

Powers in Place:

The handbook of local
authority Net Zero powers

April 2023

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Researched and produced by Quantum Strategy & Technology Ltd. for UK100



About UK100:

UK100 is a network of local leaders who have pledged to lead a rapid transition to Net Zero with Clean Air in their communities ahead of the government's legal target.

About Quantum:

Researched and written by Gill Fenna and Louise Marix Evans of Quantum Strategy & Technology - a sustainability and climate change consultancy with over 25 years' practical experience of supporting public, private, voluntary & community and academic sectors to take action to mitigate and adapt to climate change. Quantum has worked with local authorities across the UK to tackle climate change through training and facilitation, briefings and guides, developing strategies and action plans and in engaging with communities and businesses.

“We currently have a situation where local powers to achieve Net Zero are theoretical rather than actual. Local authorities are achieving enormous change despite, not because of, the regulatory framework and the reluctance to resource them adequately to meet the challenge of climate change.

Not only has a reduction in local authority funding over more than a decade impacted on capability and capacity at local level, there is also a problem with national frameworks limiting the ability of local authorities to use their powers effectively. This needs to change.”

- **Jason Torrance,**
- **Interim Chief Executive, UK100**

Powers in Place: Executive Summary

In its landmark Net Zero Strategy¹ in 2021, the UK Government recognised that 82% of UK emissions are “within the scope of influence of local authorities”, yet local leaders are still waiting for the powers and resources they need to deliver on their ambitions.

Mission Zero: Independent Review of Net Zero by MP Chris Skidmore published in January 2023 identifies Net Zero as the “growth opportunity of the 21st century”. It highlights that the benefits are greater if we act faster on decarbonisation; risk of delay is significant, and **local areas are hampered** from going as fast as they want to, in part due to lack of policy clarity, infrastructure bottlenecks or delays in the planning system.

Powers in Place considers the powers that local authorities have to deliver Net Zero in their places, and whether they can deploy these powers effectively to create change.

It finds that local authorities are hamstrung by:

- **A lack of a defined role** in Net Zero Delivery
- **A policy and strategy ecosystem and framework** that fails to enable and support local delivery.
- **Conflicting remits of public agencies** which prevent ambitious authorities from delivering their aims.
- **Insufficient funding and resources** to develop the capacity to enable this transformative shift; funding streams are inequitably and competitively distributed and rarely long-term.

The conclusion is clear: despite the progress of a handful of trailblazers, **local authorities are still waiting for Government to put the necessary resources and powers in place** to deliver on their Net Zero ambitions

To capitalise on progress and to address the critical gaps still hampering local Net Zero delivery, this report makes **three key recommendations**:

- 1** The UK government should introduce a **Net Zero Local Powers Bill** that permits and obliges the relevant levels of local authorities to deliver an effective pathway to Net Zero.
- 2** A Local-National **Net Zero Delivery Framework** should be co-designed between local authorities and the UK Government, overseen by a National Net Zero Delivery Unit.
- 3** Ministers should **end competitive short-term funding** and replace it with strategic, needs-based, long-term funding.

The powers and duties proposed in this report must be supported by adequate resource and capacity building if they are to have any impact, and underpinned by a structure of supportive national policies. Empowering local government will help the whole country to achieve Net Zero faster, better and more cost-effectively.

¹ <https://www.gov.uk/government/publications/net-zero-strategy>



As well as the key recommendations above, Powers in Place makes a series of priority recommendations for sector-specific local authority actions on Net Zero in transport, buildings, energy and waste. To achieve these recommendations, some underpinning powers will be needed:

Key supporting policy, frameworks and resources that are required from national government to underpin local authority powers:



Transport

- Revision of the Department for Transport WebTAG model to remove the factors that favour road projects and increase the value of traffic reduction, active travel and health impacts and allow alternative justifications for funding schemes that contribute to the Net Zero target
- Moving from competitive funding to providing support for all areas
- Allocate more funding to active travel and public transport
- Develop and deliver a strategy for Rural Mobility
- Revise the role of Traffic Commissioners
- Revise the process for Traffic Regulation Orders to make them less cumbersome and expensive to set up
- Review support for local transport authorities to enable them to form successful Enhanced Partnerships and, where suitable, establish bus franchising
- Introduce requirements to address local area-wide air quality, traffic reduction and emission targets into National Highways' remit
- Powers to require private companies and other organisations to cooperate with local authorities on delivering area-wide emissions reductions
- Resources to enable and increase joint working across departments, authority areas and organisations, alongside increases in transport planning capacity and guidance
- Strengthen policy in the National Planning Policy Framework to require sustainable transport contributions to be part of an area-wide transport emissions reduction plan.



Buildings

- Provide training for the Planning Inspectorate in climate change and Net Zero buildings and planning policy.
- Rapidly introduce zero carbon building standards for all buildings, and apply the proposed “in operation” energy and carbon performance requirement to homes as well as non-domestic buildings.
- Embed a requirement for local planning authorities to prioritise The Climate Change Act in Planning Policy.
- Revise the maximum permitted local authority uplift on Building Regulations in the Planning and Energy Act 2008 and revoke the Written Ministerial Statement of 25th March 2015
- Extend Minimum Energy Efficiency Standards to cover all buildings at the point of sale, change of use, and major renovation or refurbishment.
- Set up long term and flexible funding schemes for landlords, private householders and businesses to enable them to meet improved Energy Performance Certificate requirements.
- Introduce mandatory landlord licensing and a national database of EPCs for tenanted properties: with a requirement to supply information back to local authorities
- Revise the EPC system to better reflect in-use energy performance and to be appropriate for all different building types.
- Expand research to define a set of measures that are appropriate for all different housing types including traditional buildings, based on evidence from building types across the UK
- Support the training providers and the construction industry to rapidly invest in skills and capacity to deliver zero carbon buildings and install appropriate retrofit measures to existing buildings without harming the building fabric.



Energy

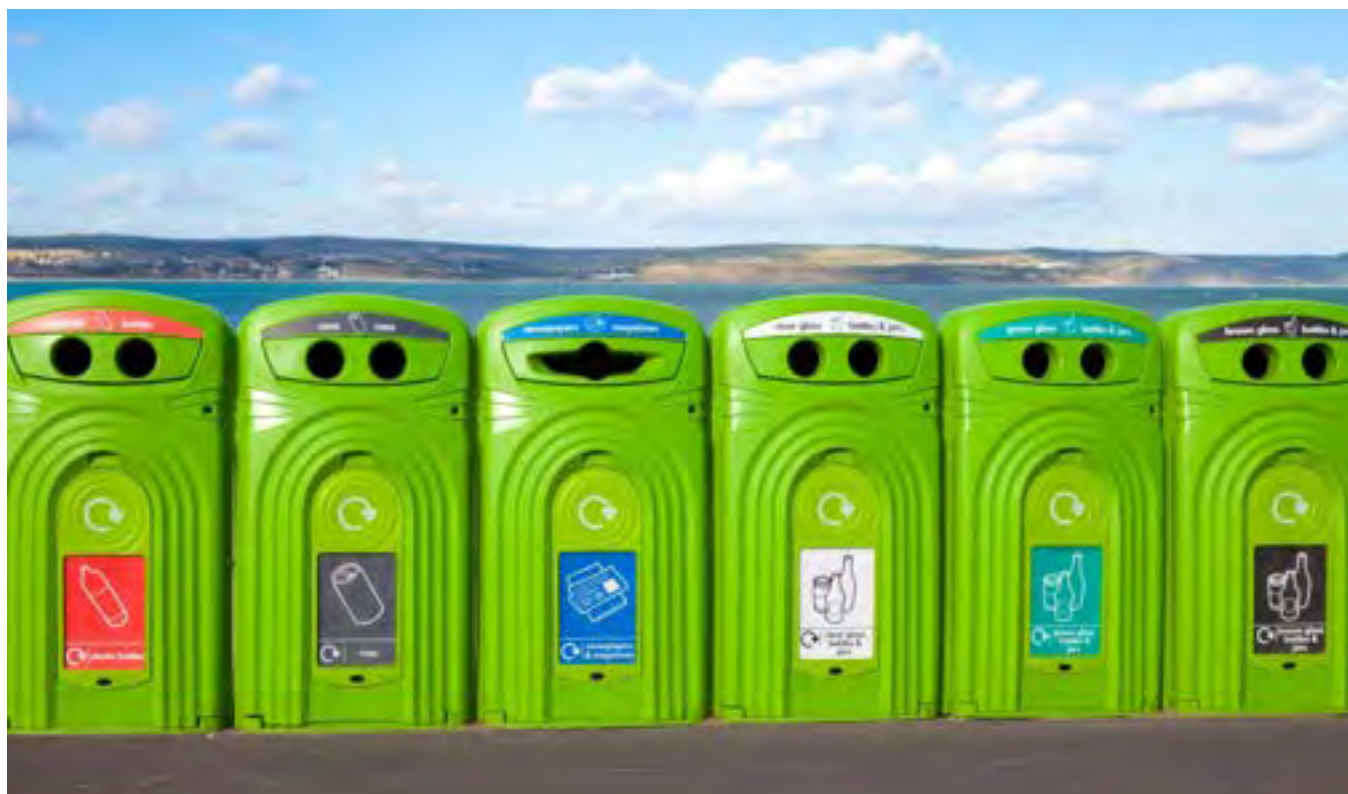
- A formal power to determine and govern Local Area Energy Plans, with a wider remit than just heat zone coordination.
- The power to coordinate the identification and delivery of Heat Network Zones and require buildings to connect to district heating schemes in identified heat network zones.
- Power to override national constraints on energy technology deployment such as on-shore wind (i.e. withdraw 2015 Ministerial Statement) when supported by local evidence, either in a LAEP or separately.
- A cost-effective system to fund and develop LAEPs supported by resources to share learning and data; this should not be competitive between local authorities as that impedes cooperation and learning
- Policy from Ofgem for a defined role in governance and management of local energy systems and supporting LAEP standards
- A requirement and appropriate mechanism to incorporate LAEPs into ongoing District Network Operators business plans, to enable and provide a fair long-term distribution of upfront infrastructure costs needed to deliver Net Zero

- Supporting policy in the NPPF to ensure that every area is covered by a Net Zero LAEP, including the removal of the viability constraint, alongside guidance relevant to different area types
- A significant increase in funding local energy infrastructure planning and delivery including where this investment may not provide a revenue stream for a significant time
- Staff resource and training in energy systems and energy markets to build local authority capacity and enable local authorities to be 'good clients' and effective project coordinators
- Elected Member training for Members on Planning Committees and Scrutiny Committees
- Resources and guidance for public engagement on the Net Zero energy transition and what it will mean for local residents and businesses, to build up awareness and engagement on likely options for local areas
- Planning policy reform to put Net Zero at the heart of decision making: allowing climate change impacts to override other issues
- Enable local authorities to refuse fossil fuel-based proposals without the expectation of their decision being overturned on appeal



Waste

- Extending work on producer responsibility and circular economy to reduce waste at source
- Increasing resources to support behaviour change on waste reduction and recycling
- Improve waste and recycling data including for the commercial sector
- Taking prompt decisions to give local authorities time to implement changes without incurring additional contractual costs



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Powers in Place: the Handbook of Local Authority Net Zero Powers

Introduction:



Mission Zero: Independent Review of Net Zero² by MP Chris Skidmore published in January 2023 identifies Net Zero as the “growth opportunity of the 21st century”. It highlights that the benefits are greater if we act faster on decarbonisation; risk of delay is significant and local areas are hampered from going as fast as they want to, in part due to lack of policy clarity, capital awaiting investable propositions, infrastructure bottlenecks or delays in the planning system. Critically it identifies the importance of local action, “there must be more place-based, locally led action on net zero. Our local areas and communities want to act on net zero, but too often government gets in the way. The Government must provide central leadership on net zero, but it must also empower people and places to deliver.”

- **UK100** hosted the first cross-party local authority Net Zero Review evidence session with Chris Skidmore MP. UK100 also
- submitted evidence to **[BEIS's Review of Net Zero: call for evidence](#)** which informed the final report.

Over 340 UK local authorities have declared a Climate Emergency and, as a result, have formally announced their intent to act with utmost urgency — with over 100 of the most ambitious also joining the UK100 network. This widespread adoption of Climate Emergency Declarations has significantly raised the profile of the role of local authorities in delivering Net Zero, both within their communities and nationally. Some local authorities have made huge progress in setting up the systems, resources and programmes needed to help them achieve their Climate Emergency targets. However, with less than seven years left until 2030, which many authorities have set as the date by which they would like to achieve Net Zero across their areas, it is highly unlikely that most will achieve their aims.

There are many barriers facing local authorities, not least resources, capacity and a lack of coherent national strategy for local delivery. Advocacy from local authorities themselves, but also organisations including the Climate Change Committee, National Audit Office, UK Research and Innovation, environmental charities and think tanks, consistently highlights the need for more local authority powers to enable action to be taken forward with ambition, scale and pace.

In 2021 we published Power Shift: a comprehensive review of the extent of English local authority powers, related to the climate actions required to deliver the UK emissions reduction target, in the context of national policy, statutory duties and factors affecting capacity to deliver. Since 2021, many significant national strategies have been published and consultations undertaken to advance Net Zero. This report updates the original research to examine the impact of those strategies on local authorities' powers and ability to act.

Over 340 UK local authorities have **declared a Climate Emergency** and as a result have formally announced their intent to act with utmost urgency.

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128689/mission-zero-independent-review.pdf

While the focus of this research is on meeting the emissions reductions target, similar issues arise when considering wider climate actions needed such as adaptation and the circular economy, but those areas are outside the scope of this report. A supplementary document on powers for Nature will be published later.

There is a view in national government that because some local authorities have taken some radical measures, they all must therefore have sufficient powers to take similar actions. It is worth noting that many local authorities have taken some action, and some have taken many actions, but even the leading local authorities have not managed to take all the actions needed. Indeed, leading authorities are at the forefront of calls for greater powers and policy alignment.

This report identifies the powers that have been used to take these actions, but also the reasons why it is difficult for others to do so. It is worth noting that most barriers encountered are a direct result of past and current government policy.

“Power Shift is a vital reference source for the powers local authorities have to deliver Net Zero and tackle climate change. It provides the legislation along with how it’s used in practice with real examples. It shows where the gaps are and what national policy-makers need to do to help local authorities deliver fully on Net Zero and all the benefits that brings to local communities and businesses.”

Judith Blake, Baroness Blake of Leeds CBE and former Leader of Leeds City Council

About this Report

This report has been written by Quantum Strategy & Technology.

Gill Fenna and Louise Marix Evans, the report authors, are directors of Quantum Strategy & Technology - a sustainability and climate change consultancy with over 25 years' practical experience of supporting public, private, voluntary & community and academic sectors to take action to mitigate and adapt to climate change. Quantum has worked with local authorities across the UK to tackle climate change through training and facilitation, briefings and guides, developing strategies and action plans and in engaging with communities and businesses.

This is a long and complex document with almost 400 references. We recommend its use as:

- **A directory** to consult on a specific issue, such as Clean Air Zone powers
- **A primer** to give an overview of a topic area with which the reader is unfamiliar
- **A source of detailed references** on legislation, powers and strategies to look up and quote if needed.

The report is structured as follows:

- An overview of the national and local authority contexts (Chapter 2)
- Overarching Powers (Chapter 3)
- Transport (Chapter 4)
- Buildings (Chapter 5)
- Energy Infrastructure (Chapter 6)
- Waste (Chapter 7)
- Conclusions and Recommendations (Chapter 8)

The research gathered information from two main sources:

Desk research:

- A review of reports produced for government departments and other government agencies to identify the recommendations already put before government.
- A review of other relevant reports including from organisations with close links to local authorities such as the Local Government Association (LGA), The Planning Advisory Service (PAS), for Public Service Excellence (APSE), The Centre for Sustainable Energy (CSE), The Royal Town Planning Institute (RTPI), UK Green Building Council (UKGBC), Energy Systems Catapult (ESC), Ashden, Friends of the Earth and The Association of Directors of Environment, Economy, Planning and Transport (ADEPT), and WRAP (The Waste and Resources Action Programme).
- Searches in the resources and database provided by LGA Inform Plus, Powers and Duties.³
- Identifying and checking the wording of relevant Legislation and Statutory Duties which provide the strong legal drivers and hooks for emissions reduction activities.
- Web searches to identify examples of local authorities using their powers for climate change actions.

Discussions with local authorities and other key stakeholders, including UK100's Advisory Group.

Disclaimer: This report refers to powers and legislation but does not constitute legal advice, and as the researchers are not lawyers, we may have made mistakes in interpretation. All errors are our own: we have endeavoured to check information on powers against the primary legislation. In a way this serves to show how complicated it can be for local authority officers to bring forward projects in a complex legal environment.

Powers in Place: the Handbook of Local Authority Net Zero Powers

National context:



In this section we set the scene by laying out the climate actions that are needed to deliver Net Zero by 2050, recent policy developments and the history of local authority action on climate change action. We go on to look at local authority structures and responsibilities, and draw the distinctions between duties and powers, and between legislative powers and the power to act.



2.1 Climate Actions to Deliver Net Zero by 2050

The Climate Change Committee (CCC) and a wide range of other actors have defined in broad terms the urgent areas for action to reduce emissions.

The CCC **2020 Progress Report to Parliament**⁴ stated that: “There are clear economic, social, and environmental benefits from immediate expansion of the following measures:

- Investments in low-carbon and climate-resilient infrastructure.
- Support for reskilling, retraining and research for a net zero, climate-resilient economy.
- Upgrades to our homes and other buildings ensuring they are fit for the future.
- Action to make it easy for people to walk, cycle, and work remotely.
- Tree planting, peatland restoration, green spaces and other green infrastructure.”

That report highlighted that local authorities have a key role in making early progress in actions to deliver building emissions reductions through housing retrofit and new building standards, transport infrastructure to support walking, cycling and electric vehicle (EV) charging, Local Area Energy Planning, waste reduction, water consumption reduction and climate adaptation. But gaps remained that prevent or hamper delivery, including resources, the lack of a consistent delivery framework, and national policies, especially in planning.

The **2022 Progress Report to Parliament**⁵ continued to identify significant risks to meeting the Net Zero target and a lack of policy and plans to mitigate those risks. One of the most important risks relates to governance, particularly the lack of a clear role and support for local government action:

“Embedding and integrating Net Zero and climate adaptation properly across the policy landscape is vital to the delivery of the Government’s Net Zero Strategy, having been largely missing from key documents such as the Levelling Up White Paper. **Clear roles and responsibilities are needed between central Government departments, the regulators, devolved and local government, and industry for the actions and interactions on the path to Net Zero.** Effective accountability mechanisms to translate these into practice will also be necessary. Without these, the required changes will not happen at the pace required, if at all.” (Our emphasis)

⁴ <https://www.theccc.org.uk/publication/reducing-uk-emissions-2020-progress-report-to-parliament/>

⁵ <https://www.theccc.org.uk/publication/2022-progress-report-to-parliament/#key-messages>

In 2020 the CCC reported that despite early progress, the UK “is not on track to meet the fourth carbon budget (2023-27) or the fifth (2028-32).” Emissions fell in 2020 due to the pandemic, and in 2021 did not reach pre-pandemic levels. The Office for National Statistics (ONS)⁶ estimates that emissions fell in the first half of 2022 due to increased renewable generation, and initial indications are that the energy crisis pushed down demand such that emissions will be below 2021 levels⁷. The CCC’s 2022 progress report stated that “tangible progress is lagging the policy ambition”; pointing to a failure to put in place cross-cutting enablers, such as a public engagement campaign, addressing how the costs and benefits of the transition will be shared fairly, and critically for this report “how central, devolved and local government will operate coherently towards the Net Zero goal.”

2.2 Build Back Greener

In order to support economic recovery after the pandemic, organisations across the UK called for the government to “build back greener,” including leading businesses, banks, the Confederation of British Industry (CBI) and local authority Leaders.

These ‘build back greener’ opportunities also help deliver Net Zero, tackle the cost-of-living crisis, energy price pressures and inflation and are areas where local authorities have a key role to play in improving local places for people and business.

The main opportunities highlighted include:

- Sustainable transport systems with space and facilities to encourage walking, cycling and public transport, reducing car dependence and cost of rising fuel prices.
- Changes in commuting and business travel patterns through the now-widespread use of home working and online meetings.
- Investment in low carbon and climate resilient infrastructure, especially in energy systems, buildings and places, broadband and green infrastructure restoration.
- Investment in renewing the electricity grid to ensure a smart decentralised energy system, plus accompanying regulatory change to maximise the benefits of low carbon decentralised energy, enabled by a national framework for Local Area Energy Planning (LAEP).
- A focus on job creation, training and skills development in low carbon and climate resilient industries.
- Investing in climate justice: investment and programmes that support those most at risk and least likely to be able to act themselves.
- Avoiding projects that lock-in future carbon, such as road building.
- Not overriding environmental and climate policies in a bid to stimulate certain sectors, such as construction.
- Setting up the financial structures to significantly increase investment in low carbon projects and assess investments on their climate impacts.
- Setting up suitable structures, roles and governance to deliver Net Zero.

These opportunity areas and the role of local authorities in delivering them remain not only relevant but essential.

⁶ <https://www.ons.gov.uk/economy/environmentalaccounts/articles/developingquarterlygreenhousegasemissionsaccountsuk/december2022>

⁷ <https://www.carbonbrief.org/analysis-uk-emissions-fall-3-4-in-2022-as-coal-use-drops-to-lowest-level-since-1757/>

2.3 Local Authority Climate Action History

Local authorities have been working for many years to address climate change mitigation, adaptation and green/ecological issues and to tackle fuel poverty and air pollution in their areas.

In the last decade or so, they have experienced changes in targets and undermining of policy support on climate change, leaving them with a patchwork of policies to rely on. For a brief period (2008-11) Local Strategic Partnerships (lead by local authorities) signed up to report on and deliver against national performance indicators related to climate change:

- **NI185:** reducing carbon emissions from local authority activities
- **NI186:** reducing carbon emissions from across the local authority area
- **NI188:** adapting to climate change.

The existence of these indicators gave recognition and political support to area-wide climate action. Although Local Strategic Partnerships could choose which to adopt, two-thirds signed up to NI186, making it the fifth most popular indicator, frequently prompting action on climate change for the first time. Some authorities embedded climate change actions within service areas and successfully continued to deliver ambitious schemes, while others pulled back during austerity to focus on delivering their statutory duties in the face of reductions in funding and rising demands on services. The national indicators were only in place for a short period, insufficient to provide any quantifiable data on their impact. However, there is a wealth of anecdotal evidence from officers on the harm their removal did to emerging climate actions. The Audit Commission noted in 2010 that NI186 had “in many areas prompted concerted action for the first time”.

Evidence from Friends of the Earth to Parliament on the Energy Bill⁸ in 2011 stated “The removal of NI186 has left a vacuum in clarity about what is expected of councils, and many councils have told Friends of the Earth that local climate strategies have been shelved. The lack of a duty has made it harder for councils to prioritise non-statutory action on climate change at a time of cuts. Professor Tony Travers warns that ‘there will be so many pressures on councillors and senior officers that an issue such as the environment will be sidelined... it is hard to see how local government capital spending on services such as waste disposal, environmental protection and the retro-fitting of inefficient buildings will not fall sharply over the next few years’.” More than ten years later, this vacuum remains in place.

From 2013 local authority funding and government-supported schemes for climate change were significantly cut. For example, a decade ago, 2.3 million energy efficiency measures were installed annually through government-backed schemes. In 2021, fewer than 100,000 were installed⁹. After 2015, further changes in policy and political focus meant that only the most determined local authorities and Combined Authorities which retained skills and the political will continued to work on climate-related matters or the low carbon economy. They operated in what became a policy desert with the failure of the Green Deal and changes to the Energy Company Obligation (ECO), the withdrawal of the Code for Sustainable Homes and the policy to require all new homes to be net zero carbon from 2016, and onshore wind effectively banned. Small amounts of funding remained, frequently through competitive processes that required a high level of time commitment with no certainty of securing the resources.

⁸ https://policy.friendsoftheearth.uk/sites/default/files/documents/2019-02/impact_abolish_ni186.pdf

⁹ <https://www.theccc.org.uk/publication/letter-reducing-energy-demand-in-buildings-in-response-to-the-energy-price-crisis/>

There has been a marked contrast between **city-regions and combined authorities** with the capacity to continue to develop programmes and bid for funding, and **smaller councils** with limited ability to commit resources or take risks with local policy.

Fully funded, comprehensive, up to date information and support services to local authorities, such as the Energy Saving Trust, Local Government Association's Climate Local, Practical Help and the Local Improvement Agency and regional support organisations largely dried up. APSE Energy was an exception to this and with various charities and think tanks, did continue with support for local authorities.

There has been a marked contrast between city-regions and combined authorities with the capacity to continue to develop programmes and bid for funding, and smaller councils with limited ability to commit resources or take risks with local policy. The area that has seen continuing action across the board is in reducing councils' emissions from their own activities: in building efficiencies, street lighting, transport fleets, due in part continued funding or finance (e.g. Salix, Re:fit and the Green Investment Bank) and the potential for efficiency and cost savings. This momentum was further boosted by post-pandemic funding for Public Sector Decarbonisation and Social Housing Decarbonisation Funds and Green Homes Grant Local Authority Delivery programmes, albeit provided through short-notice competitive funding rounds with high pressure on delivery and supply chains.

