacity, restore and enhance wildlife habitats, and improve water quality
- supporting farmers whose land may be used for flood attenuation
- collaborating with other bodies involved in watercourse management, such as the internal drainage boards and East Mercia Rivers Trust.

Methodology

Friends of the Earth has drawn on official sources of data to identify progress on climate and nature issues in metro mayoral areas. Where official data sources aren't available, we've relied on alternative quality sources. Below we list our data sources and explain what analysis of them we've carried out, if any.

Extreme weather

Professor Sarah Lindley at the University of Manchester has carried out an analysis for Friends of the Earth to identify which small neighbourhoods – Lower Layer Super Output Areas (LSOAs) with an average population of 1,700 – are both likely to be exposed to extreme weather and have demographic/ neighbourhood characteristics that make the population particularly vulnerable. More detail is available on [extreme heat](#) and [flooding](#).

Homes

The number of poorly insulated homes is based on government data on [energy performance certificates](#). There are a range of data sources on the cost of bringing properties up to a decent standard (EPC C level), including the [English Housing Survey](#). The actual costs will be influenced by the approach taken. For example, Friends of the Earth is advocating a street-by-street approach, which is likely to bring cost savings compared with approaches that require retrofitters to consistently travel between jobs. The target number of heat pumps to be fitted is based on the number recommended by the Climate Change Committee for the whole of the UK, adjusted for the number of homes within the metro mayoral region.

Transport

The proportion of commuter journeys by different travel modes is based on 2011 Census data. Unfortunately, more up-to-date data isn't available. However, the situation today is unlikely to be significantly different because of [bus service decline](#) outside of London. The data on bus service decline is from an analysis by the University of Leeds for Friends of the Earth. The data on access to a car is from the [2021 Census](#). The data on the proportion of commuter journeys that could be made by bike is from the [Propensity to Cycle Tool](#).

Air pollution

Air pollution data is based on a Friends of the Earth analysis of [modelling data at 1 km² published by the government](#). Our analysis involved using geographical boundary data for small neighbourhoods (LSOAs) to calculate an average level of air pollution within the neighbourhood and compare this with WHO limits. We've also identified the number of schools within areas with high air pollution levels using government data on school locations. More detail is available on [air pollution](#).

Renewable energy

The amount of onshore renewable energy generated in the region is identified by [government data](#). The calculation of how many homes-worth of electricity this equates to is based on [typical household consumption figures](#) published by the energy regulator Ofgem. In future, more renewable electricity will be needed to heat homes and power transport, reducing the usage of fossil fuels. Total energy consumption will reduce in the future as electric heat pumps and electric cars are much more energy efficient than equivalents powered by fossil fuels.

Green space

Friends of the Earth has identified the neighbourhoods deprived of green space by combining government data on public green space, garden size and open access land and ranking neighbourhoods on a scale of A-E. Within this Climate Action Plan, we've referred to E-rated neighbourhoods as green-space deprived. More detail, including the methodology, is available in the [full analysis](#), which was carried out in 2020. The underlying government data we relied on isn't perfect, so ground truthing is necessary.

Waste

Data on household waste recycling is from [government data](#).