From 2019 climate change was firmly back on the political agenda for local authorities with increasingly vocal demonstrations from both young and older constituents demanding action. Eventually, over 340 authorities declared a climate emergency¹⁰. There was a corresponding resurgence in support for local authorities

provided by organisations such as the Local Government Association (LGA), APSE, CSE, Regen, RTPI, the Tyndall Centre, P-CAN (Place Based Climate Action Network), ADEPT, Ashden, Friends of the Earth, IPPR and UK100. There has also been a marked resurgence in recruitment for local authority climate emergency officers or similar roles.

Since 2020 national bodies began to focus their attention on the essential role of local delivery in Net Zero. The NAO report, Achieving Net Zero¹¹, published in December 2020 called for greater coordination between government departments and for cross-cutting Net Zero objectives to be embedded and prioritised in budgets and project appraisals. It recognised that local authorities have the skills and capacity to mobilise action: "local authorities will be key in the achievement of emissions reductions in the transport and housing sectors locally where the decarbonisation challenge will vary by location."

The CCC's report Local Authorities and the Sixth Carbon Budget, December 2020¹², also outlined the powers and levers local authorities have to deliver emissions cuts. It stated that "these levers alone are unlikely to be sufficient to deliver local authorities' Net Zero ambitions, due to gaps in powers, policy and funding barriers, and a lack of capacity and skills at a local level."

A key recommendation of these and other reports, including from UK100¹³ and UKRI¹⁴, was the need for a framework for local delivery, with flexibility, finance and coherent policy and powers at the local level.

¹⁰ <https://www.climateemergency.uk/blog/map-of-local-council-declarations/>

¹¹ <https://www.nao.org.uk/report/achieving-net-zero/>

¹² <https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/>

¹³ https://www.uk100.org/sites/default/files/publications/Framework_final.pdf

¹⁴ <https://www.ukri.org/wp-content/uploads/2022/03/IUK-090322-AcceleratingNetZeroDelivery-UnlockingBenefitsClimateActionUKCityRegions.pdf>



The October 2021 Net Zero Strategy took note of these calls. It recognised the important role of local authorities and local areas in delivering Net Zero and its co-benefits to jobs and health, along with the fact that actions to deliver Net Zero will vary between areas. It also recognised the need to set clearer expectations and partnerships between national, regional and local government, to provide resources through ringfenced and unrestricted funding for Net Zero and to build capacity and capability at the local level.

The Strategy committed to set up a Local Net Zero Forum to bring together national and local government senior officials on a regular basis to discuss policy and delivery options for Net Zero. The Forum is intended to support the establishment of clearer delivery roles for local government and provide a single engagement route into government in a coordinated and coherent way. It is intended to have a political forum and an officer forum.

A year after it was announced, the officer forum finally started meeting, chaired by BEIS (now DESNZ¹⁵) with the Local Government Association. Following initial meetings, it was agreed a local government representative would co-chair alongside DESNZ, for the first year this will be a Local Government Association officer. The Forum is made up of Director-level officers from government departments and local and combined authorities including members of UK100. To date the officer forum has met three times, with the next meeting due in May, and several task and finish sub-groups have worked on key areas such as roles and responsibilities, funding and finance and data. The first political forum meeting was held in February 2023, bringing together Ministers and Councillors. It was agreed from the outset that the political forum would be co-chaired by the Minister and Chair of the Local Government Association. There are no publicly available Terms of Reference, minutes or reports for the Forums. Dialogue between national and local government is welcome and vital. In addition to the two existing level forums, a local authority Chief Executives and government Department Permanent Secretary level Forum should also be formed, in order to hold dialogue at all key levels, and to build in resilience to political changes at the local and national levels. A one-off event at this level was extremely helpful in forming support for the Local Net Zero Forum prior to the publication of the Net Zero Strategy.

However, meetings are not a substitute for a substantive framework with a delivery unit, as recommended by UK100 previously¹⁶, and to date there does not appear to be a tangible impact. The Local Net Zero Forum needs to be central to Net Zero policy-making and delivery, to have more urgency, a clear Terms of Reference and to address key challenges in planning, heat decarbonisation, retrofit and other local Net Zero priorities, being agile and able to address barriers rapidly.

¹⁵ The Department for Energy Security and Net Zero (DESNZ)

¹⁶ https://www.uk100.org/sites/default/files/publications/Framework_final.pdf

There is a lot of pressure on capability and capacity of **local authorities**, and the support the Net Zero Hubs provides is **very important**.

In addition, the Net Zero Strategy signalled a strengthening of the five Net Zero Hubs and increased knowledge-sharing. Currently the capacity of the hubs varies; some have provided resource and capacity to help local authorities or actually take on management of significant funding projects such as the Green Homes Grant Local Authority Delivery schemes and energy projects, while others have less capacity. There is a strong demand for support from the Hubs, and some have waiting lists for project support. In light of this, DESNZ should provide greater funding and support for the Net Zero Hubs in order to meet local demand for technical and project development and delivery skills.

There is a lot of pressure on capability and capacity of local authorities, and the support the Net Zero Hubs provides is very important. However, many authorities are struggling to recruit staff with the right skills and knowledge. LGA's 2022 Workforce Survey¹⁷ shows recruitment difficulties particularly in the council department areas that were most severely affected during the austerity years. Around half of authorities reported difficulties in recruiting planning officers, environmental health and building inspectors – all roles critical to being able to use existing powers to deliver Net Zero.

It is possible that the government's policy of moving department civil servants out of London to different parts of the country will result in an improved understanding of 'real life' in local areas. It may challenge the 'Whitehall bubble' in policy-making, perhaps enabling greater collaboration between government departments such as DHLUC and DESNZ and with regional and local government where they are based. This is to be encouraged, as an understanding of how policy works in practice is critical to successful local delivery.

Separately, it is worth noting that the Net Zero Strategy was challenged in court, and in July 2022, The High Court found that the Strategy did not meet the government's obligations under the Climate Change Act to produce detailed climate policies that show how the UK's legally-binding carbon budgets will actually be met. It also found that parliament and the public were not told about a shortfall in meeting a key target to cut emissions necessary to meet the sixth carbon budget for the period 2033-2037. The government was given until the end of March 2023¹⁸ to update the Strategy to include a quantified account of how its policies will actually achieve climate targets. The updated strategy was published on 30 March and is subject to parliamentary scrutiny by MPs¹⁹.

¹⁷ <https://www.local.gov.uk/publications/2022-local-government-workforce-survey>

¹⁸ <https://www.judiciary.uk/wp-content/uploads/2022/07/FoE-v-BEIS-summary-180722.pdf>

¹⁹ <https://www.clientearth.org/latest/latest-updates/news/clientearth-are-suing-the-uk-government-over-its-net-zero-strategy/>

2.4 Local Authority Structure and Responsibilities

Different types of local authority in England have different functions and responsibilities. Responsibility in some key climate change areas can be shared across authorities, split between local authorities and other agencies, or split between tiers of local authorities. For example, in transport planning, County Councils have responsibility for Highways excluding the strategic roads network (which is under the control of National Highways) while District Councils have responsibility for parking and spatial planning. The two-tier system can act as a barrier to effective and coherent action on carbon reductions and the absence of an overarching framework for climate change exacerbates a fragmented and disparate approach. A more coherent approach can be enabled by powers, for example, some authorities have combined to form Joint Waste Authorities, with four in London, one in Merseyside and one (excluding Wigan) in Greater Manchester, which has been absorbed into the Combined Authority.

In addition, there is the Greater London Authority and ten Combined Authorities. Combined Authorities each have their own negotiated devolution deals providing a range of functions and powers. Some have extensive powers over certain areas, while others are more limited or not included. These range across the following areas: Investment Funds, Health and Social Care and Health and Social Care Integration, Further Education and Skills, Employment Support, Transport, Business Support, Land and Housing, Public Services. The Greater London Authority has the longest standing deal, with the most wide-ranging powers and responsibilities, particularly for transport and spatial planning.

The government has set itself a mission that, by 2030, every part of England that wants a devolution deal will have one, with powers at or approaching the highest level of devolution, with a simplified, long-term funding settlement, as we see in the trailblazer deals for Greater Manchester and the West Midlands. It is vital that new devolution deals are designed to enable efficient and effective local delivery of Net Zero building on the lessons in this report, to enable coherent systems-wide transformation.



Powers in Place: National Context

The responsibilities of different types of local authorities are shown in the following table. Combined Authorities do not all have the same powers, so are not included in this table.

	Unitary Authorities	County Councils	District Councils	Single Purpose Authorities
Education				
Highways (excluding strategic network)				
Transport planning				
Passenger transport				
Social care				
Housing				
Libraries				
Leisure and recreation				
Environmental health				
Waste collection				
Waste disposal				
Planning applications				
Strategic planning				
Police				
Fire				
Local taxation (Council tax and business rates)				

The sectors in which local authorities have powers to take action towards Net Zero are:



Transport:

A key local delivery area for the Net Zero target although local authorities sit within a complex set of powers across different players.



Buildings:

Planning policy and enforcement is key to delivery of Net Zero new buildings while housing policy and powers are critical to energy efficiency retrofit and the decarbonisation of heat.



Energy:

Local authorities have powers through both planning and investment; the decarbonisation of heat is a key Net Zero challenge to be delivered at a local level.



Waste:

Local authorities have a significant role as waste authorities, although little ability to influence how much waste is generated.



Nature:

Local authorities have wide ranging responsibilities for nature and conservation and protection which sit within a complex net of duties with national agencies.

The table on the following page shows the greatest areas of influence and impact local authority service areas have over emissions sectors.

This also shows how, if national policy does not align with the pathway to Net Zero, opportunities to make emissions cuts can be lost.

Level of influence and impact on emissions													
		Significant	Important	High	Moderate	Minimal							
Emissions sector	Sub sector	Administration & Government	Advice & Benefits	Business & Employment	Community Safety	Education & Learning	Environmental Protection	Health & Social Care	Housing	Leisure & Culture	Licenses, Permits & Permissions	Planning & Building Control	Transport & Highways
Buildings	Strategic												
	New build												
	Owner occupied												
	Private rented sector												
	Social housing												
	New non-domestic												
	Existing non-domestic												
Transport	Strategic Plans												
	Walking & cycling												
	Parking												
	Speed limits												
	Buses												
	Taxis & private hire												
	Rail/rapid transit												
	Freight												
	Congestion charging												
	Clean air zones												
	EV charge points												
	Vehicle standards												
Energy	Strategy												
	Local area energy plans												
	Heat zones												
	Renewable energy												
Waste	Strategy												
	Recycling												
	Food waste												
	Waste reduction												
	Commercial waste												
Land use	Green space												
	Tree planting												
	Peatland restoration												
	Biodiversity net gain												
Agriculture													
Own estate	Energy procurement												
	Buildings & estate												
	Fleet												
	Employment travel												
	Procurement & commissioning												

2.5 Local Authority Duties and Powers

What local authorities can and cannot do is determined by the legal framework of duties, powers and policies. Powers can be provided through primary legislation, such as the General Power of Competence (GPoC) of the Localism Act 2011; or in Statutory Guidance such as the Minimum Energy Efficiency Standards (MEES) Regulations.

Duties are a legal obligation on a council, the things they must do or ensure. Powers are provided for in legislation as ways a duty is enabled, and that provide for actions they can do, but do not have to do. Policies help things to get done, are to be complied with and must comply with the legislation. They operate together as an ‘ecosystem’. As with many legal and policy documents they can be worded in ambiguous ways such as ‘where practicable, cost-effective and affordable...’ which can be open to interpretation, and which often serves to undermine efforts to be more exacting or ambitious in delivering Net Zero.

Even where councils have duties to act, the process of applying powers can be complex, time consuming and costly, and lack of resources often lead to a failure of enforcement action. Sometimes a local authority may have powers over a partial element, such as local roads, while power over other elements rests elsewhere, for example, with National Highways.

Disjointed duties, powers and policies can therefore be an obstacle to a whole-systems approach to carbon reduction.

Finally, there is a difference between “Powers” as defined in legislation, and the “Power” to implement actions, which is built on a combination of legislated powers, political will, public engagement and support, policy support, removal of barriers, finance, capacity, determination, attitude to risk and, frequently, sheer persistence.

When local authorities ask for more powers to deliver climate actions, it is clear that what is most needed is an overall supporting ecosystem to enable “power” to act, as well as some key additional “powers.”

Powers in Place: the Handbook of Local Authority Net Zero Powers

Overarching powers:



In this chapter we will explore what powers local authorities have to deliver Net Zero and how these powers may evolve as a result of devolution deals. We will move on to examine how cuts to local authority spending have affected their ability to exercise power, and the barriers to action. Next we will explore local authorities' powers to borrow/invest and procure/commision, and finally offer recommendations for expanding local authorities' power to deliver Net Zero.

There are several areas in which a local authority's general powers can be used to support climate action, such as finance and procurement.

3.1 General Power of Competence (GPoC)

General Power of Competence (Section 1) of the Localism Act 2011²⁰

“A local authority has power to do anything that individuals generally may do... including things that traditionally were not done by a public sector body and things that are unlike anything that other public bodies may do.”

The GPoC also gives local authorities the power to do things anywhere in the UK or elsewhere; to do them for a commercial purpose or charge, or no charge. They can do things for the benefit of the local authority, the area or residents, but they don't have to be for the benefit of any of them.

There are restrictions on the use of this power, which are outlined below.

The GPoC was introduced to replace the Wellbeing Act and **allows local authorities to do anything an individual may do**, unless prohibited. It is available to local authorities in England, Wales and Northern Ireland²¹. It is also available to three of the combined authorities (Cambridgeshire and Peterborough, South Yorkshire and West of England) in the orders establishing them. The other combined authorities have a 'functional power of competence' (see box below).

The introduction of the GPoC was intended to widen the powers of local authorities beyond the previous wellbeing powers, and to encourage innovation to promote and facilitate local economic growth at a time of funding cuts. It can be used by all types of council including “eligible” parish councils. It is actively used to support a whole range of local authority activities.

The LGA's paper²² on the GPoC in 2013 stated that there is recognition that an entrepreneurial approach and ability to 'think outside the box' is at least as important as the existence of the powers in facilitating innovation.

The GPoC was intended to shift councils from the traditional cautious 'no can do' response to new ideas, to an innovative 'anything is possible' approach to public services and innovation. The LGA found that it gave councils, officers and elected Members more confidence to act.

²⁰ <https://www.legislation.gov.uk/ukpga/2011/20/section/1/enacted>

²¹ The legislative provisions are in sections 1-8 of the Localism Act 2011 (for England), sections 79-83 of the Local Government (Northern Ireland) Act 2014 (for Northern Ireland), and sections 24-37 of the Local Government and Elections (Wales) Act 2021 (for Wales).

²² <https://www.local.gov.uk/sites/default/files/documents/general-power-competence--0ac.pdf>

Functional Power of Competence²³

This is expressed in legislation as permitting a body to do “anything it considers appropriate for the purposes of the carrying-out of any of its functions”. This general power is available to integrated transport authorities; passenger transport executives; all combined authorities; economic prosperity boards; English national park authorities; and some fire and rescue authorities. It resembles the general power available to local authorities. The Greater London Authority has a general power to do anything in connection with its ‘principal purposes’: promoting economic development, social development or the protection of the environment. Each piece of legislation covering these classes of authority also includes a specific power for them to use it to do anything ‘incidental’ to their functions.

An early example (within the first year of the GPoC being available) was that some local authorities came together to provide a residents’ energy switching scheme taking advantage of group buying power to secure better energy deals and saving residents money. Hertfordshire County Council and South Holland District Council cited the GPoC in support of the scheme which helped switch 8,500 people to better energy contracts. Other examples from the LGA include:

- Providing business loans (Newark and Sherwood District Council)
- Setting up a Local Authority Mortgage Scheme (Hertfordshire County Council) (scheme now closed but 93 LAs were involved in this along with several banks and building societies, to help people get onto the housing ladder)
- Establishing a City Regeneration company (Stoke-on-Trent City Council).

The LGA report did point to councils which had delivered innovative projects before the GPoC was available; including Woking Borough Council which had used the wellbeing power with other powers to set up the energy company ThamesWey to install low carbon energy systems and Essex County Council which had set up a local authority banking service.

Warrington Borough Council used the GPoC along with borrowing and investment powers to set up wholly-owned companies limited by shares for its solar farms and housing development companies. These are used to deliver carbon savings and drive a revenue stream in light of funding cuts.

■ 23 <https://researchbriefings.files.parliament.uk/documents/SN05687/SN05687.pdf>

⊗ Barriers ⊗

The GPoC is a useful power, but has constraints including:

- Trading restrictions (companies limited by guarantee/shares; or Industrial and Provident Societies are permitted under the GPoC, whereas Community Interest Companies/Limited Liability Partnerships are not).
- Charges made under the GPoC are for discretionary services and a surplus/profit cannot be made, which limits the power's ability to raise additional revenue. This is not the case if a company is established.
- Legal checks have to be made on pre- and post-commencement limitations (the GPoC does not override legislation previously in place, hence the requirement to check that it does not contravene other legislation) which can take time or lead to a more specific power being used.
- The GPoC cannot be used to raise tax, charge for mandatory services, or borrow.

Due to these constraints, other more specific powers may be more appropriate to deliver particular activities. Councils are advised to start with what they hope to achieve then decide whether the GPoC is a means to help deliver that. As with the use of any local authority powers, there is a fear of legal challenge. A local authority lawyer said that for large projects they carry out their own legal analysis, particularly into the pre-commencement limitations, and also have a barrister check the legal status before submitting a report to Cabinet. This can slow progress to projects.

The GPoC appears to be a useful power to help convince or encourage cautious decision-makers that action is possible, permissible, and to be encouraged; especially if used with other powers. It is useful because it provides confidence to innovators within councils.



3.2 Devolution

Devolution in England, devolving executive powers (not legislative powers) became a reality in 1998 following a referendum for Greater London and in 1999 the Greater London Authority (GLA) and role of Mayor were established²⁴. In terms of climate change, the duties and powers of the GLA were significant and comprehensive, establishing Transport for London and regulation of the bus network including the London Bus Network, and a role as a consultee for the Strategic Rail Authority. The GLA also has a spatial planning role, a role in housing and economic development. This means that the GLA and London Boroughs have been able to act on climate change ahead of other areas in England and are proving the case for a place-based approach with comprehensive powers to provide joined up policy that delivers system-wide change.

Further devolution deals were completed under The Local Democracy, Economic Development and Construction Act 2009²⁵ and Cities and Local Government Devolution Act 2016²⁶ with Greater Manchester Combined Authority established in 2011. Ten combined authorities now exist (plus the GLA) and Cornwall signed a devolution deal in December 2022.

New devolution discussions are taking place, with the Levelling Up and Devolution Bill²⁷, currently making its way through the House of Lords, providing for County Combined Authorities. Greater Manchester Combined Authority and West Midlands Combined Authority have entered into trailblazer deals for enhanced devolution including single funding settlements.

In theory, Combined Authorities with greater devolution should be able to leverage the combined powers and leadership or convening role at a greater geographic scale to act more effectively on climate change. However, conversely, they may be less agile than a city council since greater consensus has to be reached before their constituent local authorities agree to work collectively.

Combined Authorities are delivering schemes like Greater Manchester's Local Energy Market, which should give coherence across the energy system and deliver greater investment in renewable energy; and integrated place or economic growth strategies that align Net Zero, inclusive growth and public health, as in Liverpool City Region and Greater Manchester. There is a strong case for transport, economic development and energy planning at the combined authority or county level.

A number of core powers were made available to most Combined Authorities²⁸. These are:

- **Further education:** Local commissioning of the adult education budget took place from 2016-17, followed by full devolution of the budget from 2019-20
- **Business support:** In most areas, local and central business support services are or will be united in a “growth hub”
- **The Work Programme:** commissioning support and skills programmes to tackle unemployment
- **Fiscal powers:** Most devolution deals include an investment fund; business rates retention and the power to add a Mayoral Precept on council tax
- **Integrated transport systems:** Many deals include the power to introduce bus franchising, which would allow local areas to determine their bus route networks and to let franchises to private bus companies for operating services on those networks
- **Planning and land use:** Many deals include the power to create a spatial plan for the Combined Authority area, and/or the power to establish Mayoral Development Corporations
- Some Combined Authorities, for example Greater Manchester, West Midlands and the West of England, also have some powers over **housing**, while Greater Manchester, Cornwall (although not a Combined Authority) and Greater London have a degree of responsibility for **health** policy.

²⁴ <https://www.legislation.gov.uk/ukpga/1999/29/contents>

²⁵ <http://www.legislation.gov.uk/ukpga/2009/20/contents>

²⁶ <https://www.legislation.gov.uk/ukpga/2016/1/contents/enacted>

²⁷ <https://bills.parliament.uk/bills/3155>

²⁸ <https://researchbriefings.files.parliament.uk/documents/CBP-8599/CBP-8599.pdf>

The two trailblazer deals for Greater Manchester²⁹ and West Midlands³⁰ Combined Authorities provide for more devolution of powers and policy-making and greater ‘London Transport’ style powers including a partnership with the rail operator in order to deliver a more joined-up local transport system.

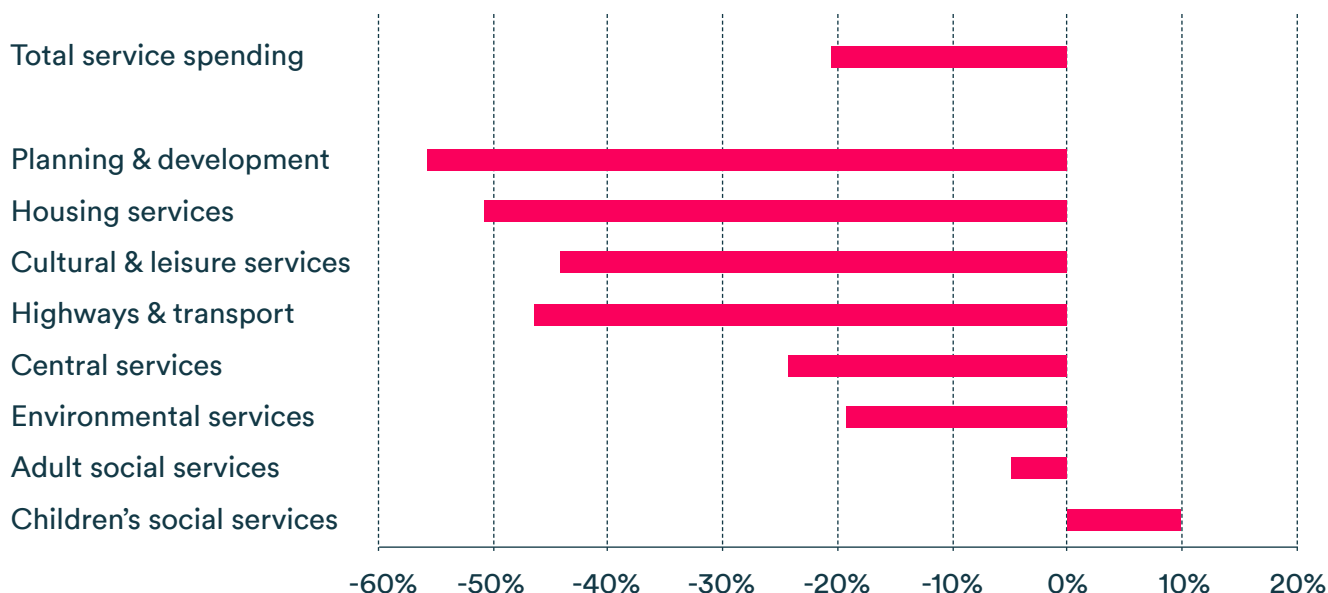
In both cases the deals include piloting the devolution of net zero funding from 2025 onwards. GMCA’s single department-style settlement includes activity across the energy system such as funding for building retrofit through allocation rather than competition and further work on standards, green finance and advice to increase household energy efficiency.

3.3 Spending

The ability to implement a programme for carbon reduction is directly related to a council’s ability to make spending decisions.

Local authority spending power fell by 16% between 2010 and 2020³¹. The deep cuts in the early 2010s and ongoing cuts in central government grants after 2015 meant that local authorities experienced a real-terms reduction in spending power (government grant and council tax) of 28.6% between 2010-11 and 2017-18. At the same time, demand in key service areas increased, including a 15% increase in the number of looked after children from 2010-11 to 2017-18³². As a result spending on local services fell by 21% in real terms between 2009-10 and 2017-18. In order to protect adult social care and acute children’s social care services, local authorities made much bigger cuts to services like planning and development (56%), housing (51%), highways and transport (47%) and leisure and culture (44%)³³. Cuts also affected more deprived areas more deeply.

Figure 1: IFS analysis - real-terms change in local government service spending by service area, 2009-10 to 2017-18



Source: Institute for Fiscal Studies (FSR0090)

²⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1143001/Greater_Manchester_Combined_Authority_Trailblazer_deeper_devolution_deal.pdf

³⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1143002/West_Midlands_Combined_Authority_Trailblazer_deeper_devolution_deal.pdf

³¹ <https://www.instituteforgovernment.org.uk/explainer/local-government-funding-england>

³² <https://www.nao.org.uk/wp-content/uploads/2019/01/Local-authority-governance-Summary.pdf>

³³ <https://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/housing-communities-and-local-government-committee/local-government-finance-and-the-2019-spending-review/written/100092.pdf>



Local authorities' already constrained income and spending was significantly affected during the COVID-19 pandemic years, with many authorities spending from reserves, and many experiencing multi-million pound shortfalls entering 2021. Despite government funding of £7.9bn and compensation for lost income of £1.23bn, in 2021 30% of authorities reported funding gaps equivalent to more than 5% of their spending in 2019-20³⁴. The unprecedented uncertainty meant that setting balanced budgets was extremely difficult. Inflation rises and energy price hikes during 2021 and 2022 further hit council finances, with services being cut to tackle a reported £3.2bn shortfall going into 2023. Unison research found that nine out of ten councils had a predicted budget gap for 2023- 24³⁵.

Institute for Fiscal Studies (IFS) analysis³⁶ of the Final Local Government Finance Settlement, 2022-23 showed that councils can expect two years of above-inflation rises in their spending power of up to 5.4% and 5.8% – although forecast inflation may again understate the cost increases facing councils. By 2024-25, core spending power is expected to be 7% higher in real per-capita terms than in 2015-16. However, this is far from fully reversing the substantial cuts made to local government in the first half of the 2010s, which affected critical areas for tackling climate change and which local authorities have had to rebuild more recently. This means local authorities are still playing catch up from austerity and often lack the well developed capabilities and capacity needed to address the Net Zero challenge.

Local authorities have three main sources of revenue (breakdown shown for 2019/20³⁷):

- **Government grants** – money from central government for local services, 23%
- **Council tax** – a property tax levied on residential properties, 50%
- **Business rates** – a property tax levied on business premises, 27%

Unlike central government, local authorities cannot borrow to finance day-to-day spending, and must run balanced budgets or draw down reserves – money built up by underspending in earlier years – to ensure that their annual spending does not exceed their annual revenue. Once reserves are spent, they cannot be spent again. The pandemic meant that some local authorities had to draw on their reserves, 73% of district councils and 46% of single-tier and county councils reported either having already used reserves, or planning to use reserves at the end of 2020³⁸. The NAO has been concerned about local authorities spending their reserves.

³⁴ <https://www.publicsectorexecutive.com/articles/nao-report-outlines-local-government-finance-covid-19-pandemic>

³⁵ <https://www.unison.org.uk/news/2022/10/councils-face-cash-crisis-of-more-than-3bn-says-unison/>

³⁶ <https://ifs.org.uk/articles/english-councils-core-spending-power-set-grow-11-real-terms-over-next-two-years>

³⁷ <https://www.instituteforgovernment.org.uk/explainers/local-government-funding-england>

³⁸ <https://www.instituteforgovernment.org.uk/explainer/local-government-funding-england>

Local politicians and officers operate within local governance frameworks of checks and balances to ensure that decision-making is lawful, informed by objective advice, transparent and consultative. This includes:

- A framework of legal duties, including the Best Value Duty to secure economy, efficiency and effectiveness
- Being legally responsible for maintaining a system of internal control including arrangements for the management of risk, an effective internal audit and preparing annual accounts
- Having Audit committees to provide financial oversight by elected members
- Overview and scrutiny functions to provide member challenge of the executive
- Local standards regimes to govern the ethical behaviour of elected members.

Having officers with statutory powers and responsibilities (three main statutory officer roles):

- Head of paid service – can warn about staffing and organisational issues
- Section 151 officer – can warn of unbalanced budget
- Monitoring officer – can warn of unlawful behaviour.

Local authority Heads of Finance or Treasurers work with the Elected Members and officers to prepare budgets looking ahead around five years, and produce plans for Capital Programmes and revenue budgets. These are prioritised in line with the council's agreed strategy and priorities. Despite the impact of COVID-19 and a near decade of budget cuts, local authorities are still able to focus their spending on priority issues. For some local authorities this includes climate change. For example, 68% of 25 participants in an ADEPT webinar³⁹ on climate change indicated that they intended to implement their Climate Change Action Plan at the same pace as pre-COVID, while 16% intended to go faster than planned and only 4% slower.

Local authorities have to develop business cases, often using the Treasury Green Book process, which can be seen as onerous. The Green Book process was previously cited as a barrier to delivering Levelling Up and Net Zero aligned projects⁴⁰. But it has been updated to tackle this problem. In September 2021 BEIS (now DESNZ) updated the valuation of greenhouse gas emissions for policy appraisal and evaluation with clear guidance that the carbon values are not the only metric that is used in developing a business case and the quantified carbon savings can mask wider benefits. It states that “it is often the case that some of the most strategically important benefits of climate policy cannot always be quantified⁴¹.” For example strengthening of decarbonisation supply chains or increases in the UK's resilience to deal with extreme climate events, reducing fuel poverty, or improving health. It goes on to say, “As a result, quantified benefits of carbon saving policies can underestimate the true benefits. **Therefore, policy makers and decision makers should consider all qualitative and quantitative evidence in the round as set out in the Green Book, even if a project has a low estimated benefit-cost ratio.**”⁴² This gives a clear steer to those developing business cases relating to Net Zero and low carbon investments that a high cost of carbon saved is not a reason not to invest, as long as wider benefits are delivered or innovation and new business models are catalysed.

³⁹ ADEPT Climate Change webinar 30 July 2020

⁴⁰ <https://lordslibrary.parliament.uk/cop26-changes-to-the-green-book/>

⁴¹ <https://www.gov.uk/government/publications/valuing-greenhouse-gas-emissions-in-policy-appraisal/valuation-of-greenhouse-gas-emissions-for-policy-appraisal-and-evaluation>

⁴² Valuation of greenhouse gas emissions: for policy appraisal and evaluation - GOV.UK (www.gov.uk)

As part of its approach to integrate climate considerations into economic policy and strategy, **Glasgow City Region** specialists from public health and economic development attended Green Book training together. This helped them to learn each other's terminology – and was later credited as teaching each other to 'speak' 'planner' or 'economist'. It enabled them to see clearly the value that different people could contribute⁴³.

Local authorities are increasingly integrating finance, legal and procurement teams for a more holistic approach to delivering climate and energy related projects, along with wider health, economic and environmental co-benefits.

Some local authorities have developed their own methods of financial appraisal which enables them to increase the importance of carbon impacts. 'Climate budgeting' includes green budget tagging, shadow carbon pricing and climate impact assessment.

C40 Cities members have begun a process of Climate Budgeting, which has been taken up by the Mayor of London who has issued a consultation budget for 2023/24 that includes a climate budget: "The 'Climate Budget' sets out funded actions that the GLA Group will take and the unfunded projects and actions that are needed to meet their 2030 Net Zero target. By 2030, this will require switching Metropolitan Police, London Fire Brigade and TfL fleets to run on electricity, the electrification of heating in police and fire stations and TfL's buildings, and the installation of more electric vehicle charging infrastructure and solar panels across the GLA estate."⁴⁴ The budget will not mean GLA funds all investments but it allows councils to plan ahead to locate finance.

Councils also have a power under the **Localism Act 2011** amended Part 1 of the Local Government Finance Act 1992⁴⁵ to hold a referendum to raise council tax if the increase is more than 3%, however, this is a rarely used power. However, the government's 2022 Autumn Statement gives local authorities in England additional flexibility to set Council Tax by increasing the referendum limit to 5% per year from April 2023.

Manchester City Council has a system which checks the strategic fit, economic impact, social impact and carbon impact of proposed spending. Like Stockport Borough Council and Greater Manchester Combined Authority, they hope to introduce a carbon accounting tool to assist them in weighing the relative carbon savings of projects. Approval processes are enabled by Carbon Literacy training which has been made mandatory for staff and elected Members, and a sub-committee looking at carbon. This approach means Manchester City Council has been able to embed the climate targets in spending decisions and invest in more staff to work on climate change. They have used it to apply for further funding and to justify expenditure on a significant £0.5m tree planting programme in the coming year.

Cornwall Council's Cabinet took a decision to ensure that all decision-making pertaining to climate change mitigation should be balanced against the principle of social justice, when it adopted the Carbon Neutral Cornwall Action Plan. A Decision Wheel⁴⁶, based on the Doughnut Economics⁴⁷ model has been used in cabinet decisions since September 2019, and has been rolled out for other Council decisions.

⁴³ <https://www.progressive-policy.net/downloads/files/Quantum-Full-Report.pdf>

⁴⁴ <https://www.london.gov.uk/media-centre/mayors-press-releases/mayor-publishes-consultation-budget-build-safer-fairer-greener-and-more-prosperous-london>

⁴⁵ <https://www.legislation.gov.uk/ukpga/2011/20/schedule/5/enacted>

⁴⁶ <https://www.cornwall.gov.uk/environment-and-planning/climate-emergency/our-action-plan/what-is-cornwall-council-doing/decision-making-wheel/>

⁴⁷ <https://www.kateraworth.com/2020/09/30/launching-doughnut-economics-action-lab/#>

⊗ Barriers ⊗

Using the power to raise council tax could be a possibility for wealthier areas, where the impact of a £1 a week rise on a Council Tax band property of D may not seem too much to politicians or residents. However, in more deprived areas it is viewed as a regressive step and could exacerbate inequalities between areas.

Local government in England has very limited revenue-raising powers compared with other wealthy countries. In 2014, every other G7 nation collected more taxes at either a local or regional level according to the Organisation for Economic Co-operation and Development. Just 12% of the UK's taxes were collected, or intended to be collected, locally in 2014, compared with 17% collected locally or federally in Italy, 30% in Germany, and almost 50% in Canada.

A power lacking for local authorities is the means to align all spending coming down from government with the wider plan for Net Zero in a local area. In recent years, Local Economic Partnerships (LEPs) have received funding from the Department of Transport (DfT), the Local Growth Fund and other funding streams which can by-pass the local authority and LEPs are much less accountable for their spending than local authorities. However, more recently there has been a new focus on funding provided directly to local authorities, including the Shared Prosperity Fund, Towns Fund and Levelling Up Fund, and LEPs are now set to be abolished⁴⁸.

Competitive funds continue to be issued, often announced with short notice, and needing to be spent in a short length of time. This wastes effort and opportunity to develop skills and local supply chains and is being increasingly criticised, including by MPs such as Chris Skidmore and Michael Gove. Chris Skidmore's Mission Zero Net Zero Strategy review replicated UK100's call for the Government to simplify the Net Zero funding landscape for all local authorities by the next Spending Review⁴⁹. It recommends consolidating different funding pots, reducing competitive bidding processes, giving longer lead-in times where bidding remains and providing funding over the medium rather than the short-term with multi-year funding arrangements where possible. Non-competitive funding reduces administrative burdens and ensures that allocation of funding is based on need and opportunity rather than bidding capacity. Additional support should be provided to local authorities with less bidding capacity.

- [UK100's Local Net Zero Delivery Progress report on Finance](#) analyses the progress on local finance commitments made by the UK Government over the past 12 months and how funding for particular initiatives has changed.
- It recommends that the Government reforms local authority funding allocations to make them non-competitive. With reference to UK100's research, the call was echoed by Chris Skidmore MP's Mission Zero Net Zero Strategy review, which called for the Government to simplify the Net Zero funding landscape for all local authorities and reduce competitive bidding processes.

⁴⁸ <https://www.localgov.co.uk/Budget-2023-LEPs-to-be-scrapped/55817>

⁴⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128689/mission-zero-independent-review.pdf

3.4 Borrowing and Investing Powers

Under the Local Government Act 2003 s.1⁵⁰, **a local authority may borrow money** for any purpose relevant to its functions, or for the purposes of the prudent management of its financial affairs. It has a duty to set an affordable borrowing limit. **A local authority has a power to invest** for the same purposes, under s.12 of the same Act.

All local authorities may take out Public Works Loan Board (PWLB) loans. They are free to finance capital projects by borrowing, provided they can afford to service their debts out of their revenues. In deciding how much debt is affordable, major local authorities are required by law to “have regard” to the Prudential Code, published by the Chartered Institute of Public Finance and Accountancy (CIPFA), but have discretion to decide how to fulfil this statutory requirement.

Decisions over which capital projects to pursue and whether to borrow for these investments are the responsibility of the elected Council of each local authority, who are accountable to their electorates. Local authorities are free to borrow so long as the Finance Director is satisfied that they are acting in line with statute and can afford to repay the loan.

PWLB interest rates were increased in 2019 along with a revision to the Prudential Code to discourage local authorities from investing in commercial property simply to generate revenue, which some had done to tackle funding cuts. This may lead local authorities to borrow from other sources, such as municipal bonds. In 2020 the government changed the lending terms of the PWLB⁵¹ with a view to limiting local authorities’ ability to borrow for the purposes of investment in housing, infrastructure, and public services and to prevent financial investments that serve no direct policy purpose. Until 2021, the PWLB was a non-discretionary lender: it did not ask the purpose of a loan, as that would duplicate the decision-making structures of the individual local authorities. However, under the new terms, the local authority must submit a description of their capital spending and financing plans for the next three years. It is not clear whether this restriction would now limit investment in out-of-area renewable energy schemes.

A bond has been developed by Abundance for West Berkshire Council and Warrington Borough Council to finance solar and other environmental schemes on council assets. Cotswold has more recently followed suit.

The Westminster Local Climate Bond (LCB), called the Westminster Green Investment, was issued on March 13th aiming to raise £1 million, and was fully subscribed after just nine days. The average raise for previous LCBs was around three months. The proceeds will be used to finance carbon reduction measures within Westminster. To enable this, Westminster City Council included a provision within its Treasury Management Strategy Statement (TMSS), allowing the use of community municipal investments as a means of raising funds from multiple sources, including individuals. Westminster also developed the Westminster Green Finance Framework, aligned to the Loan Market Association’s Green Loan Principles, the first LCB to do this. This provides investors with confidence against greenwashing risks.

⁵⁰ <https://www.legislation.gov.uk/ukpga/2003/26/contents>

⁵¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/940281/Response_to_consultation_Public_Works_Loan_Board_future_lending_terms_1.pdf

The October 2021 Treasury Net Zero Review set out the key issues relating to Net Zero and the economy, including challenges, trade-offs and mechanisms for financing Net Zero but was light on action.

More positively, the UK Infrastructure Bank was established in June 2021 to increase infrastructure investment to help tackle climate change and regional disparities by supporting local and regional growth. Its June 2022 Strategic Plan outlined its functions to deploy £22 billion through direct lending or government guarantees over five to eight years. This includes a local authority lending function of £4 billion at a preferential rate for high value projects of at least £5 million. The bank is developing a local authority advisory service and working on pilot projects⁵² with Bristol City Council, Transport for Greater Manchester and West Yorkshire Combined Authority on zero emission infrastructure and heat decarbonisation, zero emissions buses and mass transit respectively. Its local authority lending priorities are clean energy, waste, water, digital and transport. But it will also lend for energy efficiency retrofit and nature-based solutions, although the pilot projects are not in these categories.



- **UK100** hosted a member roundtable with the UK Infrastructure Bank (UKIB), including their CEO, to discuss the newly established bank's local authority lending and advisory functions in January 2022. Next, UK100 published a [UKIB Local Authority Lending and Advisory Service Insight Briefing](#) which makes recommendations for the UKIB to accelerate the rate of local place-based Net Zero investment. The UKIB local authority pilots include projects in Bristol City Council, Transport for Greater Manchester and West Yorkshire Combined Authority, as we advocated for in our insight briefing.

52 <https://www.ukib.org.uk/news/ukib-partner-local-authority-projects>

In June 2021 the government set out in its Green Financing Framework how the Green+ Gilt and retail Green Savings Bonds will help finance projects with environmental benefits, while creating green jobs across the UK. The Framework also commits the government to annual allocation reporting and reporting on environmental impacts and social co-benefits every two years, ensuring transparency for retail and institutional investors and other interested parties. Green+ Gilts are bonds issued by the UK government to institutional investors, where an investor lends money to the government for a set period, in exchange for regular fixed-rate interest payments. So far, £16.4bn has been raised in Green+ Gilts from the first two issuances, and the UK is set to raise a further £10bn.

According to the UK Green Financing Report September 2022, “proceeds were allocated to expenditures across all six of the categories outlined in the Framework: Clean Transportation, Energy Efficiency, Renewable Energy, Pollution Prevention & Control, Living & Natural Resources and Climate Change Adaptation. Clean Transportation received the largest allocation, reflecting the importance of decarbonising the transport sector, which generates over a quarter of the UK’s greenhouse gas emissions. Energy efficiency received the second largest allocation, with a focus on decarbonising the UK’s building stock, a vital part of reaching net zero by 2050”⁵³.

The Business Rates Retention Scheme introduced in 2013-14 allows local authorities to borrow for infrastructure projects, against the future growth in business rate receipts which will result from the projects. Councils can retain 50% of receipts but, from 2021/22, local authorities in areas including Greater Manchester, Cornwall, West of England, West Midlands and Greater London have been able to retain a greater proportion of business rates in return for forgoing other funding streams⁵⁴.

Section 137 (1) of the Local Government Act 1972⁵⁵ is a statutory power. It gives councils the power ‘to incur expenditure for purposes not otherwise authorised.’ It is only used when there is no other specific power available; it is a ‘power of last resort’, it must benefit some or all inhabitants, not an individual, nor can it be made retrospectively. It was amended in s.36 of the Local Government and Housing Act 1989. The amendment stipulates that expenditure and benefit must be balanced.

- **UK100** responded to a Government [Call for Evidence on the Update to Green Finance Strategy](#) arguing that the Government should set UKIB a Net Zero mandate and ensure that the UKIB primarily invests capital at the early stage of market development to absorb early-stage financial risk and provide patient capital to de-risk decarbonisation projects enough to encourage private investors to invest at scale. We advocated that UKIB should assist local authorities to develop investable propositions to access private capital for Net Zero projects.

UK100 also responded to the Environmental Audit Committee’s [The financial sector and the UK’s net zero transition inquiry](#), arguing that local authorities are key to opening up the investment opportunities to enable a significant investment of private finance into low-carbon projects, through developing local projects in partnership with private capital.

⁵³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1106352/11138-HHG-HMT-UK_Green_Financing_Allocation_Report_Accessible_2.pdf

⁵⁴ <https://www.gov.uk/government/publications/authorities-with-increased-business-rates-retention-arrangements-provisional-local-government-finance-settlement-2021-to-2022>

⁵⁵ <https://www.legislation.gov.uk/ukpga/1972/70/section/137>

3.5 Procurement and Commissioning Powers

Under s.1 of the **Local Government (Contracts) Act 1997**⁵⁶ local authorities have procurement powers to enter contracts for assets or services to deliver their statutory functions.

Local authorities are accountable to their communities for how they spend their money and for ensuring that this spending represents value for money.

Procurement and commissioning represent a strong lever that local authorities can use to drive down or lock-out emissions from a wide range of areas and support the growth and innovation in their supply chains. Emissions from items in **bold** can be driven down using procurement powers and policies.

Scope 1	Scope 2 Indirect emissions	Scope 3 ⁵⁷ all other indirect emissions in the value chain
Fuel combustion Company vehicles Fugitive emissions	The generation of purchased electricity, steam, heating and cooling Purchased electricity, heat and steam	Purchased goods and services Business travel Employee commuting Waste disposal Use of sold products Transportation and distribution (up- and downstream) Investments Leased assets and franchises

⁵⁶ <https://www.legislation.gov.uk/ukpga/1997/65/section/1>
⁵⁷ <https://ghgprotocol.org/standards/scope-3-standard>

Local authorities have a Duty regarding procurement to follow the rules and regulations:

Under the Public Contracts Regulations 2015 (Procurement)⁵⁸ local authorities (as contracting authorities) must have regard to the regulations in relation to how they award public contracts for the execution of works, the supply of products or the provision of services.

Sustainable procurement has been a topic of interest for a long time, since the days of NI186 and has been used as a lever to deliver wider social, environmental, and economic benefits to a local area. The Preston Model⁵⁹ has been applauded for its community wealth building approach. Procurement has also been seen as a way to support the low carbon economic transition and support the development of supply chains in the low carbon economic goods and services sector.

Some local authority contracts are put in place for long periods of time, such as waste contracts, while high-cost items such as vehicles can have a reasonably long lifetime, so specifying early for low carbon or Net Zero compliance is critical. Taking steps to avoid locking-in emissions can also be achieved through leasing, rather than purchasing.

This report does not provide scope for extensive coverage of procurement regulations, nor of the new Procurement Bill passing through parliament and which is under scrutiny⁶⁰. But local authorities have long been able, even within EU procurement rules, to specify for sustainability, including carbon reductions **as long as it is relevant to the contract**. The regulations include provision for:

- Regulation 68⁶¹ Life-cycle costing, which covers the cost of acquisition, use (energy and other resources), maintenance costs, and end of life costs, such as collection and recycling costs. It also covers costs attributed to environmental externalities linked to the product, service or works during its life-cycle, provided their monetary value can be determined and verified (which includes the cost of emissions of greenhouse gases (GHG) and of other pollutant emissions and other climate change mitigation costs)
- The procurement of complex schemes such as district heating schemes.

Laws and regulations for procurement are set to change since the exit from the EU, however, much of the procurement regulations remain with some changes, such as replacing the OJEU with Find a Tender Service. Local authorities are still applying the Public Contracts Regulations 2015 and World Trade Organisation Principles. In 2020, the government published a consultation entitled Transforming Public Procurement⁶². Building on this, a Procurement Bill⁶³ is currently passing through parliament⁶⁴ which provides for new principles and objectives, procurement processes and notices. This alters some of the procedures for tendering. The new objectives⁶⁵ are:

- delivering value for money
- maximising public benefit
- transparency
- acting with integrity.

⁵⁸ <https://www.legislation.gov.uk/ukxi/2015/102/contents/made>

⁵⁹ <https://www.preston.gov.uk/article/1339/What-is-Preston-Model->

⁶⁰ <https://www.youtube.com/watch?v=1hzL-ZrnoFo> Local Authority Insight Series - The Procurement Bill Explained 23 June 2022

⁶¹ <https://www.legislation.gov.uk/ukxi/2015/102/regulation/68/made>

⁶² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/943946/Transforming_public_procurement.pdf

⁶³ <https://publications.parliament.uk/pa/bills/cbill/58-03/0218/220218.pdf>

⁶⁴ <https://bills.parliament.uk/bills/3159>

⁶⁵ <https://www.gov.uk/government/publications/the-procurement-bill-summary-guide-to-the-provisions/the-procurement-bill-a-summary-guide-to-the-provisions#the-bill---summary-of-provisions>

Local authorities will have to have regard to these objectives.

The Bill sets out that the Minister will have to provide a National Procurement Policy Statement and this will have to include strategic priorities including:

- achieving targets set under the Climate Change Act 2008 and the Environment Act 2021
- meeting requirements set out in the Public Services (Social Value) Act 2012
- promoting innovation amongst potential suppliers
- minimising the incidence of fraud, waste or abuse of public money.

The Bill is likely to change significantly at Committee Stage, and it is expected additional procurement resource in response to the additional burdens will be needed if it remains in the current form. The Cabinet Office have provided information⁶⁶ on training⁶⁷ that will be coming forward to support delivery. The new procurement law regime is not expected to be in force until after Spring 2024 at the earliest.

The current National Procurement Policy Statement⁶⁸ importantly states in the social value section:

“All contracting authorities should consider the following national priority outcomes alongside any additional local priorities in their procurement activities:

- creating new businesses, new jobs and new skills
- tackling climate change and reducing waste, and
- improving supplier diversity, innovation and resilience.

But the Government wants to send a clear message that commercial and procurement teams across the public sector do not have to select the lowest price bid, and that in setting the procurement strategy, drafting the contract terms and evaluating tenders they can and should take a broad view of value or money that includes the improvement of social welfare or wellbeing, referred to in HM Treasury’s Green Book as social value.”

The Bill also moves beyond the most economically advantageous tender (MEAT) to MAT (most advantageous tender); while it is welcome that local authorities do not have to be restricted by the most economically advantageous tender, they of course do not have unlimited funds, and will have to continue to deliver Best Value and manage constrained budgets.

⁶⁶ <https://www.gov.uk/government/collections/transforming-public-procurement>

⁶⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1112206/20221011_TPP_L_D_offer_update__2_.pdf

⁶⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/990289/National_Procurement_Policy_Statement.pdf

Cambridgeshire County Council has recently issued a tender for the decarbonisation of its services in order to meet the targets in its updated Climate Change and Environment Strategy. “Although Scope 3 emissions are indirect emissions from assets not under CCC control, such as those of our contractors and suppliers, it is the Council’s specifications and contracting for these goods and services which drives the creation of these emissions.

The Council has a range of assets and statutory duties. Our carbon footprints have identified the services and assets with the largest carbon emissions under scope 1, 2 and 3. We are now seeking external advice, expertise, and experience on the best ways to reduce carbon emissions (or greenhouse gases) to deliver our Net Zero commitments for the following assets and services: Highways, Waste and Recycling, Rural Estates and Schools”.

Public Services (Social Value) Act 2012⁶⁹

Under this Act local authorities have a Duty to take the economic, social and environmental well-being of an area into account before entering into certain procurement exercises and entering into certain service provision contracts.

This is not a Power, but a Duty so it is obligatory. The fact it is called Social Value means that some local authorities may focus more on the social aspects such as local jobs or skills. But it does include environmental benefits and many local authorities are using this to align their procurement with their climate targets.

Nottingham City Council’s Procurement Policy references the Social Value Act and its Strategic Procurement Objectives for the Environment include:

- Minimise the environmental impact of goods, services and works procured
- Improve air quality
- Resource efficiency, waste reduction and recycling
- Source innovative and sustainable green solutions.

These are measured by the following indicators:

- Air quality and climate change
- Maximising opportunities for carbon saving measures in contracts
- Minimising the damaging impact of transport in the City
- Resource efficiency, waste reduction and recycling
- Reducing waste by managing demand and making sustainable choices
- Encouraging sustainable methods of waste disposal – in particular reducing landfill.

In response to its Climate Emergency declaration and carbon neutrality target of 2038, **Manchester City Council** has been quick to include a carbon indicator in its procurement assessment criteria, adding 10% for carbon to the existing 20% social value indicator. Potential suppliers are assessed for how they can save carbon in delivering their goods and services. This was trialled on highways spending before being rolled out. This is in addition to a carbon assessment that all projects have to pass for financial approval.

⁶⁹ <https://www.legislation.gov.uk/ukpga/2012/3/enacted>

⊗ **Barriers: Procurement powers** ⊗

Procurement is complex, and large projects have to be carefully procured as they can be open to legal challenges. There is a myth that persists that ‘you can’t do that’ under procurement rules but early scoping, careful specification, key performance indicators and importantly, robust contract management can deliver emissions savings through procurement.

Changes to the procurement law and regulations will necessitate greater capacity in local authority procurement and legal teams.



3.6 Overarching Powers Summary

While these general powers and funding mechanisms can be used to address climate change, there is no overarching duty to do so. This means that although local authorities largely have powers to do anything they want if it is legal, there must be strong political will, robust and often technically specialised capability and capacity to develop innovative initiatives and significant effort made to embed net zero across all council areas. Without an overarching duty to act, only committed, determined and leading authorities can forge ahead in gathering relevant evidence, developing new metrics, delivering schemes, and learning from one another. This makes for duplication of effort across each local area, as specific local evidence is often needed to develop bespoke local business cases. Net Zero is not necessarily taken as a starting point – even when it is at the heart of a strategy for a council, but still has to be justified. This means that the speed and scale of delivery is lacking and council climate emergency targets are under threat of not being delivered.

- **UK100's Local Net Zero Delivery Progress reports** find that local government ambition is not being mirrored or adequately enabled at the national level, and urgent attention is needed to support local leaders to deliver Net Zero.

UK100 held a **launch event** for these eight sector-based reports in July 2022, with speakers including UK100 co-presidents, Mayor Tracy Brabin and Cllr Richard Clewer, as well as Mayor Andy Burnham and Chris Skidmore MP.

The **Local Powers progress report** recommends that the Local Net Zero Forum should determine in detail how local and national (and cross-departmental) collaboration will work and develop a clear delivery framework to be supported by a Net Zero Delivery Unit.

Recommendations: Overarching Powers

- 1** National policy and regulatory frameworks must be revised and co-ordinated to enable local, regional, national and devolved governments to work more effectively in partnership towards Net Zero and adapting to climate change. The Local Net Zero Forum should determine in detail how local and national (and cross-departmental) collaboration will work and develop a clear delivery framework to be supported by a Net Zero Delivery Unit.
- 2** Within a Net Zero Delivery Framework, there should be a requirement [Duty] on local authorities to take action to contribute to achieving the UK's climate change targets. The UK government should put in place a Net Zero Local Powers Bill which permits, obliges and resources relevant levels of authority to undertake climate change action to satisfy the Climate Change Act. The bill should be accompanied by appropriate policy and guidance which identifies public funding and potential private sector investment levers, and better cross-departmental alignment within government to support local areas that satisfy these obligations.
- 3** There should be a requirement for local authorities to report local area emissions, and clear and consistent guidance from national government on monitoring and reporting for LAs to enable progress to be tracked.

Powers in Place: the Handbook of Local Authority Net Zero Powers

Transport:



This chapter covers the four main areas in which local authorities have power or influence:

- **Active Travel:** walking, cycling and micromobility
- **Public Transport:** buses, rail and rapid transport
- **Infrastructure:** electric vehicle charging, parking, Clean Air Zones, congestion charging, speed limits, vehicle sharing, placemaking and planning⁷⁰
- **Vehicles:** emission standards, taxis and private hire vehicles, freight and local authority fleet.

4.1 Overview

Surface transport has emerged as the largest-emitting sector in the UK since 2015⁷¹, accounting for 26% of total UK emissions in 2021⁷² and is not on track to meet Net Zero requirements. In 2020, despite an overall drop in transport emissions, the transport sector was the biggest estimated contributor of CO₂ for most local authorities in the UK.⁷³

Transport emissions show considerable fluctuation from year to year as technological improvements struggle to keep on top of rising demand. Demand for car travel has increased by 6% in the last decade, but this has largely been offset by a combination of improved fleet fuel efficiency and increased use of biofuels. From 2009 to 2016, the average CO₂ emitted per km from new cars fell, leading to an improvement in overall car efficiency across the fleet. However, this trend has reversed in recent years, and from 2017 to 2019 cars sold were less fuel efficient on average than the previous year.⁷⁴ On the plus side, the CCC Progress Report 2022⁷⁵ reports that fully electric car sales have grown substantially to 12% of the new car market in 2021, with around 191,000 being sold. This is ahead of the trajectory required (8%), although this is within a depressed overall new car market.



⁷⁰ <https://www.legislation.gov.uk/uksi/2020/548/made>

⁷¹ <https://www.ons.gov.uk/economy/environmentalaccounts/articles/roadtransportandairmissions/2019-09-16>

⁷² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1134664/greenhouse-gas-emissions-statistical-release-2021.pdf

⁷³ 2005 to 2020 UK local and regional greenhouse gas emissions: statistical release" <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2020>

⁷⁴ <https://www.gov.uk/government/statistics/transport-and-environment-statistics-2022/transport-and-environment-statistics-2022>

⁷⁵ <https://www.theccc.org.uk/publication/2022-progress-report-to-parliament/>

To deliver zero carbon transport, the actions needed are:

- Reducing emissions from all types of vehicles: moving to electric and hydrogen vehicles
- Reducing the need to travel: home working, remote meetings, provision of local facilities, improved digital technology - fibre broadband and mobile network coverage
- Modal shift from cars to active travel: cycling and walking
- Modal shift from cars to public transport
- Increasing the provision and use of shared transport (car clubs, lift share and variants – increasing the utilisation of vehicles and shifting to electric)
- Reducing freight vehicle movements: consolidation and low carbon last mile.

Until recently transport planning largely focused on how to move more cars more quickly and more smoothly with little recognition that there are diminishing returns on investment as demand grows. There have been some policy shifts at a strategic level, but road building is still the main focus of expenditure (as well as the HS2 rail project) and Department for Transport (DfT) models still use a ‘predict and provide’ approach to road building rather than trying to manage demand. The March 2020 budget announced a package of major new road building schemes, promising £27 billion for road building compared with £4.2 billion for integrated transport and £1 billion on active travel. Unfortunately in March 2023 the Transport Secretary announced that overall active travel funding for the current parliamentary term was being reduced from £3.8 billion to £3 billion. This includes a two-thirds cut to promised capital investment in infrastructure for walking, wheeling and cycling, from £308 million to only £100 million for the next two years.

The lack of an integrated whole-place approach to transport in all areas of the country except London has severely restricted local authorities’ ability to plan for zero carbon transport. The actions that have been taken are piecemeal and even the leading local authorities do not manage to incorporate the whole suite of measures needed.

The models used to determine the economic benefit of each pound spent are based on a calculation of the economic benefit of moving more cars, vans and lorries more efficiently. These models are not sophisticated enough to include the costs or savings to public health. This narrow focus has led to under-investment in active travel in particular, and in designing the public realm to be a pleasant place to walk and cycle.

Powers, policy and practice converge and it is unclear how to apportion consequences between them. There are examples of the remit of agencies being so fragmented that they work against decarbonisation: one example being road network management versus the targets to reduce emissions.

During the COVID-19 pandemic, temporary public transport capacity restrictions resulted in local authorities being given more powers to increase travel options while making it safer for people, particularly key workers, to walk and cycle. Schemes included active travel projects based on reducing rat-running in built-up urban areas by means of Traffic Regulation Orders, which have been implemented extensively in London boroughs, alongside locations such as Kelham Island in Sheffield.

- **UK100's** [Local Net Zero Delivery progress report on Transport](#) analyses the progress made towards delivering Net Zero transport at a local level in the UK in the past year, and offers recommendations to increase the pace and scale of delivery. This includes a recommendation for the Government to end competitive funding for transport - replacing this with funding that is long term, tied to Net Zero outcomes and available to all. Provision should be made across the sector, with public transport and active travel prioritised.

4.1.1 Key Strategies

In 2021 the Department for Transport released its **Transport Decarbonisation Plan**⁷⁶. The key commitments are:

Decarbonising all forms of transport

- Increasing cycling and walking: £2 billion over five years with the aim that half of all journeys in towns and cities will be cycled or walked by 2030
- Zero emission buses and coaches
- Decarbonising our railways: including zero emission trains and improved connectivity
- A zero emission fleet of cars, vans, motorcycles, and scooters
- Accelerating maritime decarbonisation
- Accelerating aviation decarbonisation.

Multi-modal decarbonisation and key enablers

- Delivering a zero emission freight and logistics sector
- Delivering decarbonisation through places
- Maximising the benefits of sustainable low carbon fuels
- Defining hydrogen's role in a decarbonised transport system
- Future transport – more choice, better efficiency: including mobility as a service and vehicle sharing
- Supporting UK research and development as a decarbonisation enabler.

The Plan recognises the key role of local authorities and announced additional support measures, including a **Local Authority Toolkit for Transport Decarbonisation**⁷⁷ and the launch of Active Travel England, a new executive agency to deliver training, support and promote best practice in active travel schemes.

⁷⁶ <https://www.gov.uk/government/publications/transport-decarbonisation-plan>

⁷⁷ <https://www.gov.uk/government/collections/transport-decarbonisation-local-authority-toolkit>

4.1.2 Key Powers

Relevant Legislation	Power enabled
Highways Act 1980	Highways improvements including walking and cycling routes
Environment Act 1995	Air Quality Management Areas (AQMA): measures to reduce emissions
Transport Act 2000 Transport Act 2008	Requirement to produce Local Transport Plans (LTP), Transport Authority structures, Clean Air Zones (CAZ)
Road Traffic Regulation Act 1984 Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996 Local Government Act 1985	Traffic Regulation Orders (TRO) and Experimental TROs – restricting traffic in defined areas To encourage walking and cycling, and manage parking
Traffic Orders Procedure (Coronavirus) (Amendment) (England) Regulations 2020	Emergency procedure for introducing Traffic Regulation Orders, withdrawn in April 2021
Road Traffic Regulation Act 1967	Introducing speed limits e.g. 20mph
Equalities Act 2010	Accessibility requirements affecting pavement furniture including EV charging
Road Traffic (Vehicle Emissions) Regulations 2002 Civil Enforcement of Parking Contraventions (England) General Regulations 2007	Penalties for vehicles left idling: can be used to support air quality measures Allows local authority to enforce parking regulations, including in EV charging bays, bus stops and cycle lanes
Traffic Management Act 2004	Enforcing moving traffic violations. Guidance added in 2020 regarding support for active travel
Transport Act 1985	Deregulation of buses
Bus Services Act 2017	Potential to franchise bus services, or specify routes through Enhanced Partnerships
Local Government Act 1976	Taxi licencing: can apply to emissions
Air Quality (Taxis and Private Hire Vehicles Database) (England and Wales) Regulations 2019	Collection of data on taxis and private hire vehicles (PHV)
Workplace Parking Levy 2009	Charging for workplace parking
Public Services (Social Value) Act 2013	Procurement
National Planning Policy Framework (NPPF)	Ability to place requirements on developers to incorporate or pay for sustainable transport in new developments, including walking and cycling provisions

4.1.3 Local Authority Transport Structures

London is the only city in the UK to have a transport body with control over nearly every aspect of its transport network. This includes the ability to raise funds and cross-subsidise services, directly control certain aspects of public transport such as the bus network, and negotiate long term funding directly with central government.

Most of the UK's largest city regions outside London also have Passenger Transport Executives, such as Transport for Greater Manchester (within Greater Manchester Combined Authority) and West Yorkshire Combined Authority, which combine the transport functions of a local authority with strategic decisions made at a regional level – for example, planning of local rail services. Some metropolitan areas do not have a separate Passenger Transport Executive and instead transport functions are undertaken by the Combined Authority. Bus franchising powers are available to mayoral Combined Authorities, and in March 2021 franchising was reintroduced in Greater Manchester, the first such arrangement outside London since services were deregulated in 1986.

Several areas of England also have regional strategic transport bodies: Transport for the North, England's Economic Heartland, Transport East, Transport South-East, Peninsula Transport, Western Gateway and Midlands Connect. So far only Transport for the North has been officially endorsed as a sub-national transport body, and its main output has been a regional strategy for road and rail, focusing on improvement of intra-regional connectivity. Transport for the North is still seeking funding commitments from central government for its strategy and currently functions primarily as a lobbying organisation for investment in the region. How well the

Combined and Regional Authorities work with the constituent authorities varies.

Two-tier authorities have split responsibilities: County Councils are the Transport Authority and hold the funding and decision-making power for transport planning, roads and public transport. District Councils are responsible for parking and development planning. Unitary Authorities combine the powers of County and District Councils.

Other organisations play key roles which can conflict with local authorities' ability to act across their whole area. National Highways is responsible for motorways and major roads. Traffic Commissioners, appointed by the Secretary of State, are responsible for bus licensing.

The **Transport Act 2000** imposed a requirement on all local authorities outside London to produce a Local Transport Plan (LTP). Initially LTPs were assessed by the DfT, which also imposed targets based on the plan, but this is no longer the case. LTPs are required to include an implementation plan for their proposals but there is no obligation on local authorities to put this into practice.

Major funding is determined by the DfT in response to bids from each Transport Authority, taking into account their LTP. Funding for maintenance is from the local authority's budget, which can also cover smaller scale projects. Some additional funding is possible through bidding for specific pots, such as for EV charging.

As well as direct powers in relation to transport, local authorities can also wield an influence through air quality, planning and other legislation.

4.1.4 Urban and Rural Areas

Rural and urban areas have different issues with respect to transport and hence need different low carbon solutions. The opportunities for scale in cities enable lower carbon mass transit and walkable neighbourhoods with access to the majority of required shops and services.

People in rural areas form diffuse populations spread across greater distances with jobs, services and shops distributed unevenly, requiring people to make longer journeys for commuting, leisure and to access services. Both tourism and agriculture create journey time unreliability on rural roads. Public transport is sparser and car use endemic: towns and villages without train stations are particularly car dependent. Commuting creates congestion and parking issues around train stations (either within towns or in adjacent areas) serving all the major cities – and where this is not possible or becomes too expensive or inconvenient people drive the entire distance. Research for the Countryside Climate Network⁷⁸ highlighted that limited options for active travel and lack of public transport is a significant challenge to delivering Net Zero in rural areas.

Cities are often at pains to reduce the number of cars congesting their streets, but political and funding structures rarely allow redistribution of funding to provide public transport in rural areas to enable people to travel from outlying areas without driving. This is reflected in the carbon profile. Districts classified as rural account for 21% of population and 32% of transport carbon.

In rural areas walking and cycling are often overlooked in planning: there are many examples of developments where people cannot walk to shops and pubs because the route to amenities is along a major A road which is unsafe for pedestrians.⁷⁹ Meanwhile, retroactively creating active travel infrastructure in rural areas is complex – mainly because of the funding processes.

The **Future of Mobility: urban strategy**⁸⁰ published in 2019 set out principles for mobility strategies in urban areas and the expectations on local authorities.

The **Future of Mobility: rural strategy** call for evidence⁸¹ ran over winter 2020-21. No strategy has yet been adopted but in March 2022 the government published a Rural Mobility Toolkit⁸² for local authorities.

4.1.5 Transport After COVID-19

During the COVID-19 pandemic the transport context changed rapidly due to requirements to stay at home, social distancing and the consequent rise in online-shopping. New powers and the urgency of the crisis allowed local and national government to make some changes that would normally take months or even years. For example, in May 2020 the Department of Transport announced a £250 million fund to provide more space for walking and cycling. This enabled measures to reallocate road space through schemes such as rapid temporary pedestrianisation, wider pavements, temporary cycle lanes, rerouting traffic and measures like ‘pop up’ park and ride, bike parking facilities, e-cargo bikes, and communications.

⁷⁸ <https://www.uk100.org/publications/rural-net-zero>

⁷⁹ <https://www.transportfornewhomes.org.uk/the-project/building-car-dependency/>

⁸⁰ <https://www.gov.uk/government/publications/future-of-mobility-urban-strategy>

⁸¹ <https://www.gov.uk/government/consultations/future-of-transport-rural-strategy-call-for-evidence/future-of-transport-rural-strategy-call-for-evidence>

⁸² <https://www.gov.uk/government/publications/transport-in-rural-areas-local-authority-toolkit/transport-in-rural-areas-local-authority-toolkit>

4.2 Active Travel

4.2.1 Walking and Cycling

Creating or enhancing environments that support walking and cycling can be an effective way of reducing motor vehicle travel for short urban trips. Local authorities can influence this directly, by creating new walking and cycling infrastructure and restricting motor vehicle traffic, and indirectly, via planning policy. Local authorities are encouraged to attract central government investment by creating a Local Cycling and Walking Infrastructure Plan (LCWIP). Central government funding is available to support LCWIPs but to date has been allocated based on a bidding process, with not all local authorities receiving this.

The funding landscape for active travel has changed following the government's publication of the **Gear Change**⁸³ report in 2020, which promised £2 billion of funding for cycling and walking. Some of this can be directly accessed by local authorities, such as the Capability Fund, which supports infrastructure improvements and behaviour change initiatives. Funding from the main capital projects pot is dependent on the quality of infrastructure projects drawn up by the authority, including whether these comply with the new LTN 1/20 design standard for active travel.

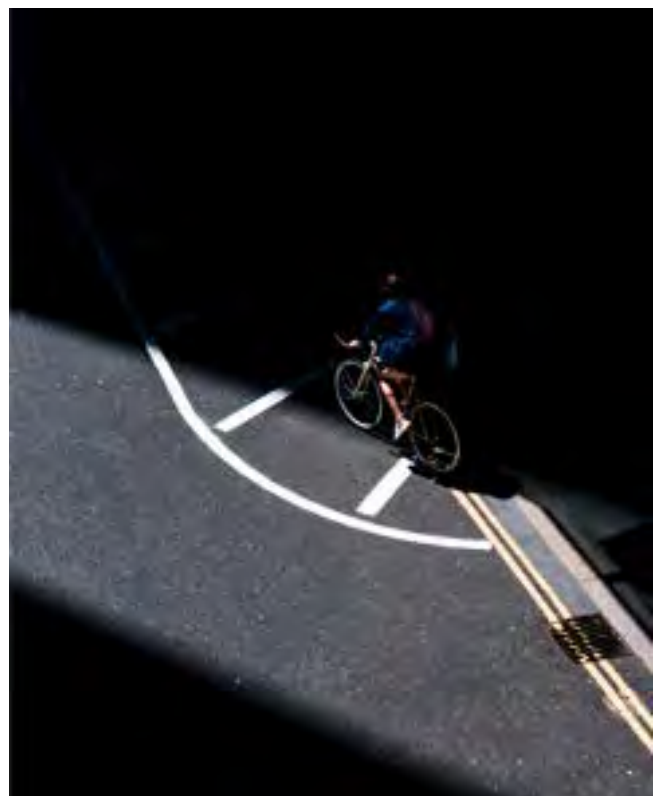
Gear Change aims to address some of the barriers highlighted by local authorities, including increased funding, increasing staff capacity, design guidance to plan separated cycling routes, and new funding assessment mechanisms. As of early 2023, additional funding has been announced for officer and councillor training, LCWIP development, public engagement and other initiatives at local authority level.

A new body, Active Travel England (ATE) has

been set up to support local authorities, and can also influence local authorities' overall transport funding, depending on whether projects meet standards of provision for active travel. ATE is also a statutory consultee on planning applications for developments above a certain size and highways.

The **Cycling & Walking Investment Strategy v2**⁸⁴ July 2022 increased the targets for walking and revised the expected spending on active travel up to £3.8 billion from 2022 to March 2025, but that was subsequently reduced to £3bn in March 2023. This includes funding allocated through different mechanisms such as the City Region Sustainable Transport Settlements.

However, local and combined authorities often have to bid for funds and justify the expected impacts using the government's WebTAG guidance, mainly used to justify large infrastructure schemes. Concerns have been raised by cycling advocates over the potential to miss out on funding if a local authority fails to produce an LCWIP, and the overall levels of funding committed by central government⁸⁵.



⁸³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf

⁸⁴ <https://www.gov.uk/government/publications/the-second-cycling-and-walking-investment-strategy>

⁸⁵ <https://www.transport-network.co.uk/Govt-admits-cycle-funding-needs-to-double/16203>

The National Cycle Network⁸⁶ (NCN) is managed by the charity Sustrans and funded primarily by central government. Therefore, schemes that form part of NCN are assessed differently.

Under the **Highways Act 1980⁸⁷** 90 local authorities have general powers to make highway improvements, including the ability to change street layouts to make more space for walking. The creation or widening of footways is enabled by s.62 of the Act and can be carried out without wider consultation. Local authorities may construct cycleways adjacent to a highway under s.65 of the Act with no requirement to consult. Both these powers can be used by local authorities wishing to create new cycling and walking infrastructure at short notice.

Under the **Road Traffic Regulation Act 1984** and **Local Government Act 1985**, The Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996 gives powers to local authorities to restrict vehicle traffic to create pedestrian and cycling-friendly areas by means of a TRO.⁸⁸ This is less straightforward than works carried out under Part V of the Highways Act as it requires consultation with affected parties, and a full public inquiry in the case of roads used by public transport. However, it is possible to truncate the consultation process by carrying out work under an Experimental TRO and starting consultation after the scheme becomes live. Some schemes, particularly Low Traffic Neighbourhoods, were brought in swiftly to implement available funding during the pandemic without sufficient community engagement and proved very unpopular with some vocal opponents.⁸⁹

University of Westminster's Active Travel Academy with climate action charity, Possible, conducted a systematic review and meta-analysis of traffic data presented in monitoring reports from 46 LTN schemes in 11 London boroughs which were introduced between May 2020 and May 2021. The study found that LTNs have substantially reduced motor traffic on internal roads, without shifting traffic on boundary roads⁹⁰.

In a departure from previous practice, the DfT has given new powers to local authorities in England to use CCTV to issue penalty charge notices to drivers who park or load illegally in mandatory cycle lanes, putting cyclists at risk of a serious accident⁹¹.

The National Planning Policy Framework (NPPF) states that local authorities should identify and pursue opportunities for walking and cycling, and that applications for development should prioritise pedestrian and cyclist movements. This should be reflected in local planning policies. The 2022 consultation on changes to the NPPF identifies that transport planning is a key area to address but provides insufficient detail on how this will be done. Several respondents have commented that the revised NPPF is weak on active travel and does not sufficiently integrate place-making and transport planning.

⁸⁶ <https://www.sustrans.org.uk/national-cycle-network>

⁸⁷ <https://www.legislation.gov.uk/ukpga/1980/66/section/62>

⁸⁸ <https://www.legislation.gov.uk/uksi/1996/2489/contents/made>

⁸⁹ <https://www.rac.co.uk/drive/news/motoring-news/overtaken-planters-and-oil-slicked-roads-low-traffic-neighbourhood/>

⁹⁰ <https://www.wearepossible.org/latest-news/low-traffic-neighbourhood>

⁹¹ <https://www.legislation.gov.uk/uksi/2020/548/made>

The Equality Act 2010 requires that councils have a duty to make reasonable adjustments to avoid putting people with disabilities at a substantial disadvantage compared to people who are not disabled. In the walking realm its tests can be used as a tool to ensure that footways are designed to meet the needs of all.

Waltham Forest Mini-Holland. In 2013, all 18 outer London boroughs were invited to apply for funding from the Mayor of London's Mini-Hollands fund and Waltham Forest was one of three boroughs (with Enfield and Kingston) selected to share the pot of money. Since then, Waltham Forest has used this funding to upgrade streets and the road network to help tackle key issues surrounding road safety, air quality and public health.

Mini-Holland is one of many projects underway to make Waltham Forest safer for walking and cycling and is made up of a total of 13 schemes which include pedestrianisation, traffic reduction and cycle infrastructure. The funding for this is devolved to the Mayor of London and was appraised against Healthy Streets Standards not the Green Book (WebTAG). It would not have been possible in areas which are still required to be appraised against traditional BCRs.

The **Manchester Bee Network** is a plan to connect every neighbourhood and community in Greater Manchester, making it easier for people to get around on foot or by bike. It includes 1,800 miles of proposed cycling and walking network and 2,400 new and improved road crossings. It is possible because it is funded out of the Mayor of Greater Manchester's Challenge Fund which is devolved funding. Some local authorities within the area are also contributing.

Several towns and cities have introduced bike hire schemes, using a combination of their own funds, grant funds such as the Transforming Cities Funds⁹² and their procurement powers.

CoMoUK, the national organisation for shared transport, has produced useful guidance for local authorities to help set up bike hire schemes⁹³. Cycling UK has published a list of different types of scheme in operation and providers.⁹⁴

In 2021, the **E-Cycle Extension Fund**⁹⁵ awarded up to £250,000 to each of nine local authorities to pilot e-cycle hire and loan schemes. **Isle of Wight Council**⁹⁶ was awarded £133,000 to provide a subsidised e-bike hire scheme, a fleet of e-bikes available for loan for up to one month, a peer-to-peer e-bike share scheme and an e-bike corridor. The first bikes were available from November 2021, promoted via a successful e-bike roadshow.

Some authorities including Bristol, Bath & North East Somerset, Southwark and Lewisham also offer a "try before you buy" scheme where people can rent a bike for up to a month to see how they get on with cycling, before buying their own. Cycling UK is running pilot e-bike loan schemes⁹⁷ in Manchester, Sheffield, Leicester, and Luton and Dunstable.

⁹² <https://www.gov.uk/government/publications/apply-for-the-transforming-cities-fund>

⁹³ <https://www.como.org.uk/shared-bikes/starting-and-running-successful-schemes>

⁹⁴ <https://www.cyclinguk.org/article/guide-cycle-share-schemes>

⁹⁵ <https://www.gov.uk/government/publications/e-cycle-extension-fund-successful-bids>

⁹⁶ <https://iow-newsroom.prgloo.com/news/get-on-your-e-bike>

⁹⁷ <https://www.cyclinguk.org/making-cycling-easier>

⊗ **Active Travel: Barriers** ⊗

1. **Funding Mechanisms:** Investment in active travel infrastructure is hampered by the evaluation process which calculates a Benefit Cost Ratio (BCR) for each project. Benefits are generally calculated in economic terms using WebTAG, the DfT 'Green Book'. This tends to favour outcomes such as reduced journey times by calculating economic benefit using traditional transport modelling.

Either the DfT evaluates schemes centrally or transport authorities use the same WebTAG guidance to assess the impact of schemes against strategic and economic cases. Whilst active travel projects will usually meet the strategic case, the assessment of the economic argument is based on models that assign monetary value to speeding up vehicular traffic movements to calculate their BCR. This directly conflicts with the need to reduce carbon. Schemes generally require a BCR of £2 'benefit' for every £1 spent. High volumes of faster traffic typically lead to a high BCR whilst actively increasing carbon emissions.

Economic models work from baselines on the basis of percentage uplifts – which means that they are unable to model (or assign value to) paradigm shifts. The economic appraisal is unable to capture a new piece of infrastructure that creates an entirely different travel pattern (for instance a completely new segregated cycle lane encouraging parents and children to cycle to school) and this means it entrenches existing schemes and can only be used to improve existing infrastructure. Putting a figure on carbon reduction is not given much weight as it is incredibly difficult to measure. Carbon reduction has a financial multiplier but the data is regarded as so unreliable it is given almost no value.

Over time, organisations have created tools that enable the benefits to public health from active travel (and other auxiliary investments such as mobility hubs) to be calculated in the benefits side of the equation. Councils attempting to fund walking and cycling have access to other tools to assess the value of schemes, however, they are not as helpful as this suggests.

"WebTAG is a major obstacle to sustainable schemes. To give just two examples: we've been told that money for an access road to the city centre wouldn't be awarded if traffic levels reduced, due to the 'reduction in economic activity'. And we couldn't introduce a single phase pedestrian crossing due to the cost of delay to traffic." **Local Councillor**

"The range of tools at our disposal are not good enough. It comes down to the fact that only the things where it's easy to prove economic value are assessed. Those are things like movements of traffic, linked to 60-year-old 'predict and provide' approach. For example, if you have a certain number of vehicles getting through a junction you can quantify the number of seconds saved, then you can calculate monetary value. This doesn't include cost of putting cyclists and pedestrians off, or the health consequences." **Local Authority Transport Planner**

"AMAT – the active mode assessment tool – is flawed. If you want to use it on a corridor where there is no cycling infrastructure, you have to input the current levels of cycling to provide a baseline so if something isn't currently used then it only shows marginal benefit. For instance if you have a scheme worth £2m on a route which is so hostile that there's currently only one cyclist and you assume our target increase of 300% for the area, that would only give you four cyclists in total and you're not going to get much of your £2m based on that. However, where the existing baseline is better you'd get more funding. It's a case of where you have a good baseline position, AMAT just makes it easier to get funding and for each iteration it improves. This is no good to get new projects started." **Local Authority Transport Planner**

Where schemes can be built, it is generally because they do not require WebTAG appraisal or the authority has the power and financial control to decide to build despite a poor BCR and takes a political decision to do so. Devolved authorities are able to do this to a greater or lesser extent, depending on their devolution deal.

2. **TROs:** Are an outdated mechanism. The consultation and advertising requirements are time consuming and place a heavy cost burden on small schemes – effectively rendering some of them unviable. A 2019 DfT review of TROs⁹⁸ found that “Users cited multiple pain points with the existing process” and recommended reforms to make the process cheaper, easier to use and fit for the data-driven age. A consultation on proposed changes ran in 2022⁹⁹ but no final recommendations have yet been published.
3. **Obstructions:** Of pavements by parked vehicles and street clutter (bins, advertising boards, etc.) can have a deterrent effect, particularly for visually impaired people, wheelchair users and people with prams/buggies. Although driving on a pavement is illegal, pavement parking is legal outside Greater London, and can only be prohibited in specific areas by applying a TRO. Central government ran a consultation on this in late 2020,¹⁰⁰ proposing to address these issues by reforming the TRO process, introducing civil enforcement, or banning pavement parking outright. As yet no legislative follow-up to this consultation has been forthcoming.

Taking action against vehicles blocking cycle lanes is also problematic: advisory cycle lanes (indicated by a dotted line) cannot be enforced and nor can mandatory lanes created since 2016.¹⁰¹ Under Part 6 of the Traffic Management Act 2004, local authorities have to make a specific application to enforce moving traffic violations, and the area already has to be designated for civil parking enforcement.¹⁰²

4. **Staff Resources and Capacity:** All local authorities have been affected by a decade of reduced resource and funding and have reduced staffing. This means that staff time is reduced and they have few resources to challenge the status quo. This is particularly marked in smaller, less urban authorities where it is harder to raise revenue (e.g. from developers) but which still have a full remit in terms of planning, transport, social and environmental services. It has become increasingly difficult for council officers to find time to work together across departments: such working is crucial for decarbonisation, for instance in ensuring that a local development has an environmentally sustainable transport plan or to increase active travel to schools.

⁹⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/915957/traffic-regulation-orders-and-associated-data-policy-alpha-report.pdf

⁹⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1059131/consultation-on-reform-of-traffic-regulation-orders.pdf

¹⁰⁰ <https://www.gov.uk/government/consultations/managing-pavement-parking/pavement-parking-options-for-change>

¹⁰¹ <https://www.cyclinguk.org/blog/underhand-law-change-undermines-mandatory-cycle-lanes>

¹⁰² <https://www.legislation.gov.uk/ukpga/2004/18/schedule/8>

4.2.2 Micromobility: e-scooters

Small, lightweight e-scooters are becoming commonplace on the UK's streets, but as yet are not legal for private use on highways without a motorbike licence, registration, tax and insurance, as they are classed as motor vehicles.

In early 2020 the Department for Transport announced that it would enable local authorities to launch trials of rental e-scooters. Local authorities were required to submit bids to the DfT demonstrating standards of service, data gathering, insurance and safety, before applications closed in September 2020.¹⁰³ Participating authorities needed to ensure that their traffic regulation orders (TROs) – either temporary, experimental or permanent – were updated to allow e-scooter use.

E-scooter rental trial schemes were subsequently launched at 31 locations in England. In order for these to happen some legislation amendments were required: including in the Road Traffic Act 1988 and Motor Vehicles (Driving Licences) Regulations 1999. The scooters are subject to type approval, including blanket limitations on top speed and power, and the rental operating company must provide insurance. Riders need a full or provisional drivers' licence. Helmets are not mandatory but recommended. There have also been local restrictions imposed: for example, the vehicles are not able to be ridden in certain areas,

even within the trial schemes, or may be speed-limited in others due to safety concerns.

The connected nature of rental e-scooters enables some innovative measures to boost rider safety – for example, in London over the office Christmas party season, users of one scheme had to complete a dexterity test to evaluate whether they had been drinking before they were able to hire a scooter.

Although rented e-scooters have to be returned to a designated area, most schemes do not have parking docks, and have been accused of contributing to street clutter. In some trial schemes such as Bristol, the ability to create kerbside parking areas for scooters has been hampered by the fact that the trial is being implemented by the regional transport authority, but powers to reallocate on-street parking are held by the local area authority.

While some trials have ended, some have been extended until 2024, by which time further legislation is expected to legalise e-scooters in more general use.¹⁰⁴ Widespread use would require amendments to several pieces of legislation, unless they were to be re-classified as similar to electrically assisted pedal cycles (EAPCs).



¹⁰³ <https://www.gov.uk/government/publications/e-scooter-trials-guidance-for-local-areas-and-rental-operators/e-scooter-trials-guidance-for-local-areas-and-rental-operators>

¹⁰⁴ <https://zagdaily.com/featured/the-definitive-guide-to-the-uks-e-scooter-trials/>

4.3 Public Transport

4.3.1 Buses

Buses form an important part of public transport that enable people to move away from car ownership. As buses electrify they enable ‘quick wins’ for decarbonisation. Buses are also vital to many households with lower incomes: households in the lowest income quintile use buses three times as much as the highest.¹⁰⁵ Since bus services tend to serve more than one local authority area, they are typically administered by dedicated transport authorities, rather than individual local authorities: for example, Transport for Greater Manchester.

Outside London and Northern Ireland, no authorities retained direct control of all bus services. The closest approximation is in cities such as Reading, Nottingham and Edinburgh, which retained ownership of their municipal bus companies following deregulation. These services are still obliged to compete with private operators, but local authorities can reinvest their profits – for example, in 2019 Lothian Buses paid a dividend of £7.7 million to its shareholding councils.¹⁰⁶

- **UK100** responded to the [House of Lords Built Environment Committee’s inquiry into Public Transport in Towns and Cities](#) arguing that increasing devolution of transport funding and wider powers, similar to London’s, is key to enabling the coordination and delivery of integrated Net Zero transport networks that are appropriate for local areas.

UK100 responded to the [DfT’s consultation on Ending the sale of new, non-zero emission buses, coaches and minibuses](#), recommending that the Treasury needs to develop a long-term sustainable funding approach to give certainty to bus operators to invest and to manufacturers with visibility of orders to scale up production.

The National Bus Strategy for England¹⁰⁷ published in March 2021, sought to address the role of buses in the context of Net Zero. This promised £3 billion investment in bus services outside London aimed at increasing local transport authority capacity and skills, investment in more comprehensive services, cross-ticketing and zero emission vehicles.

¹⁰⁵ <https://www.gov.uk/government/statistical-data-sets/nts07-car-ownership-and-access>

¹⁰⁶ <https://www.lothianbuses.com/news/2019/06/were-investing-in-our-future/>

In order to access funding, local authorities were required to produce Bus Service Improvement Plans (BSIPs) and enter into Enhanced Partnerships with operators. Most transport authorities have opted to go down this route, but in April 2022 it was announced that the available funding had been reduced to £1.2 billion, and fewer than half of local and unitary authorities which had prepared BSIPs received funding for these.

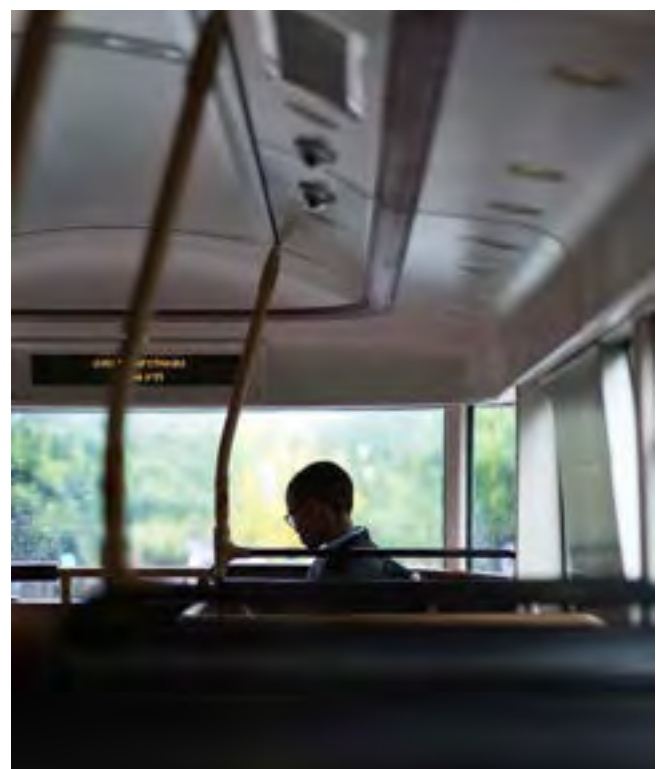
Following a drop in UK bus ridership of up to 90% during the pandemic, an estimated £2 billion of emergency support funding was made available to bus service operators from central government. The COVID-19 Bus Services Support Grant was put in place to support operators to increase services. By late 2022, bus usage had only recovered to 84% of pre-COVID levels.¹⁰⁸ Following the lead of mayoral authorities, the DfT announced that bus services would receive a further £60 million subsidy in December 2022, in order to cap single fares at £2 until 31st March 2023, since extended to end June.

The Transport Act 1985¹⁰⁹ deregulated buses, which means that transport authorities have had relatively few powers to direct where buses should run. They can commission services directly or procure them in specific circumstances from a bus operator. Where bus services are not actually profitable they can be run by a third sector organisation. Organisations that provide transport on a 'not-for-profit' basis can apply for operating permits (issued by the Transport Commissioner) under s.19 or s.22 of the Transport Act 1985. These permits allow the holder to operate transport services for hire or reward without the need for a full public service vehicle operator's (PSV 'O') licence.

The Bus Services Act 2017¹¹⁰ gives transport authorities powers to create Enhanced Partnerships which allow them to specify, for example, timetables and multi-operator ticketing and to register bus services. Mayoral Combined Authorities automatically have power to directly franchise services. Other transport authorities could theoretically also access franchising powers under this Act, but this requires further regulations to be made and approval from the Secretary of State.

The Bus Services Act 2017 requires bus operators to provide much more detailed and real time data on their services. This enables bus timetables and fares to be found online (and in apps) to improve the passenger experience. The Bus Services Act 2017 also prevents local transport authorities from setting up new local authority owned bus companies, although they can purchase existing operators. The National Bus Strategy for England recommended that the latter be reviewed, but that has not yet happened.

Bus Refranchising is a complex process with the potential for drawn out and expensive litigation. Greater Manchester has successfully begun to refranchise bus services despite a judicial review from the incumbent operators.¹¹¹ Liverpool and South Yorkshire are among other transport authorities considering franchising.



¹⁰⁷ <https://www.gov.uk/government/publications/bus-back-better>

¹⁰⁸ <https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic/domestic-transport-usage-by-mode>

¹⁰⁹ <https://www.legislation.gov.uk/ukpga/1985/67/contents>

¹¹⁰ <https://www.legislation.gov.uk/ukpga/2017/21/contents/enacted>

¹¹¹ <https://www.manchestereveningnews.co.uk/news/greater-manchester-news/bus-firms-legal-action-manchester-16481755>

Greater Manchester Combined Authority announced it would begin a franchising process in March 2021, following an extensive public consultation and a strongly favourable vote by its constituent local councils. The aims of franchising include a single, simplified ticketing system, a common visual identity for buses, better integration between services and accessibility improvements. Two of Manchester's major bus operators, Stagecoach and Rotala, began judicial review proceedings to contest this. In March 2022 the review application was dismissed, and Transport for Greater Manchester was able to continue with the implementation of the franchise, which is to take place in three phases covering different areas. In the meantime, some operators have announced cuts to services, ostensibly due to the uncertainty raised by franchising, while other operators have been appointed to run the first wave of franchised services. Wigan and Bolton will have the first new fully franchised buses running from September 2023.

Funding: Greater Manchester, Liverpool City Region, South Yorkshire, Tees Valley, West of England, West Midlands and West Yorkshire have been allocated £5.7 billion in City Region Sustainable Transport (CRST) Settlements¹¹² which will enable those areas to deliver new bus infrastructure and services, alongside other sustainable travel measures. Other areas can access funding from different streams such as the Levelling Up Fund (LUF), the Shared Prosperity Fund (SPF) and the Towns Fund.

⊗ Buses: Barriers ⊗

1. **Bus Deregulation:** The net effect of deregulation is that in most parts of the country there is little network oversight – bus operators run routes on the basis of profitability and cut those that are not profitable. There is no incentive to run 'feeder services' (even if they increase the profitability of main routes) as the rest of the network may be run by a rival.

Because the industry is deregulated, competitors must not consult on routes, pricing or any other element of business as this is deemed 'anti-competitive'. The only exception is where a transport authority sets up a Ticket Operating Company which enables an authority-wide fare box to be distributed.

The National Bus Strategy for England acknowledges these failings of the deregulated bus system and aims to re-introduce significant Local Authority control by tying new funding to Local Bus Service Improvement Plans.

"Greater control over buses is one of the best powers we could have as they are so flexible, compared with light rail for example. The commercial basis of the bus system means that either the public purse picks up the cost of a service or there isn't one." Local Authority Transport Planner

2. **Funding mechanisms:** The financially precarious nature of bus operations is recognised in legislation through the award of the Bus Service Operator Grant (BSOG).¹¹³ This grant repays fuel duty spent, and as such is a perverse incentive as it undermines fuel efficiency and electrification. The National Bus Strategy for England proposed to reform the BSOG to move away from subsidising fuel costs to contributing to miles covered, with an uplift for rural areas, although no details of this have yet been released.

Bus Service Improvement Plan funding was allocated to only 31 of the 79 transport authorities that applied for it, and only £1.08 billion was offered of the £10 billion requested in total¹¹⁴. This means there is a £9 billion deficit in funding for bus services and most areas of the country will not receive any financial help to improve services.

¹¹² <https://www.gov.uk/government/publications/city-region-sustainable-transport-settlements-confirmed-delivery-plans-and-funding-allocations>

¹¹³ <http://www.legislation.gov.uk/uksi/2002/1015/contents/made>

¹¹⁴ https://bettertransport.org.uk/wp-content/uploads/2022/07/Funding_local_bus_services_in_England_June_2022.pdf

- 3. Traffic Commissioners:** The Transport Act 1985 makes provision for Traffic Commissioners in each area. The Traffic Commissioners' role is to issue licences and ensure bus services comply with their licence conditions. Traffic Commissioners are appointed by the Secretary of State (rather than the transport authority). Various Transport Acts have attempted to allow partnerships and better design of bus networks, (Local Transport Act 2000 and Transport Act 2008) however there are conflicting messages (e.g. the 2012 Local Bus Markets Investigation) and a distrust of testing their powers within authorities under constant threats of litigation from the bus industry who view their business model as under threat. The new National Bus Strategy suggests that local transport authorities may regain powers to issue licences.
- 4. Population sparsity:** Many rural areas are transport deserts¹¹⁵ as there are insufficient people to make a bus service profitable for operators. CPRE research found that 56% of small towns across the North East and South West of England have become transport deserts and over 3,000 bus routes were withdrawn between 2010 and 2018, as local transport authorities were unable to continue to provide financial support for these routes. The Rural Mobility Fund (RMF) has awarded grants to 17 local authorities to trial demand responsive transport (DRT) services and investigate ways to run these more efficiently. These trials are ongoing.

Nottinghamshire County Council has been awarded nearly £1.5 million under the RMF, which will be used to purchase a fleet of eight new vehicles. This has enabled the provision of new DRT services to three rural and suburban areas in a way that integrates as closely as possible with the county's fixed timetable public transport, including timetable coordination and through-ticketing. It is also planned to create a new transport interchange and bespoke back-office software for booking journeys.¹¹⁶ In August 2022 Nottsbus On Demand started to be trialled in the villages around Retford, Ollerton and Newark with an evening service for Mansfield.

- 5. Not-for-profit services:** This is a contested area as the 'not-for-profit' element has been open to litigation from for-profit bus operators and has led to the closure of routes operated by community transport operators where they were deemed not to fit the guidelines. This has further limited bus services in poorly served areas. Whilst this has an impact on the availability of local services, there is little the local authority can do as powers currently lie with the Traffic Commissioner.

¹¹⁵ <https://www.cpre.org.uk/resources/transport-deserts-report-a-summary/>

¹¹⁶ <https://www.nottinghamshire.gov.uk/media/2904568/executive-summary.pdf>

4.3.2 Rapid Transit

Rapid Transit (light rail, metro, underground) is a key plank of the Transport Decarbonisation Plan for large urban areas, as their existence encourages modal shift away from cars. The Urban Transport Group reported¹¹⁷ in 2021 that: *“In Nottingham, 30% of Nottingham Express Transit users switched from the car for part or all of their journey. If the Tyne and Wear Metro was closed as many as 42% of Metro passengers in North Tyneside would switch to car or taxi.”* UK Tram’s Strategy for Light Rail¹¹⁸ 2022 sets out the case for light rail but stops short of laying out a strategy.

Transport authorities can develop light rail/tram system proposals, but they require central government legislation and funding and there is a complex interaction between the transport authority and central government before any development can take place. The power to set up a new light railway lie with the Secretary of State under the Transport and Works Act 1992¹¹⁹.

There are light rail or underground systems in nine cities and towns: Birmingham, Blackpool, Edinburgh, Glasgow, London, Manchester, Newcastle, Nottingham, and Sheffield, (plus Merseyrail which is technically a rail system). A number of other authorities are developing proposals for rapid transit systems.

⊗ Rapid Transit: Barriers ⊗

1. **Funding:** Large scale rapid transit networks must pass stringent BCR tests with criteria set out by the central government (the WebTAG system). It seems difficult to make these BCRs stack up even though metro, tram and local rail systems often experience much greater passenger numbers once opened than predicted in BCR modelling. (This was a major barrier to proposals for a rapid transit network in Leeds.)
2. **Timescale:** Developing a rapid transit system can take up to 10 years from plan to operation, with the risk that the project could be cancelled by the Secretary of State.
3. **System Planning and Land:** At the local level there are complex webs of land ownership around rail stations should local authorities want to create more integrated or connecting transport nodes. Land may be owned and separately managed by any combination of Network Rail, the franchised rail operator for the station, the local authority or private bodies and agreements have to be made with each owner or operator.



¹¹⁷ https://www.urbantransportgroup.org/system/files/general-docs/LRT%20funding%20Factsheet%20Finalv2%2019052021_0_0.pdf

¹¹⁸ <https://uktram.org/wp-content/uploads/2022/07/Strategy-for-Light-Rail-Final.pdf>

¹¹⁹ <https://www.legislation.gov.uk/ukpga/1992/42/contents>

4.3.3 Rail

Rail legislation is generally national and policy is developed by the DfT. Virtually all elements of rail infrastructure are dealt with by central government and Acts of Parliament are required to open or close even local stations. Local authorities are only expected to have planning input into railways where they are a metropolitan area with a Passenger Transport Executive.

Rail usage dropped during COVID-19 restrictions and public transport, light rail and tram operators have received a support package of funding totalling around £2 billion, extended until March 2023. Rail operators had their franchises suspended but were paid compensation for lost revenues.

In September 2020 the DfT announced that rail franchising would end and post-COVID the government would reform the rail operating system.¹²⁰ However, the creation of the statutory body to deliver this reform, dubbed Great British Railways, has been shelved as of late 2022 due to lack of parliamentary time.

There are two key issues for local authorities around rail services:

- Influencing the provision of services
- Connectivity: making interconnections with other transport modes easy.

The Williams-Shapps Plan for Rail¹²¹ 2021 (Great British Railways) proposes “partnerships between Great British Railways and local and regional government will be established to give local leaders a greater say in how the railways are run in their area”. This is expected to include integrated ticketing and the potential to influence local rail services so that they meet the needs of area-wide local transport provision.

Inter-mode connectivity is also hampered by difficulties in carrying bikes on trains. Carriage of bikes is specified within rail franchises at the national level, but space for bikes often loses out to the more valuable space for passengers.

The Gear Change report¹²² promises to address some of the connectivity barriers, including investing in cycle routes to stations and increasing capacity to carry bikes on trains. The National Bus Strategy aims to increase connectivity and integrated ticketing between buses and trains.

Network One¹²³ is Tyne & Wear’s combined public transport ticketing system. It offers a ticket covering local buses, local rail, metro and the Shields Ferry with options to buy for weekly, monthly or annual travel. Similarly, Merseytravel¹²⁴ offers weekly, monthly and annual combined tickets for bus, rail and Mersey ferry services.

¹²⁰ <https://www.gov.uk/government/news/rail-franchising-reaches-the-terminus-as-a-new-railway-takes-shape>

¹²¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/994603/gbr-williams-shapps-plan-for-rail.pdf

¹²² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf

¹²³ <https://networkonetickets.co.uk/>

¹²⁴ <https://www.merseytravel.gov.uk/tickets-and-pricing/ticket-types/trio-ticket/>

⊗ Rail: Barriers ⊗

1. **Complexity of regulations and negotiations:** Connectivity between buses and rail is fraught. Bus operators are concerned about losing passengers to rail and there is some hesitancy among them about interchanges at stations. Buses are licenced by the Traffic Commissioner and legally bound to run services to timetables, and operators contravene their licences if they delay services to enable connections (for instance with a train). Only bus services regulated by the local authority can be required to connect with other services and modes: for example, in Greater Manchester there is an ambition to integrate key train services into the Bee Network, and discussions with rail operators with this aim in mind are underway.

4.4 Infrastructure

4.4.1 Electric Vehicle (EV) Charging

EVs are a key component of the UK's transport decarbonisation strategy. Whilst other measures can reduce demand for cars and freight vehicles, there will be a considerable residual demand for private mobility, especially outside the more densely-populated urban areas. The CCC's 2018 report *Plugging the Gap*¹²⁵ recommended that 27,000 public charging points will be needed by 2030. There is a role for both private providers and local authorities.

Shifting to zero emissions vehicles is one of the key areas included in the government's **Ten Point Plan for a Green Industrial Revolution**.¹²⁶ The sale of new petrol and diesel cars and vans will be banned from 2030, with hybrid vehicle sales allowed until 2035. This Plan announced a £1.3 billion investment in charging infrastructure, including on-street charge points. However in the 2021 budget the subsidy available for new EVs was reduced from £3000 to £2500, and in the 2022 Autumn Statement it was announced that Vehicle Excise Duty of £165 per year would apply to EVs from 2025.

The **EV Infrastructure Strategy**¹²⁷ 2022 sets out proposed measures to remove barriers to EV charging, and increase local authorities' role in delivering the infrastructure. Specifically it proposes to "look to take pre-emptive powers, subject to consultation, to ensure there is a clear statutory obligation to develop local charging infrastructure strategies and oversee their delivery." The strategy also includes measures to help develop local authority skills. The Energy Saving Trust offers support and advice to local authorities for EV charge point planning and installation.¹²⁸

Under the **Road Traffic Regulation Act 1984** local authorities have the power, by means of a TRO¹²⁹ to assign street space to EV charging.

Local authorities can procure charging infrastructure for public car parks and on public roads. This process is still being established and there is some caution from authorities as it is new territory. Charging infrastructure installation follows two broad models: either paid for with authorities receiving revenue from electricity sold, or leased in return for provision of infrastructure. Provider models vary but authorities can negotiate terms: it is possible to specify charging regimes for at least some part of the contract term if they wish to encourage uptake of EVs through low tariffs.

¹²⁵ <https://www.theccc.org.uk/wp-content/uploads/2018/01/Plugging-the-gap-Assessment-of-future-demand-for-Britains-EV-public-charging-network.pdf>

¹²⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936567/10_POINT_PLAN_BOOKLET.pdf

¹²⁷ <https://www.gov.uk/government/publications/uk-electric-vehicle-infrastructure-strategy>

¹²⁸ <https://energysavingtrust.org.uk/business/transport/local-authorities/>

¹²⁹ <https://www.legislation.gov.uk/uksi/1996/2489/contents/made>

For homes without a driveway, the lack of access to local and affordable charging is a barrier to EV uptake. There are still only 0.5 public charge points per 1,000 population across the UK, with the highest levels in London (5.5 per 1000 people in Westminster). Two-thirds (66%) of local authorities have fewer than 0.5 per 1,000 people¹³⁰. The **On-Street Residential Chargepoint Scheme**¹³¹ provides local authorities with up to 60% of the cost of installing on-street residential charging facilities (down from 75% prior to 2022), with funding of £20 million allocated for 2022-23. Funding is subject to conditions including installation of contactless payment options and ongoing monitoring. Some 158 local authorities have so far accessed this funding.

The **Local EV Infrastructure Fund**¹³² is due to provide £450 million to support local authorities to put in place charging infrastructure leveraging private sector investment. A £10 million pilot scheme¹³³ involving nine local authorities commenced in 2022.

⊗ EV Charging: Barriers ⊗

- 1. Limited expertise:** Limited expertise as this is a new industry. There is some risk of ‘getting it wrong’ and authorities are concerned about potential future ramifications.
- 2. Grid infrastructure:** The costs of connections in areas with poor infrastructure can be prohibitive. Local authorities have not been seen as strategically important to the development of local energy plans so engagement with them by the energy sector has been limited, although the Network Operators are starting to develop local authority engagement plans. However, the focus has been on cities, and rural areas are likely to be left behind.
- 3. Competition for street space:** Local authorities must ensure streets are accessible for those with mobility issues (see Equalities Act 2010), so ensuring that street furniture (like EV chargers and bike stands) are built out into the street rather than on the footway is essential. Early installations in the London Borough of Islington were criticised by campaign groups for taking up pavement space on roads where they could have been installed in on-street parking bays¹³⁴. Creating proper pavement build outs to accommodate chargers off pavements will reduce parking spaces, with cost, revenue and political implications. Existing competition for on-street parking spaces is expected to be exacerbated by EV charging requirements, with some local authorities considering ‘end of street’ charging bays.
- 4. Energy price variability:** High electricity prices reduce the attractiveness of EVs for new buyers. Charging costs are linked to the price of electricity and subject to fluctuations, in the same way as petrol or diesel prices. Wholesale electricity prices increased rapidly in 2022, which in turn increased the average cost of charging an EV at a public chargepoint, but by March 2023 these were falling again. Home charging remains relatively economical, but is not an option for anyone without off-street parking.

¹³⁰ <http://maps.dft.gov.uk/ev-charging-map/>

¹³¹ <https://www.gov.uk/government/publications/grants-for-local-authorities-to-provide-residential-on-street-chargepoints/grants-to-provide-residential-on-street-chargepoints-for-plug-in-electric-vehicles-guidance-for-local-authorities>

¹³² <https://www.gov.uk/guidance/apply-for-local-ev-infrastructure-levi-funding>

¹³³ <https://www.gov.uk/government/news/drivers-to-benefit-from-20-million-ev-chargepoint-boost>

¹³⁴ <https://londonlivingstreets.com/2018/06/07/call-for-ev-charging-stations-on-roads-not-pavements/>

4.4.2 Parking

Interventions relating to car parking are an under-appreciated tool for influencing travel behaviour in urban environments. The more urban space allocated for parking, the easier car use is, and the less space is available for other modes of transport. Parking can also have a direct effect on the safety of vulnerable road users: for example, if pedestrians have to cross a busy car park to access a service. Over-provision of parking also decreases urban density and makes areas less walkable.

Local authorities have substantial powers in relation to parking, although these are mostly aimed at ensuring there is an adequate supply. There are however a number of interventions relating to parking which authorities can use to encourage more sustainable travel.

Under the **Road Traffic Regulation Act 1984**¹³⁵ local authorities have the power to set charges on designated parking places at whatever level they wish, with no statutory requirement for consultation. It also provides for the introduction of parking permits to restrict parking to certain users, typically local residents, under a TRO, which requires a statutory consultation period. Local authorities can use TROs to repurpose parking towards lower carbon modes. Some have used this to create dedicated parking spaces for electric car club vehicles (e.g. Oxford and Bristol City Councils). Repurposing a parking space may also need planning permission depending on the type of facility installed. The problems with TROs have been covered in the Active Travel section above.

Under the **Transport Act 2000** and regulations introduced in 2009 the **Workplace Parking Levy** gives local authorities the power to charge an annual levy on workplace parking spaces.

The amount of residential parking provided with new developments can have an effect on how their occupants choose to travel, providing other conditions are also met, such as good public transport links. Local authorities can specify maximum parking space allocations for new development via planning guidance. However, the National Planning Policy Framework advocates caution in specifying standards: *“Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport”*¹³⁶.



¹³⁵ <http://www.legislation.gov.uk/ukpga/1984/27/section/46>

¹³⁶ <https://www.gov.uk/guidance/national-planning-policy-framework/9-promoting-sustainable-transport>

Car-free developments are also feasible if local authorities can secure the co-operation of developers. The mechanism for this is that when residents purchase a property in the development, they agree to a restrictive covenant which prohibits private car ownership.¹³⁷

Park and ride is one of the strategies employed by local authorities to reduce traffic in city and town centres. Park and ride schemes have been successful where the local transport strategy and funding has allowed. The main obstacles to park and ride schemes are availability of land and procurement (e.g. of bus operator partners). It is notable that bus operators of park and ride schemes are not always the same operator as other routes within an urban area, reducing the opportunities for simple seamless ticketing for users with more complex onward journeys.

An EV charging street was introduced in **Oxford** as a trial to gauge usage and resident response. This installed charging infrastructure for residents in residential parking bays alongside an electric car club vehicle (which was free to use for residents during the trial). The vehicles and chargers were well utilised.¹³⁸

Leeds City Council has repurposed on-street car parking to bike parking.

The London Borough of Merton has aligned its car parking charges with public transport accessibility levels: there are higher charges for parking that has high levels of public transport accessibility, and lower fees for less well served areas.¹³⁹

Planning guidance in London now sets the maximum amount of parking for new residential developments. These are determined by individual boroughs and are estimated to have reduced parking provision for new developments by 40%.

Brighton and Hove Council Planning Policy H07 Car Free Housing and linked guidance¹⁴⁰ (Park Standards Supplementary Planning Document 14) state that planning permission will be granted to car-free housing in areas covered by a controlled parking zone (CPZ) with good access to public transport and local services. This is secured through s.106 planning obligations where developers and the council willingly enter into legal agreements to amend the relevant TRO to remove the right to parking permits for those specific developments/homes (exceptions are made for disabled residents). The requirement is maintained through covenants on future residents. This approach has been rolled out to smaller schemes to mitigate the impact of overspill parking. It's being achieved by attaching an informative on the permission and mending the TRO to control parking permits. The council is also investigating the impact of making parts of the city centre car-free.

Nottingham City Council introduced a workplace parking levy in 2012, and in 2023/24 charging companies with more than 11 parking spaces an annual fee of £522 per space. Proceeds of this charge are ring fenced and put towards sustainable transport projects. The scheme had national funding and the support of one major employer but was introduced in the face of strong opposition from most of the city's business community. Nottingham remains the only example of a local authority which has introduced a Workplace Parking Levy, although Oxford City and Oxfordshire County Councils are consulting on their proposals. Leicester City Council's plans for a WPL were dropped in November 2022, citing the cost-of-living crisis as a factor.

¹³⁷ <https://www.savills.co.uk/blog/article/241496/residential-property/car-free-developments--for-healthier--cleaner-and-greener-living.aspx>

¹³⁸ https://www.oxford.gov.uk/news/article/1279/report_published_on_phase_one_of_go_ultra_low_oxford_pilot_project

¹³⁹ https://www.brighton-hove.gov.uk/sites/default/files/2022-10/CPP2%20Adoption%20Version%20October%202022%20DIGITAL%20version_0.pdf

¹⁴⁰ https://www.brighton-hove.gov.uk/sites/default/files/2022-10/CPP2%20Adoption%20Version%20October%202022%20DIGITAL%20version_0.pdf

⊗ Parking: Barriers ⊗

1. **Parking:** Parking is one of the most controversial issues for high streets. There is an almost universal belief that the ability to store vehicles on-street is inextricably linked to economic benefit, despite empirical evidence to the contrary. Retailers hugely underestimate the spend associated with people arriving by non-car means and overestimate the value of people arriving in cars.¹⁴¹ This ensures that any debate about parking becomes highly emotive.
2. **Resident parking schemes:** Residents parking schemes are widely used across the UK to provide on-street parking for those who need it, while discouraging commuting into a town or city by car. However, they are often contentious: objections include the price of permits (which may not offset the cost of administering the scheme), difficulty accommodating visitors, and displacement of parking to areas just outside the zone covered by a scheme.
3. **Car Free developments:** Nationally there is still a presumption that developers should be able to set their own levels of parking provision. The NPPF states that *“Local planning authorities should only impose local parking standards for residential and non-residential development where there is clear and compelling justification that it is necessary to manage their local road network.”* This may be why parking maximums for residential developments are not yet widely used.
4. **Loss of revenue:** There are tensions between the desire to remove parking in order to deter vehicle use and losing the income it generates.
5. **Land ownership:** Private car parks are outside council control, as are car parks owned by other government bodies such as Network Rail, which can affect key locations such as city centres and rail stations. However many local authorities have subsidiary companies owned in partnership with private car providers which gives a greater level of influence.



141 "Shoppers and how they travel", <https://cidadanialxmob.tripod.com/shoppersandhowtheytravel.pdf>

4.4.3 Vehicle Sharing Systems

Informal and formal vehicle sharing mechanisms such as car clubs can contribute to transport decarbonisation. Car club membership reduces private car ownership and as a result also increases use of public transport and active travel, as members treat the car as one of a mix of transport options.

CoMoUK¹⁴² is the national organisation for shared transport. Its 2022 report found that each car club vehicle replaces 18 private cars. Car clubs tend to operate newer more efficient vehicles and many are moving to EVs as the primary vehicle choice. Car clubs include those run by private operators, community organisations or peer-to-peer sharing platforms.

Local authorities can actively encourage car clubs through their powers to provide supporting infrastructure such as dedicated parking spaces, free or lower cost parking for car club vehicles, and EV chargers for car clubs. Councils can also directly procure car club services. Car clubs for car-free developments have been used as a tool to enable residents to have shared access to a vehicle without every dwelling requiring its own parking. Several councils include requirements for, or guidance on, the provision of car clubs in their planning documents (e.g. Surrey, Norwich, Richmond on Thames, Tower Hamlets).

Lift sharing tends to be a more informal arrangement, although some large employers run their own schemes. Local authorities can set up their own scheme for staff or in partnership with other public sector organisations, and support businesses or community groups to set up their own schemes.

In 2022, the government published Local Authority Toolkits for Car Clubs¹⁴³ and Lift Sharing.¹⁴⁴

Norwich City Council has used parking policy and TROs to grow a healthy car club network. The reduction of car ownership in ‘hard to park’ areas of city centres indicates that parking restrictions generally depress car ownership which in turn reduces emissions.

Durham County Council has partnered with Derwent Valley Car Club to provide EV car club vehicles for residents in rural villages around the county¹⁴⁵.

The **Go North East** bus operator has partnered with Co Wheels car club provider to offer a season ticket that includes bus use and membership of the car club, and existing car club members can obtain the season tickets at reduced rates.

¹⁴² <https://www.como.org.uk/shared-cars/starting-and-running-successful-schemes>

¹⁴³ <https://www.gov.uk/government/publications/car-clubs-local-authority-toolkit/car-clubs-local-authority-toolkit>

¹⁴⁴ <https://www.gov.uk/government/publications/lift-sharing-local-authority-toolkit/lift-sharing-local-authority-toolkit>

¹⁴⁵ <https://www.netzeronortheastengland.co.uk/case-studies/transport/electric-vehicle-car-hire-launches-in-county-durham>

4.4.4 Clean Air Zones (CAZ)

Whilst air quality is not directly the same as decarbonisation, cutting the numbers of internal combustion engine vehicles has a decarbonising effect. Conversely, the previous focus on CO₂ emissions lead to an increase in diesel vehicles with negative impacts for air quality. A holistic approach considering co-benefits and assessing for unintended negative impacts needs to be taken in all transport decisions.

- UK100's [Yes we CANZ! Local leaders delivering Clean Air and Net Zero report](#) introduces the concept of Clean Air Net Zero (CANZ) — which means ensuring Net Zero policies include a Clean Air audit and vice versa.

Identifying the “wins-wins” to be gained from a CANZ approach to transport, the report calls on local authorities to:

- Support a modal shift away from private car reliance
- Empower and work with local communities to make informed choices with more data transparency and access

The follow up report, [What CANZ be done?](#) outlines case studies from UK100 members which illustrate examples of actions which tackle clean air and Net Zero together.

In June 2022, UK100 and Healthy Air Campaign partners hosted a Clean Air parliamentary drop-in event attended by nearly 40 MPs and peers, including ministers and shadow ministers, to build support for more ambitious action on air quality.

Part IV of the **Environment Act 1995**¹⁴⁶ requires local authorities to review air quality in their area and designate Air Quality Management Areas (AQMAs) if improvements are necessary. The effectiveness of AQMAs depended on the area. Some locations are naturally problematic due to convergence of roads and the limits of public transport capacity.

Where an AQMA is designated, local authorities are also required to work towards objectives prescribed in regulations for that purpose. An air quality action plan describing the pollution reduction measures must then be put in place. These plans contribute to the achievement of air quality limit values at local level and can include a CAZ.

146 <https://www.legislation.gov.uk/ukpga/1995/25/part/IV>

A CAZ “defines an area where targeted action is taken to improve air quality and resources are prioritised and coordinated in order to shape the urban environment in a way that delivers improved health benefits and supports economic growth.”¹⁴⁷ Clean Air Zones aim to address all sources of pollution, including nitrogen dioxide and particulate matter, and reduce public exposure to them using a range of measures tailored to the particular location. Within a CAZ there is also a particular focus on measures to accelerate the transition to a low emission economy. It should provide active support to increase take up of ultra-low emissions vehicles as well as supporting active travel.

A CAZ can include charging for vehicles that do not meet emissions standards if they enter or move within a specified zone. The legal framework for charging CAZs is contained in the Transport Act 2000. This framework expects local authorities to use all other relevant legislation to reduce emissions in the zone – i.e. Bus Services Act 2017, taxi and Private Hire Vehicle licensing and vehicle standards.¹⁴⁸ Most authorities are wary of charging mechanisms and the impact that might have on local businesses and are offering financial support for upgrades to cleaner vehicles.

Sixty local authorities were considering CAZs in September 2019. Several cities have since decided not to go ahead as local pollution levels are below the threshold limits or for reasons of cost or local opposition. As of early 2023, eight are operational (plus London ULEZ) with others under review expected in 2023.

Birmingham CAZ started in June 2021, with older cars, taxis and HGVs all subject to a daily charge within the boundary of the A4540. Revenues from the scheme are reinvested in active travel, public transport and air quality initiatives.

Bristol City Council has implemented a smaller CAZ-D Clean Air Zone in November 2022, after postponing the launch date from October 2021. This covers the main retail and commercial areas in the city centre, plus the Cumberland Basin, an area earmarked for a substantial new residential and commercial development.

Newcastle, Gateshead and Sheffield launched CAZs at the end of January 2023, with charges applicable to LGVs, HGVs, buses and taxis. Newcastle has postponed charges to LGVs due to supply chain issues for cleaner vehicles.

City of York Council's CAZ was introduced in January 2020. This is bus-based as the length of the roads in York was deemed insufficient for a full-blown CAZ. All services entering the city centre more than five times a day must use Euro 6 or EVs (enforced by the Traffic Commissioner). York now has a sizeable fully electric bus fleet, with some compromises. For example, an electric bendy bus wouldn't fit under the bridge used for the Park and Ride route so they had to accept a Euro 6 vehicle instead.

¹⁴⁷ <https://www.gov.uk/government/publications/air-quality-clean-air-zone-framework-for-england/clean-air-zone-framework>

¹⁴⁸ <https://www.gov.uk/government/publications/air-quality-clean-air-zone-framework-for-england/clean-air-zone-framework>

⊗ Clean Air Zones: Barriers ⊗

1. **Charging:** There is some reluctance to use charging mechanisms available due to the fear of its potential impact on local businesses and political fallout for the authority. One example of this is Greater Manchester, which successfully applied to revise its Clean Air Zone plan in 2022 on the grounds that it would cause undue hardship to people in the affected area, as well as citing supply chain issues with compliant vehicles.¹⁴⁹
2. **Strategic Road Network:** Local authorities do not have powers to enforce CAZ on the National Highways network. As an example, the A1 west of Newcastle is in a deep valley with industrial estates and very poor air quality but, because the A1 is managed by National Highways, the local authority has no power to make changes or create a CAZ. To make the case to allocate money to a scheme, they must prove that it has an impact on the air quality on the strategic road network. As vehicles travel on both the strategic road network and local roads proving the benefit just to the strategic network within the framework is difficult.
3. **Smoothing traffic flow:** This is recommended as a potential measure to assist local authorities in meeting their air pollution targets. A traffic authority has an obligation to fulfil the Network Management Duty under Part 2 of the Traffic Management Act 2004¹⁵⁰ to manage their road network to achieve (as far as may be reasonably practicable): “(a) securing the expeditious movement of traffic on the authority’s road network; and (b) facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority.” This is controversial and has resulted in calls to remove traffic calming measures from streets. Guidance issued by the National Institute for Health and Care Excellence later had to be clarified after it was widely misreported as recommending the removal of speed bumps in polluted areas.¹⁵¹

- **UK100** responded to [DEFRA’s consultation on the Designation of National Highways as a relevant public authority](#), stating that many sources of local pollution are outside local authority control, a major source being the Strategic Road Network (SRN), so it is important that National Highways is designated as a “Relevant Public Authority” who can then be required to act as ‘Air Quality Partners’ within the LAQM Framework.
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UK100 also responded to the [Public Accounts Committee’s Inquiry on Tackling Local Air Quality Breaches](#), recommending that Government action to reduce NO₂ must be better integrated with action to reduce other pollutants such as particulate matter and ammonia, in areas where limits are being breached.

UK100 members [co-signed a letter to DEFRA](#), advocating that the Government brings forward the forward the PM_{2.5} target of 10µg/m³ to 2030 in line with the WHO’s interim guideline. UK100 also submitted this recommendation to [DEFRA’s consultation on the Environment Act 2021](#).

¹⁴⁹ <https://cleanairgm.com/clean-air-plan/#the-clean-air-zone>

4.4.5 Congestion Charging and Road Pricing

Congestion charging and road pricing in general can play a role in decarbonisation by rebalancing road use in favour of public transport and away from the private car.

Local road charges can be introduced in England, Wales and Scotland. In England charges can be introduced by County Councils; Metropolitan District Councils; Transport for London; a London Borough Council or the Common Council of the City of London; and Passenger Transport Executives/ Integrated Transport Authorities.

Devolution arrangements in England mean that in practice the relevant authority in some areas would be an entity such as Transport for Greater Manchester or Network West Midlands, under Part III and Schedule 12 of the **Transport Act 2000**, as amended by the **Local Transport Act 2008**.

The Road User Charging Schemes (Penalty Charges, Adjudication and Enforcement) (England) Regulations 2013¹⁵² allows transport authorities outside London to enforce road charging mechanisms and impose penalties on vehicle owners. London's congestion charging scheme was enabled by different legislations, the Greater London Authority Act 1999 and the Greater London (Central Zone) Congestion Charging Order 2004.

As numbers of electric vehicles increase there is a recognition that a new mechanism for road pricing needs to be developed. Vehicle Excise Duty (VED) and fuel duties contribute £35 billion in taxation. The current exemptions and very low charges for low emissions vehicles, if continued, would by 2040 reduce the £7 Billion from VED available for transport infrastructure to almost zero. The Transport Select Committee Road Pricing Report 2022¹⁵³ recommends that the government urgently investigate alternative charging mechanisms in order to manage the expectations of EV owners that they will need to pay for road use, and avoid the potential to increase congestion caused by “free” motoring for EV drivers in CAZ's. “The Government must examine how an alternative road pricing mechanism can be delivered alongside devolved local road charging schemes, while respecting the existing devolution settlement.” This indicates there is potential within any new road pricing mechanisms for local charging schemes which could be within the remit of the local transport authority.

¹⁵⁰ <https://www.legislation.gov.uk/ukpga/2004/18/section/16>

¹⁵¹ <https://www.theguardian.com/environment/2016/dec/01/nice-pricing-smooth-driving-measures-to-cut-pollution-and-save-lives>

¹⁵² <https://www.legislation.gov.uk/uksi/2013/1783/contents/made>

¹⁵³ <https://committees.parliament.uk/publications/8754/documents/88692/default/>

London is the only current example of congestion charging in the UK. The **London Congestion Charge** was increased during the pandemic to reduce any shift to private cars. The increase was initially temporary but was made permanent at the end of 2021. The cost of the Congestion Charge increased to £15 from £11.50, on weekdays it operates up to 18:00 and it now applies at weekends. In addition, it removed the residents' discount for new applications from 1 August 2020. This latter represents a significant shift as these are some of the “non-essential” trips that have been hardest to reduce since the Congestion Charge started.

Other schemes in Manchester and Edinburgh were rejected by public vote. The introduction of Clean Air Zones in cities across England has also reduced the impetus to introduce further charging schemes.

⊗ Congestion Charging and Road Pricing: Barriers ⊗

1. **Political will:** Political will is the most significant barrier to road pricing. The Transport Select Committee noted that “The political risks associated with road pricing have made it too toxic a prospect for successive Governments”.

The votes in Manchester and Edinburgh were controversial and exposed fractures along party lines and schisms between inner and outer boroughs, car drivers and public transport users. In some ways the referenda were held in an attempt to balance competing needs and visions, however the ultimate outcome was that the schemes did not go ahead and the tools the authorities were left with to combat emissions were more limited.

Research into the acceptability of road pricing found that schemes can be acceptable if voters have experience of the benefits of road pricing, costs of overheads are low, any revenue is ring fenced for transport projects and there are reductions in other motoring taxes.¹⁵⁴ Planners point to Sweden for its example of trialling congestion charging first then having a referendum at the end of a year's trial as a different model which might be easier to introduce.

However, the landscape has now changed with the urgent need to comply with CAZ legislation. Cities have developed charges for city centre access within that framework with some consultation processes but without referenda. The barriers to them are largely political, although the structures of authorities and the interplay between local authorities and area-based Combined or Transport Authorities can also play a role in watering down measures.

¹⁵⁴ https://www.racfoundation.org/wp-content/uploads/acceptability_of_road_pricing-walker-2011.pdf

4.4.6 Speed Limits

Local Transport Authorities can set speed limits under the **Road Traffic Regulation Act 1967**.

While speed limits on the strategic road network are set by the Highways Authority, local authorities have the power to set speed limits on the local road network. There is detailed government guidance on factors to consider when setting speed limits which includes mean and 85th percentile traffic speeds, road geometry and presence of vulnerable users. The same guidance encourages local authorities to introduce more 20mph limits and zones in residential areas, and on roads which receive significant pedestrian and cycle use.¹⁵⁵

Following the introduction of this guidance in 2013, there has been an increase in the number of areas with 20mph limits and research has been undertaken into their health and road safety benefits. A 2018 literature review¹⁵⁶ for the Welsh Government showed that the evidence for reduced casualties as a result of 20mph limits was the strongest, with it being likely there will be improved air quality and that active travel may be increased, but that the evidence for this was weak. This is a result of there being a small body of peer reviewed research and lack of randomised control trials. More recent modelling by Future Transport London¹⁵⁷, taking into account the impact of acceleration, shows a 22% reduction in CO₂ emissions at 20mph compared with 30mph. More research is needed in this area to produce stronger quality evidence.

A local authority can enforce lower speed limits by the authority of the police force.¹⁵⁸ The extent to which this happens in practice is unclear, although there is now widespread use of partnership-based solutions such as Community Speedwatch.

⊗ Speed Limits: Barriers ⊗

1. **Motoring Lobby:** There is a powerful motoring lobby which argues against speed limits, congestion charges and parking restrictions, in favour of the benefits to the motorist of free-flowing and faster traffic.¹⁵⁹
2. **Lack of evidence of impacts:** Studies have found a low overall reduction in traffic speeds where limits are not enforced or supplemented with engineering measures. Evidence on road safety benefits is also mixed, with some areas showing clear reductions in casualties, others not. However lowering speed limits does seem to improve user perception of a road, particularly for walkers and cyclists.¹⁶⁰ It is not clear whether this results in a shift away from car use.
3. **Speed and emissions:** There is a complex relationship between speed and both carbon and NO_x emissions depending on acceleration and braking as well as car fuel and engine warmth. There has been controversy at the idea that freer flowing traffic will improve air quality (as noted in the CAZ section).
4. **Piecemeal approach:** There is a tendency in the UK to create piecemeal solutions which create an on-paper benefit for specific metrics but a larger disbenefit for active travel.

¹⁵⁵ <https://www.gov.uk/government/publications/setting-local-speed-limits>

¹⁵⁶ <https://gov.wales/sites/default/files/publications/2019-08/the-state-of-the-evidence-on-20mph-speed-limits-with-regards-to-road-safety-active-travel-and-air-pollution-impacts-august-2018.pdf>

¹⁵⁷ <https://futuretransport.info/urban-traffic-research/>

¹⁵⁸ https://www.20splenty.org/how_las_can_enforce

¹⁵⁹ <https://roadsafetygb.org.uk/news/blanket-20mph-speed-limits-senseless/>

¹⁶⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/757307/20mph-headline-report.pdf

4.4.7 Planning System

The legal requirements for local authorities are to set planning policies in the Local Plan, within the National Planning Policy Framework 2019 (NPPF)¹⁶¹.

- **UK100** responded to DfT's consultation on the [Strategic road network and the delivery of sustainable development](#) advocating that longer term funding and capacity is needed for work between National Highways and local authorities to improve air quality, in order to ensure better integration between the SRN and local plans and spatial development strategies.

Whilst the assumptions about car parking spaces are addressed elsewhere there are other local planning instruments which can have implications for decarbonisation:

- Community Investment Levy (CIL)/s.106 agreements – these provide for developers to contribute to the infrastructure and community in which their development takes place and can be used to require contributions to sustainable transport modes
- Each development is also required to have a sustainable transport plan, however the reality is that good ideas often fail to be carried through the planning process or adequately monitored afterwards.

Edinburgh City Council: Over the past decade the application of developer agreements through s.75 of the Town and Country Planning (Scotland) Act 1997 has contributed significantly to the creation of the on-street parking infrastructure for the car club scheme in Edinburgh, enabling residents to shift from privately owned vehicles to lower emission or electric shared vehicles.

The majority of the city's permit-controlled car club parking infrastructure has been funded by developer contribution. Generally these are in the streets adjacent to a development and may be used by all local residents as well as local employers. Although little of Edinburgh's car club parking is located on developer's land, some large developments provide accessible off-street car club parking where on-street kerb space is in short supply. In addition, some areas are covenanted as car-free with the car club vehicle the only option for residents.

Planning officers understand the benefits of the car club and work with both the developer and the car club to ensure that the vehicles are supported whilst reaching sustainable utilisation rates.

¹⁶¹ <https://www.gov.uk/guidance/national-planning-policy-framework/9-promoting-sustainable-transport>

⊗ Planning System: Barriers ⊗

- 1. Planning contributions:** Planning contributions are not suitable for designing an integrated sustainable transport system as they are typically specific to each development, not the area as a whole, or do not provide sufficient contribution for a radically new travel system. Some planning conditions are time-limited and do not enable long term provision e.g. support for a bus service for a limited number of years, then it is not a viable service for a private operator to take on.
- 2. An underlying assumption that car use will be the main mode of travel:** A review¹⁶² of Garden Towns and Villages, which were designed to fully incorporate sustainable transport, has shown that the planning system fails to deliver this. There is frequently a time lag between construction of the housing and provision of sustainable transport, so residents become used to relying on cars.
- 3. Lack of detailed travel design input throughout the development process:** A 2019 KPMG report¹⁶³ noted that: *“Many bus operators highlighted that basic design principles, such as footpaths to bus stops, the distance to bus stops, and on-street parking provision, are often overlooked by planners and developers but are fundamental to the attractiveness and feasibility of providing bus services to new housing developments.”*
- 4. Two-tier and smaller authorities:** Developer contributions are decided at the District level but strategic transport planning is the responsibility of the County. In smaller authorities or areas with low land values, planning contributions are stretched thinner. Combined with reduced resources in planning, this leads to piecemeal and less coherent sustainable transport requirements from developers. For large developments in urban areas, there is a much higher expectation from the developer that they will have to contribute to public transport: Leeds City Council planning conditions include a contribution for a future tram system.
- 5. All of the barriers covered in the Buildings chapter are also relevant here:** Sustainable transport fights with affordable homes and sustainable design for limited funds under the viability test; lack of planning resource and capacity; lack of weight of climate change aspirations and policies; long time scales, etc.

¹⁶² <https://www.transportfornewhomes.org.uk/wp-content/uploads/2020/06/garden-village-visions.pdf>

¹⁶³ https://greenerjourneys.com/wp-content/uploads/2019/02/20190213_KPMG-Sustainable-Transport-and-New-Housing-Report-for-TKH.pdf

4.5 Vehicles

4.5.1 Emissions Standards

Local government does not have the power to set emissions standards for vehicles, but these standards can be used within CAZ frameworks and within TROs when designating which class of vehicles can use which streets.

The UK government has announced a ban on the sale of petrol and diesel cars by 2030, with hybrid car sales being phased out by 2035. In general, regulation and taxation of vehicles with a view of shaping the national fleet is the remit of central government.

Local authorities can also prioritise certain kinds of vehicles for parking permits which are used by some to prioritise ultra-low emissions vehicles.

The main powers are within CAZ which are being implemented in varying ways across the country. It is up to the controlling authority to decide which vehicles to control in order to achieve the results – some target measures at commercial vehicles and others include private cars. It remains to be seen which are most successful at reducing emissions.

Combined and Transport Authorities can use vehicle standards to improve the overall emissions performance of vehicles in their areas, through other funding mechanisms.

Coventry City Council introduced a £1 million scrappage scheme which will give motorists £3,000 of mobility credits to give up their car, if it is more than 10 years old. These credits are for other forms of transport – bus, train, car club and bike share. The scheme is funded by the Future Transport Zone funding which was awarded to four areas, and has been popular enough to reach capacity at 100 subscribers.

The Mayor of London has introduced a number of vehicle scrappage schemes.¹⁶⁴ Low income and disabled residents can receive up to £2,000 to scrap a car or motorcycle that does not meet the Ultra-Low Emission Zone standards. The van scrappage scheme offers payments of up to £9,500 for small businesses (up to 50 employees) switching to electric vans. From March 2021 grants of up to £15,000 were available to scrap heavy vehicles up to a maximum of three vehicles. These latter two have been suspended for new applications due to excessive demand.

⊗ Emissions Standards: Barriers ⊗

1. **Lack of scale and capacity in smaller authorities:** Where there are few air quality issues, there is little incentive to address vehicle standards.

¹⁶⁴ <https://tfl.gov.uk/modes/driving/scrappage-schemes>

4.5.2 Taxis and Private Hire Vehicles (PHV)

Under the **Local Government Act 1976** local authorities have the power within their licensing function (within a regulatory structure set by central government) to specify standards for taxi and PHV companies operating in their areas. Local authorities also have the power to request taxi and PHV trip data. All local licensing has the provision that origin and destination addresses should be surrendered to the local authority or police on request.

There is recognition in government that licensing needs a thorough review.¹⁶⁵ In 2018, the average person in England made 10 trips travelling 62 miles by taxi or PHV. We spend over £2 billion per year on taxi and private hire travel. Across the UK there are around 300,000 licensed vehicles – the most highly utilised driving 30,000 miles per year. This represents an opportunity for decarbonisation for local authorities.

The Air Quality (Taxis and PHV Database) (England and Wales) Regulations 2019¹⁶⁶ requires all local licensing authorities in England and Wales to provide registration data for every relevant vehicle (taxi and private hire) in its authority. Assessing the environmental impact of the taxi fleet at a local level is still problematic, as this requires resources to collect and analyse trip data from PHVs.

All Clean Air Zone schemes in England apply to taxis, meaning that taxis must meet a minimum standard of Euro 6 (diesel) and Euro 4 (petrol). Local authorities which have introduced CAZs have also announced financial support for taxi operators to upgrade to cleaner vehicles.

Cambridge City Council is using licensing requirements to gradually upgrade the taxi and private hire fleet and manage a switch towards EVs. New licences are only issued to vehicles under four years old and meeting Euro 5 standard or higher and, as of April 2020 are only issued to zero or ultra-low emission vehicles. Licences will not be renewed on vehicles that are over nine years old or do not meet Euro 4 standard or higher. The authority has set a date by which only electric or ultra-low emission vehicles will be admitted to the city centre. There are already a notable proportion of electric and hybrid taxis and PHV in central Cambridge.

Bristol City Council has received funding from the Department for Environment, Food and Rural Affairs (Defra) to offer 100 taxi owners incentives of over £3,000 if they purchase an ultra-low emission vehicle. The scheme was running from 2018-2023.



¹⁶⁵ <https://www.local.gov.uk/publications/councillor-handbook-taxi-and-phv-licensing-2021>

¹⁶⁶ <http://www.legislation.gov.uk/uksi/2019/885/introduction/made>

⊗ **Taxis and Private Hire Vehicles (PHV): Barriers** ⊗

“Taxi and PHV licensing is not really regarded as part of transport. In smaller authorities they’re very low on the list of priorities.” **Local Authority Transport Planner**

1. **Political will:** Local licensing standards have produced widely divergent taxi and PHV fleets – from a largely EV fleet in Cambridge to an older, largely diesel, fleet in Calderdale. Taxi drivers can be a forceful lobby with strong advocates among council members.
2. **Cross-border travel and licensing:** The localised nature of licensing is somewhat undermined by digital booking which enables taxis to be licensed by one borough and operate in another. This means that there is a trend to obtain licences from boroughs with lower standards.
3. **Resources in licensing:** Greater collection of data on taxis and PHV could enable better regulation of emissions, but it is unlikely that resources will be available to implement this.

4.5.3 Freight

Under the **Road Traffic Regulation Act 1984** local authorities have the power to restrict the use of specific types of vehicle, including Heavy Goods Vehicles (HGVs), via a TRO. Restrictions can apply to a specific vehicle type, area, delivery time or any combination of these.

Most of the freight transport in the UK is road-based and has a disproportionate environmental impact in urban areas. In 2020, HGVs were responsible for 19% of transport sector GHG emissions¹⁶⁷ despite only making up 6% of mileage driven.¹⁶⁸ HGVs also pose a disproportionate risk to pedestrians, cyclists and even drivers, being around three times as likely to be involved in a fatal accident as all types of traffic.¹⁶⁹

Use of vans for deliveries in urban areas is growing rapidly particularly due to increasing deliveries of online shopping. The distance travelled by vans is growing much more rapidly than for transport in general. In 2020 vans accounted for 16% of transport GHG emissions.¹⁷⁰

Local authorities can restrict vehicles in certain areas via a TRO.¹⁷¹ Restrictions can apply to a specific vehicle type, area, delivery time or any combination of these. There is a requirement to consult any parties who may be affected by the order, and there is a real risk of knock-on effects when imposing restrictions. For example, a time-based restriction may result in an increase of deliveries outside those times.

In a class B, C or D Clean Air Zone all HGVs need to meet Euro VI emissions standards. Class D Clean Air Zones, as introduced in Birmingham and Bristol, also apply to vans, which must meet the same emissions standards as private cars and taxis.

¹⁶⁷ <https://www.gov.uk/government/statistics/transport-and-environment-statistics-2022/transport-and-environment-statistics-2022#main-findings>

¹⁶⁸ <https://www.gov.uk/government/statistics/transport-and-environment-statistics-2022/transport-and-environment-statistics-2022>.

¹⁶⁹ MTRU for Campaign for Better Transport, HGV fatal collision rates, November 2017

¹⁷⁰ Transport and Environment Statistics 2022, *ibid*.

¹⁷¹ www.legislation.gov.uk/ukpga/1984/27/contents

City of York Council currently operates a restricted access scheme for vehicles to certain streets in its historic centre, known as Footstreets. Delivery vehicles need to make special arrangements to access these streets between 10:30 and 17:00.

“We haven’t noticed any displacement of deliveries to times when restrictions don’t apply. But we’re still having issues with vehicles damaging historic buildings – particularly large HGVs”
Local Councillor

As a result, interventions to reduce the impact of freight are often a combination of restrictions and incentives. The NPPF recommends introducing planning conditions that support sustainable logistics, such as siting industrial developments in areas which are served by good transport connections.

Some local authorities have also introduced freight consolidation points or centres to transfer deliveries from larger, more polluting lorries to smaller vehicles before they enter city centres. Consolidation centres can increase the efficiency of freight by facilitating higher payloads and reverse logistics. Developments of this type typically require seed funding and ongoing support to be financially viable, but there are examples of established consolidation centres in Sheffield, London and other major cities. Participation in consolidation centre schemes is optional, except for a limited number of schemes (e.g. Heathrow Airport) where it is a condition of businesses’ tenancies.

The DfT’s Review of Last Mile Logistics¹⁷² is seeking solutions to reduce the impact of increasing delivery traffic and in 2022 the LGA published recommendations¹⁷³ to government to support local authorities in developing solutions.

The new cycling and walking vision includes proposals to increase last mile deliveries by e-cargo bikes, which will require suitable cycling infrastructure. The eCargo Bike Grant Fund¹⁷⁴ has provided £2.6 million funding to 32 local authorities in two tranches (2019/20 and 2021/22) to support the purchase of over 500 e-cargo bikes. As a result there are a growing number of cargo bike delivery services, as well as trial schemes for businesses and large institutions in urban areas.

⊗ Freight: Barriers ⊗

- 1. Commitment from commercial partners:** The success of consolidation centres is highly dependent on the level of support from businesses. In particular it is difficult to pass on the cost to city centre businesses while out-of-town can avoid it. A more substantive national framework for consolidation centres is yet to emerge.¹⁷⁵

¹⁷² <https://www.gov.uk/government/publications/review-of-last-mile-logistics-2019/position-statement-on-last-mile-logistics>

¹⁷³ <https://www.local.gov.uk/publications/future-last-mile-deliveries-understanding-local-perspective>

¹⁷⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1035420/e-cargo-bike-local-authority-project-summaries.csv/preview

¹⁷⁵ https://www.researchgate.net/publication/271840841_Urban_Freight_Consolidation_Centers_Case_Study_in_the_UK_Retail_Sector

4.5.4 Local Authority Fleet

The **Public Services (Social Value) Act 2013** places a statutory duty on local authorities to consider how their procurement processes can generate wider social, economic and environmental benefits.

Local authority vehicles make a significant contribution to the authority's emissions, and in 2019 these fleets were still overwhelmingly made up of diesel vehicles.¹⁷⁶ The justification given for this is that there are few low emission models currently available for many local authority vehicles such as waste collection lorries. However, this is changing with more local authorities investigating or piloting alternative options such as electric or hydrogen powered vehicles.

In 2022, the Government published a Zero Emission Fleets Local Authority Toolkit¹⁷⁷ to help develop a strategy to move towards zero emissions vehicles.

Leeds City Council has the largest local authority fleet of 335 EVs, including 50 electric cars and vans to be distributed to local businesses for two months as part of an EV Trials Scheme to encourage wider uptake. The Council also offers a “try-before-you-buy” e-cargo bike loan scheme.

Nottingham City Council¹⁷⁸ has offered 50 electric vans to businesses for up to three months and a “try-before-you buy” electric taxi scheme. It converted over 20% of its fleet to electric by the end of 2020 and has created an EV only service centre available to external customers, creating an additional revenue stream. In addition, a successful joint bid with Derby will create three new “e-mobility hubs”, with EV charging, car and bike hire combined in a single location, together with a dedicated booking platform for these.

Manchester City Council has invested in 27 electric waste collection vehicles with 30 charge points in partnership with Engie and Biffa.

Cheshire East is running a hydrogen refuse collection lorry pilot with Local Growth Fund funding.

Liverpool City Region has agreed to invest £12.5 million from the Transforming Cities Fund to purchase 20 hydrogen-powered buses, to add to their existing low carbon bus fleet.

¹⁷⁶ <https://www.transport-network.co.uk/Vast-majority-of-council-vehicles-run-on-diesel-despite-pollution-concerns/16344>

¹⁷⁷ <https://www.gov.uk/government/publications/zero-emission-fleets-local-authority-toolkit/zero-emission-fleets-local-authority-toolkit>

¹⁷⁸ <https://www.transportnottingham.com/leading-by-example/>

There is also a link here to other areas such as the waste strategy and procurement policies. **Wakefield Council** found that they need to know whether to order big new vehicles or smaller EVs if weekly food waste collection is required; they have a seven-year life and this is something that needs procuring within the current procurement cycle.

Another avenue which local authorities can pursue to reduce emissions is proactive management of “grey fleet” - the term for employees using their own vehicles on company business. Research by the Energy Saving Trust indicates that local authorities are responsible for around a third of grey fleet trips and that these trips are typically made in older, more polluting vehicles than the local authority’s own. In addition, the use of fuel cards and payment of mileage charges by HMRC act as a perverse incentive against planning journeys efficiently. It recommends that local authorities develop systems to transfer frequent or high-mileage journeys away from employee’s own vehicles.¹⁷⁹

Calderdale Council have introduced a Climate Emergency Human Resources policy which targets a reduction in mileage driven for work purposes, including for carers. It provides a hierarchy of travel and provides access to e-bikes, public transport expenses claims and aims to reduce car use. The council is reviewing jobs which require the staff member to own a car.

⊗ Local Authority Fleet: Barriers ⊗

1. The main barrier is cost as local authorities typically have to fund these changes through their own budgets or Invest to Save.



¹⁷⁹ <https://governmentbusiness.co.uk/features/how-public-sector-can-tackle-grey-fleet>

4.6 Transport Summary

Transport is the main area where a lack of local authority powers is significantly impeding progress towards zero carbon.

In the last two years some progress has been made towards addressing this which will have an impact in some areas, particularly the major cities, for example:

- Devolution agreements and major funding such as the City Region Sustainable Transport Settlements are allowing city regions to move towards delivering integrated low carbon transport and active travel plans
- Clean Air Zones enable local authorities to control emissions of vehicles in some areas. Although road charging is unpopular, the existence of these zones starts to normalise the idea that vehicle transport can and should be controlled locally and the benefits to health and the climate can outweigh individual freedom to drive
- Enhanced Partnerships are increasing the ability of local transport authorities to influence bus networks and systems
- EV uptake is growing faster than anticipated and there is a commitment to rapidly install the necessary infrastructure.

However, in reality, it is the large urban conurbations that will see most benefit from these changes. There is still a significant gap for local authorities in rural areas, most towns and smaller cities.



⊗ Key Barriers ⊗

Lack of control and oversight of the whole transport system

Local authorities are one player in the transport matrix. Only London is able to implement an area-wide strategy as it has control over the funding for the whole system, and even then, it is dependent on the level of funding settlement awarded by central government, thanks to the withdrawal of its annual operating grant and the reduction in fare revenues caused by the pandemic.¹⁸⁰ Devolution deals in other areas are starting to create the kind of closely integrated system seen in London. Several factors are outside local authority control and they have little power to influence decisions or funding:

- Major roads under the remit of **National Highways**, which is only mandated to spend its clean air budget on its own network even when mitigation off the network (e.g. on roads managed by local authorities) would be a more effective use of its funding
- **Buses** (unless franchised) are under the control of the **Traffic Commissioners** who have no remit to consider transport planning as a whole
- **Bus operators** are companies whose responsibility is to their shareholders and they are required to be profitable. There are few incentives to invest in new services or improved networks, and competition rules stop them acting to create a cohesive network
- **Train operators** are both private companies and regulated by central government. There is no incentive to integrate services within a multi-mode local plan.

Finally smaller and two-tier authorities have split roles.

This all leads to a piecemeal approach in most areas, which sees individual successes promoted (such as Nottingham's workplace parking or Cambridge's low emissions taxis) whilst missing the ability to deliver an integrated plan.

Funding

Competitive funding continues to widen the gap between those authorities that have the capacity to develop successful bids, often based on demonstrating previous ability to deliver funded programmes, and those that do not have the resources to do so. This achieves the opposite of "Levelling Up".

The public transport funding promised in the National Bus Strategy has not been delivered and the mechanism for allocating the much smaller pot has left the majority of local areas without support to improve.

Large capital scheme funding is awarded by central government. The funding models used to assess investments (DfT's WebTAG, based on the Treasury Green Book) put a high value on free-flowing vehicle traffic and almost no value on active travel. This is a massive inhibitor of low carbon transport schemes wherever funding decisions are not devolved or specifically ring fenced for active travel. Funding is often actively channelled into schemes that make roads less attractive to people on bikes, in wheelchairs or walking because there is no method to account for health and carbon benefits. Effectively funding is channelled into maintaining a myth of free-flowing traffic whilst making low carbon forms of transport less safe and less attractive.

¹⁸⁰ <https://www.london.gov.uk/tfl/tfl-funding-settlement-another-short-term-sticking-plaster>

Lack of a strategy for rural and semi-rural areas

Large urban areas have the population density and infrastructures that enable zero carbon transport options to be more readily installed and suit the travel demands of the population. The solutions for smaller towns and rural areas are more difficult to achieve and more difficult to fund using the government's funding mechanisms. Over 30% of the population and 44% of local authorities are in areas classed as predominantly rural or urban with significant rural. The Urban Mobility Strategy has been in place for over 3 years but there is still no strategy for the more rural areas.

Political will and organised opposition

There is a vocal and growing lobby that views any attempt to get people out of their cars as restricting freedom. Parking is seen as an emotive issue and political risk. Providing free parking is equated with "free" travel. Road charging is an even more difficult issue for politicians to take on, and needs strong national leadership to change not only the national strategy for vehicle and fuel taxation but also the ability for local leaders to determine the best mix of usable and affordable alternative travel options alongside any restrictions and related charging mechanisms for their areas.

The nature of opposition to some transport related carbon reduction and clean air projects has changed significantly since late 2022, and in some areas now resembles previous campaigns sharing inaccurate information about wind turbines. This rise in opposition ranges from genuine local concerns to proposed changes through to organised national campaigns exploiting the issue to incite fears about control and surveillance off the back of pandemic restrictions.

In 2022 **Oxford City Council's** Local Plan 2040 preferred options consultation included reference to 15 minute neighbourhoods¹⁸¹. The subsequent **County Council's Central Oxfordshire Travel Plan**¹⁸² proposed to introduce six new traffic filters on key connecting roads around the city as part of a net-zero transport network, aiming to improve air quality, reduce car journeys and road fatalities. These proposals were meant to ensure that most residents can access goods and services within a short distance of home. Alongside local people expressing their concerns about the scheme, the councils were faced with a high profile, nationally organised campaign of opposition that included wide-spread international social media outrage against "surveillance culture" and "climate change lockdowns", demonstrations, misleading leaflets and threats to councillors and officers.

The heightened sense of controversy and genuine fears over a minority of violent threats risk eroding the political will to implement bold but effective measures. Some local leaders may be hesitant to act decisively in the face of vociferous opposition, despite Government guidance urging them to roll out traffic management schemes to address national Net Zero and air quality targets. However, it also speaks to the need to fully involve and properly engage with communities on net zero proposals, enabling fears and myths to be addressed, and to put in alternatives for people and businesses before charging or restrictive schemes are implemented.

Capacity and Resources

Cuts in funding have reduced the time available for some transport authorities to introduce and manage radical carbon reduction programmes, and limit the capacity for cross-departmental /cross-authority working.

¹⁸¹ https://www.oxford.gov.uk/info/20067/planning_policy/1460/oxford_local_plan_2040

¹⁸² <https://www.oxfordshire.gov.uk/residents/roads-and-transport/connecting-oxfordshire/central-oxon-travel-plan>

4.6.2 Transport Conclusions

National policy is slowly moving in the right direction to support local authorities to deliver a Net Zero local transport plan. However, there are still structural barriers that need to be addressed to allow this delivery to happen.

The decarbonisation of local transport networks is being obstructed by centralised approaches to funding and decision-making. Increasing devolution of transport funding and wider powers, similar to London, are key to enabling the coordination and delivery of integrated Net Zero transport networks that are appropriate for local areas.

4.6.3 Recommendations for Transport Powers

UK100 Top Three Transport Recommendations:

- 1** Devolve the powers for local leaders to develop a London-style integrated, reliable, more affordable, and simpler to use regional public transport service. This includes incorporation of the oversight of buses into the local transport authority role, giving LAs the power to require bus and rail operators to collaborate on timetabling and cross-ticketing and requiring National Highways to cooperate with local authorities on emissions reduction schemes on major highways within the local area.
- 2** Devolve and pool local authority transport funding to provide longer term certainty, with funds allocated in a non-competitive way on the basis of local transport plans. Local authorities should have the power to access transport funding using alternative justifications to WebTAG and WebTAG should be revised to increase the value assigned to traffic reduction, active travel and health impacts.
- 3** Reduce the high costs of connecting EV charging networks to the grid and include every local, city and regional authority in designing and shaping the charging infrastructure across its area for public, freight, and bus networks.

Key supporting policy, frameworks and resources are required from national government to underpin local authority powers:

- Revision of the DfT WebTAG model: to remove the factors that favour road projects and increase the value of traffic reduction, active travel and health impacts
- Moving from competitive funding to providing support for all areas
- Allocate more funding to active travel and public transport
- Develop and deliver a strategy for Rural Mobility
- Revise the role of Traffic Commissioners
- Revise the process for TROs to make them less cumbersome and expensive to set up
- Review support for local transport authorities to enable them to form successful Enhanced Partnerships and, where suitable, establish bus franchising
- Introduce requirements to address local area-wide air quality, traffic reduction and emission targets into National Highways' remit
- Powers to require private companies and other organisations to cooperate with local authorities on delivering area-wide emissions reductions
- Resources to enable and increase joint working across departments, authority areas and organisations, alongside increases in transport planning capacity and guidance
- Strengthen policy in the NPPF to require sustainable transport contributions to be part of an area-wide transport emissions reduction plan.

Powers in Place: the Handbook of Local Authority Net Zero Powers

Buildings:



5.1 Buildings: Overview

CO₂ emissions caused by energy use in housing, commercial buildings and the public sector account for around 41% of the UK total, with housing alone contributing 30%.¹⁸³ Between 2005 and 2020, these building related CO₂ emissions fell by 48%, primarily due to decarbonisation of the electricity supply network, with gas and solid fuel emissions falling 24%. The main source of emissions from the housing sector is the use of natural gas for heating.

There has been very little focus on emissions from industrial buildings and very little data exists on their CO₂ contribution, which is not separated out from industrial process emissions.

Reducing emissions from buildings requires a combination of:

- Ensuring all new buildings are Net Zero carbon
- Retrofitting existing buildings to minimise their emissions and decarbonising heat
- Providing low or zero carbon energy infrastructure to supply buildings.

This chapter concentrates on the first two of the above: new buildings and existing buildings.

Energy infrastructure is considered in a separate chapter.

Local authorities can have significant influence over the emissions related to new buildings in their area, subject to the constraints of national planning policy, but have more limited power to affect the energy performance of existing buildings.

5.1.1 Key Strategies

The **Heat and Buildings Strategy 2021**¹⁸⁴ sets out the issues the government hopes to address and proposals for measures to improve the energy performance of buildings. There is a strong focus in the introductory text about energy efficiency and retrofit, and the measures included are covered in this chapter. But overall it is unambitious and lacking sufficient scope and funding in many areas to deliver the headline targets. There remain significant areas of uncertainty where the strategy's action is merely to explore opportunities and consult.

¹⁸³ <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2018>

¹⁸⁴ <https://www.gov.uk/government/publications/heat-and-buildings-strategy>

**5.1.2 Existing Powers related to Building Performance**

Relevant Legislation	Power enabled or blocked
Town and Country Planning Act 1947 Town and Country Planning Act 1990 Planning and Compulsory Purchase Act 2004 Localism Act 2011 Neighbourhood Planning Act 2017	Framework requiring local authorities to develop local plans and give permissions for developments
Planning and Energy Act 2008	Set energy standards above building regulations and require on-site renewables for new developments
Town and Country Planning Act 1990 Planning Act 2008	Introduced s.106 agreements and the CIL to provide developer contributions to supporting infrastructure
Localism Act 2011	General Power of Competence (GPoC) Set up own housing development organisations <i>Barrier:</i> abolished regional spatial strategies and introduced Neighbourhood Plans with consequent extra demands on each Local Planning Authority (LPA)
Neighbourhood Planning Act 2017	<i>Barrier:</i> Centralising power allowing the Secretary of State to rule that an LPA may not impose certain planning conditions
Local Government Act 1988 and Localism Act 2011.	Loan capital to other organisations to build homes (e.g. Housing Associations)
Land Compensation Act 1973, Acquisition of Land 1981, Planning and Compensation Act 1991, Neighbourhood Planning Act 2017	Compulsory purchase of land to enable own development
Town and Country Planning Act 1990	Deal with abandoned buildings and spaces
Homelessness Reduction Act 2017	Justification for building council housing
Localism Act 2011: General Power of Competence	Power to do anything an individual may do, unless specifically prohibited. Enables commercial activities including setting up development companies, making loans to other organisations
Local Authority Land Act 1963	Enable local authorities to acquire land, build and fund those activities
The Limits on Indebtedness (Revocation) Determination 2018	Removed cap on council borrowing for house building
Housing and Planning Act 2016	<i>Barriers:</i> Extended Right to Buy, forced councils to sell high value homes, automatic planning consent given by national government on any land allocated in a development plan document
Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015	Minimum Energy Efficiency Standards (MEES) for rented properties

Housing Act 2004	Housing Health and Safety Rating System (HHSRS) - local authorities keep under review the conditions of residential buildings in their area and take action where hazards are identified
Homes (Fitness for Human Habitation) Act 2018	Supporting legislation setting standards for landlords and private housing that can be enforced under HHSRS
Energy Performance of Buildings (England and Wales) Regulations 2012	Energy Performance Certificates (EPCs) on sale or rent or property
Building Act 1984, The Building Regulations 2010 and (Amendment) Regulations 2021	Building Control functions relating to energy performance of new buildings and changes to existing buildings, and contractor compliance schemes
A Decent Home: Definition and Guidance for Implementation, Department for Communities and Local Government in June 2006	Decent Homes Standard for social housing – a duty to report
Clean Air Act 1993 and 2019 Clean Air Strategy	Limit pollution from burning fuels
The Electricity and Gas Energy Company Obligation (ECO) Order 2018	Directing a proportion of ECO money to homes identified by the council
Warm Homes and Energy Conservation Act 2000	Actions to address fuel poverty
Local Government Act 2003	Grants for central heating in private homes
Regulatory Reform (Housing Assistance) (England and Wales) Order 2002	Home improvement grants
Home Energy Conservation Act 1995	Reporting on energy conservation measures undertaken
The Environmental Permitting (England and Wales) Regulations 2010, Environment Act 1995 and Clean Air Act 1993	Enforcing emissions standards in industrial and commercial premises
General Permitted Development Order (GPDO) 2013	<i>Barrier:</i> Planning permissions not required for conversion of offices to dwellings.

5.1.3 Scope of Local Authority Power

Before considering the detail of local authority powers, it is worth noting the relative numbers of buildings over which they have any degree of power or control. In practice this is currently limited to at most 10% of homes, although that proportion could increase to around 20% if the Minimum Energy Efficiency Standards (MEES) for private rented properties tighten as planned for 2025-28. For non-domestic buildings, local authorities' direct power is currently even more limited, but again will increase significantly as planned MEES changes are enacted.

New Buildings	Number / Scale		Local authority power or control
Housing	1,388,000 homes completed in 2016-21, 18% of which achieved an EPC less than B ¹⁸⁵		Power to require marginal improvement over national standards Power to build homes to own standards
Non-domestic buildings	£122bn investment in 2020-22 ¹⁸⁶		Power to require improvement over national standards
Existing Homes	Number ¹⁸⁷	%	Local authority power or control
Owner occupier	15,857,547	64%	Limited to homes with extreme cold or heat issues Some control over home improvements or refurbishments through Building Control Potential to check properties have an EPC on sale, through Trading Standards
Private rented	4,876,457	20%	As above plus properties with an EPC lower than E through MEES
Rented from Registered Provider	2,523,939	10%	As above plus homes not meeting the Decent Homes Standard
Rented from Local Authority	1,615,378	6%	Full power, subject to funding and capacity constraints
Non-Domestic Premises	Premises (approx.)		Local authority power or control
Owner occupied	785,000	39%	Some control over building improvements or refurbishments through Building Control Regulation of polluting businesses
Rented	1,228,000	61%	As above plus properties with and EPC lower than E through MEES

¹⁸⁵ England and Wales completions since 2016 Zero Carbon Homes standard was to have been implemented, before being cancelled

¹⁸⁶ Approximately since non-domestic buildings should have been Net Zero

<https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/datasets/outputintheconstructionindustrysubnationalandsubsector>

¹⁸⁷ <https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants>

5.2 New Buildings

5.2.1 Planning Powers

Action needed: New buildings to be zero carbon combined with infrastructure for zero carbon transport and energy supply.

Local Planning Authorities (LPA) (District and Unitary Authorities) set the policies that define the need for development and acceptable standards, provided these can be justified within the national policy landscape. Building standards provide the minimum enforceable standard of energy performance at the building design stage.

Combined Authorities and County Councils can influence Local Plans through wider spatial planning policies and guidance (e.g. the London Plan, Local Transport Plans).

The power to develop local plans is set up in the **Town and Country Planning Act 1947**¹⁸⁸, **Town and Country Planning Act 1990**¹⁸⁹, **Planning and Compulsory Purchase Act 2004**¹⁹⁰, **Localism Act 2011**¹⁹¹ and **Neighbourhood Planning Act 2017**¹⁹².

The Building Act 1984¹⁹³ empowers local planning authorities to enforce building standards and set up the framework for the Building Regulations.

The planning system locks in future emissions levels, so early rather than delayed action is critical. LPAs have been using their powers to push for better than national carbon standards in buildings for almost 20 years. Whilst this initially helped push national government to introduce national changes in planning that address climate change (e.g. the first NPPF and Planning Guidance), until recently it has become progressively more difficult to demand better standards. Government policy to “build to any standard” and a “bonfire of red tape” positioned the imposition of requirements such as low carbon or affordable homes as the major barriers to development.

¹⁸⁸ <https://www.legislation.gov.uk/ukpga/1947/51/enacted>

¹⁸⁹ <https://www.legislation.gov.uk/ukpga/1990/8/contents>

¹⁹⁰ <https://www.legislation.gov.uk/ukpga/2004/5/contents>

¹⁹¹ <https://www.legislation.gov.uk/ukpga/2011/20/contents/enacted>

¹⁹² <https://www.legislation.gov.uk/ukpga/2017/20/contents/enacted>

¹⁹³ <https://www.legislation.gov.uk/ukpga/1984/55>

Tackling climate change through the planning system is one of the strategic aims of the **National Planning Policy Framework**¹⁹⁴ 2021 revision (NPPF), which states that:

“152. The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.”

In December 2022, the government published a consultation on the Levelling-up and Regeneration Bill: Reforms to National Planning Policy¹⁹⁵ which includes some proposed changes affecting existing buildings but nothing specifically relevant to energy performance of new buildings. However there is a risk that the proposed demand for “beauty” may be taken as means to override highly sustainable buildings, and concern that as yet undefined proposals to develop National Development Management Policies with statutory weight might defeat local policies with strong net zero requirements.

Under the Planning and Energy Act 2008,¹⁹⁶ LPAs have the power to include policies imposing reasonable requirements for—

- (a) a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development;
- (b) a proportion of energy used in development in their area to be low carbon energy from sources in the locality of the development;
- (c) development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations.

The Written Ministerial Statement 25th March 2015¹⁹⁷ (WMS) stated that the option to include requirements for energy efficiency in new dwellings that exceeds the Building Regulations would be removed in amendments to the Planning and Energy Act 2008 in the Deregulation Bill 2015 and until then Planning Authorities could not set conditions with requirements above a Code for Sustainable Homes Level 4 equivalent.

The amendments to the Planning and Energy Act 2008 have not yet been enacted and the government has confirmed that it does not intend to, so on the basis of the WMS powers remain in place to:

- Set conditions requiring dwellings to achieve Code for Sustainable Homes Level 4 equivalent (or a 19% reduction on the Dwelling Emission Rate (DER) against the Target Emission Rate (TER) based on the 2013 Edition of the 2010 Building Regulations (Part L))
- Set conditions requiring non-domestic buildings to achieve an energy performance above the Building Regulations (no restrictions were placed on this in the WMS)
- Require a proportion of energy used in the development to be supplied from a renewable or low carbon source in the locality of the development.

¹⁹⁴ <https://www.gov.uk/government/publications/national-planning-policy-framework-2>

¹⁹⁵ <https://www.gov.uk/government/consultations/levelling-up-and-regeneration-bill-reforms-to-national-planning-policy/levelling-up-and-regeneration-bill-reforms-to-national-planning-policy>

¹⁹⁶ <https://www.legislation.gov.uk/ukpga/2008/21/section/1>

¹⁹⁷ <https://www.gov.uk/government/speeches/planning-update-march-2015>

The specific detail noted in the first point of the WMS above has now been superseded by changes to the Building Regulations (see below), so the power held under the Planning and Energy Act now contradicts the WMS on that point. Those councils that had incorporated higher standards of energy efficiency for dwellings into their Local Plan documents as detailed in the WMS now find these to be out of date. Local authorities do retain the right to require developments to achieve higher standards than the current Building Regulations through the Planning and Energy Act 2008, although, controversially, this has been subjected to different interpretations by the Planning Inspectorate.

Building Standards 2021

Changes to the Building Regulations 2021¹⁹⁸ which came into force in June 2022 brought in 31% reduction in CO₂ on average per dwelling over the previous 2013 Part L (Conservation of Heat and Power) standard and an average 27% CO₂ reduction for non-domestic buildings. The revisions also introduced changes to the way energy efficiency is measured, new guidance on ventilation and an increase in the ventilation rates required (Part F), new standards on overheating (Part O) and requirements to install electric vehicle charging infrastructure (Part S).

A further significant change is that the new standards will apply to each individual building where the building work commences after 15 June 2023. Before this, a whole site could have acquired planning permission before the change in regulations and applied the previous standards to the entire site, even if it were not built out for several years.

A remaining issue for Net Zero is that these Building standards only apply to “regulated emissions” (those related to heating, ventilation and lighting). Anything else that uses energy in the building (something that is plugged in such as appliances, computers, secondary electric heaters, dehumidifiers, or mobile air conditioners) is excluded. As building fabric improvements reduce the heating demand, these unregulated emissions account for a greater proportion of the total energy demand. Finally, the standards apply to the design of the building, and there is no mechanism for monitoring in-use energy demand and emissions.

Future Homes Standard and Future Buildings Standard

The Future Homes and Buildings Standards aims to ensure new buildings are “net zero ready” from 2025 and will not require retrofitting to become net zero once the electricity grid has decarbonised. The standard should achieve carbon reductions of 75-80% on the 2013 building regulations for homes. It is due to be introduced in 2025 following a further consultation in 2023. Although the detail of this consultation is yet to be published the government response to the Future Homes Standard Consultation 2019¹⁹⁹ and Future Buildings Standard Consultation 2021²⁰⁰ set out the expected direction.

- No gas connection for new homes from 2025
- Primary energy to be used as a metric alongside the Fabric Energy Efficiency Standard in order to promote the fabric first approach
- The energy performance gap and embodied carbon in buildings are recognised as key issues and further work will be done to address these prior to the Standard being published.

It is expected that local authorities will retain the right to set higher energy performance standards. This issue has been tested at Inspection by several councils in 2022-23.

¹⁹⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1040800/Circular.pdf and <https://www.gov.uk/government/collections/approved-documents>

¹⁹⁹ <https://www.gov.uk/government/consultations/the-future-homes-standard-changes-to-part-l-and-part-f-of-the-building-regulations-for-new-dwellings>

²⁰⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1040925/Future_Buildings_Standard_response.pdf

Both the Cornwall Council Climate Emergency Development Plan Document²⁰¹ and Bath & North East Somerset (BNES) Local Plan Partial Update²⁰² aim to implement an energy-based net zero policy and include the following energy based requirements for new housing:

- 40kWh/m²/year – total energy use (including unregulated)
- 30kWh/m²/year – space heating demand
- On-site renewable energy generation to match total energy use.

BNES will also impose net zero operational carbon standards for new major non-residential development, and limit embedded carbon emissions in building materials to 900kg CO₂e/m².

The Planning Inspection report²⁰³ for Cornwall stated that:

“While I acknowledge that there are still those who express scepticism, the scientific community and governments worldwide fully accept the dangers posed by climate change, and the need for urgent action to address it. In that context, it seems to me that it would be perverse to criticise the Council for attempting to do too much, too soon. As a result, I am content that the DPD has been positively prepared and is justified. There is no undue variance from national policy.”

“In assessing the Council’s approach to sustainable energy and construction, the WMS of 25 March 2015 is of limited relevance. While it remains extant, any inconsistency with its provisions does not mean that the approach the Council has taken lacks justification. In that sense, there is nothing in the Council’s approach that raises issues of soundness.”

The Inspector’s recommendations included several modifications to strengthen the proposed climate change policies.

The Inspector for BNES noted that²⁰⁴:

“The WMS 2015 has clearly been overtaken by events and does not reflect Part L of the Building Regulations, the Future Homes Standard, or the legally binding commitment to bring all greenhouse gas emissions to net zero by 2050. I therefore consider that the relevance of the WMS 2015 to assessing the soundness of the Policy has been reduced significantly, along with the relevant parts of the PPG on Climate Change, given national policy on climate change. The NPPF is clear that mitigating and adapting to climate change, including moving to a low carbon economy, is one of the key elements of sustainable development, and that the planning system should support the transition to a low carbon future in a changing climate. [..]

I am satisfied that the energy efficiency standards set out in Policy SCR6 are justified and that they would not threaten deliverability or viability of housing development.”

²⁰¹ <https://www.cornwall.gov.uk/planning-and-building-control/planning-policy/adopted-plans/climate-emergency-development-plan-document/>

²⁰² <https://newsroom.bathnes.gov.uk/news/council-adopts-ground-breaking-planning-framework>

²⁰³ <https://www.cornwall.gov.uk/media/10pmiq1e/appendix-1-cornwall-climate-emergency-dpd-final-report-1.pdf>

²⁰⁴ <https://beta.bathnes.gov.uk/policy-and-documents-library/local-plan-partial-update-inspectors-final-report>

The **Bristol Local Plan Review**²⁰⁵ November 2022 is still in consultation at the time of writing. It includes Draft Policy NZC2: Net zero carbon development – operational carbon, which states:

Development will be expected to:

- Achieve a maximum 15 kWh/m²/year space heating demand;
- Achieve the following standards:
 - In the case of new homes and other forms of accommodation, a maximum energy use intensity of 35 kWh/m²/year;
 - In the case of major non-residential development, the operational energy/ carbon requirements of BREEAM 'Excellent' consistent with Draft Policy NZC1; and
- Provide on-site renewable electricity generation with an output equivalent to at least the annual energy consumption of the development, as calculated using an operational energy model.

The policy specifies the routes to acceptance where it is technically unfeasible to meet these requirements onsite and alternative mechanisms for compliance such as Passivhaus accreditation.

The London Plan (2016): Zero carbon residential buildings from 2016 and zero carbon non-domestic buildings from 2019. Major development proposals should provide a reduction in expected CO₂ emissions through the use of on-site renewable energy generation. London boroughs should develop detailed policies and proposals that promote and are consistent with the achievement of the Mayor's strategic CO₂ emissions reduction target for London: 60% (below 1990 levels) by 2025.

Other routes: voluntary standards and specific demands

Other authorities have not taken the route of introducing more stringent climate change policies in their Local Plan but have successfully worked with the construction industry to press for higher standards to be met voluntarily. This approach tends to work best in areas with high land and house values, where the relative cost of improvements is marginal and benefits can be used to increase market value.

Local authorities can deliver higher standards in certain areas if they are identified as meeting a particular need, such as regeneration. Where an area is covered by an Area Action Plan, it is generally easier to include more specific demands. These demands are typically for higher levels of affordable housing, but could also cover better carbon emissions standards, or more cycling routes.

Planning Powers summary

Using planning to meet Net Zero is not the best approach: higher standards incorporated into the building regulations with immediate effect would provide the quickest and most consistent route to zero carbon buildings. However, in the short term LPAs continue to need the ability to demand higher standards to meet Net Zero carbon ambitions for both housing and non-residential buildings.

²⁰⁵ <https://www.bristol.gov.uk/files/documents/5446-bristol-local-plan-review-nov-22-further-consultation/file>

5.2.2 Council Owned Homes

Local authorities have the power to build homes either for rent or sale. Where private developers are unwilling to meet the local authority ambitions to deliver low carbon homes, some are taking this route to improve the quality of housing stock available in their areas. They could use the same powers to build non-domestic buildings, either for their own use or private use, although to date work has focussed on housing.

Under the **Localism Act 2011** local authorities can establish a wholly-owned housing company, or can loan capital funding to other organisations such as Housing Associations under the **Local Government Act 1988 and Localism Act 2011**. They have powers to acquire land where this is not available through Compulsory Purchase Orders (**Land Compensation Act 1973, Acquisition of Land 1981, Planning and Compensation Act 1991, Neighbourhood Planning Act 2017**), and deal with abandoned buildings and spaces under the **Town and Country Planning Act 1990 s.215**. The **2017 Homelessness Reduction Act** requires all councils to prevent and relieve homelessness, providing the argument for investment in homes for people not provided for by the market or other social housing providers.

Removing the borrowing cap on Housing Revenue Account in 2018²⁰⁶ has increased the rate at which councils are building new homes. A study in 2021²⁰⁷ found that the number of local authorities with a housing company increased from 57% in 2017 to 83% in 2021. 80% are directly engaged in the provision of housing, building over 20,000 homes in 2020-21, which includes market sales as well as affordable homes. A key finding of this report was that “Higher environmental standards in development may cost more but they may result in fewer arrears and lower maintenance costs”.



- UK100's [End the wait. Insulate. Report](#) sets out how redesigning the Government's Social Housing Decarbonisation Fund to allocate funding based on need rather than through competitive bidding could help protect some of the most vulnerable households from the gas price crisis by permanently slashing energy bills.
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²⁰⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/751989/Limits_on_Indebtedness_Determination_2018.pdf

²⁰⁷ https://www.ucl.ac.uk/bartlett/planning/sites/bartlett_planning/files/morphet_and_clifford_2021_-_local_authority_direct_delivery_of_housing_iii_report43.pdf

Milton Keynes and various London Boroughs are also using the carbon offset levy set out in their planning policies to invest in energy improvements to their own estate.

Exeter City Council has built over 200 council homes to Passivhaus standard, as well as the first council owned Passivhaus standard leisure centre and Extra Care Scheme of 53 flats. To support this the Housing Development Team are Passivhaus Certified. By 2019 the cost premium was down to 8% above standard construction and by 2020 they delivered Passivhaus apartments in blocks up to 4 storeys at 4% lower cost than standard designs²⁰⁸. In response to the lack of genuinely affordable homes provided by the market, in 2018 Exeter City Council set up its own development company, Exeter City Living, to build homes for sale and market rent to similar standards. They have a pipeline of 1,000 homes. Around 50% are expected to be market sale/rent.

Norwich City Council has built over 200 new homes to Passivhaus standard with a mix of homes for sale and social rent. In 2019 the 93 homes on Goldsmith Street, a mix of 1-4 bed flats and houses, won the RIBA Stirling Prize.

Oxford City Council's Housing Company (OX Place) has selected seven developers to build over 2,000 low/zero carbon homes in the next 10 years, of which 1,100 will be council housing²⁰⁹. This follows a pilot of eight “zero-carbon”²¹⁰ homes using prefabrication to achieve high standards of energy efficiency along with triple glazing, air source heat pumps and solar PV. The developers will work to one of three standards of construction:

- a carbon reduction of 40% or more from the 2021 building regulations
- Passivhaus equivalent standard - meeting required primary energy demand of 60 kWh per m² per year
- zero carbon for regulated and unregulated energy, with a preference for low embodied energy.



²⁰⁸ https://www.passivhaustrust.org.uk/UserFiles/File/research%20papers/Costs/2019.10_Passivhaus%20Construction%20Costs.pdf

²⁰⁹ https://www.oxford.gov.uk/info/20010/housing/1449/oxford_needs_homes/3

²¹⁰ Regulated emissions only i.e. only those directly influenced by the building fabric

⊗ 5.2.3 Barriers to Higher Standards in New Buildings ⊗

1. **Lack of weight of climate and energy policies:** Declaring a Climate Emergency holds no weight in planning, nor does a Local Area Energy Plan (LAEP), although some councils that have declared emergencies are revisiting their Development Plan Documents to see where they can be better aligned with the climate change goals. In practice, the Climate Change Act also appears to hold little weight in planning policies, as detailed below.
2. **Planning Inspectorate inconsistency:** While Cornwall and Bath and North East Somerset Council are fortunate to have had their zero carbon buildings policies approved, other councils such as Lancaster City Council and West Oxfordshire have had their similar policies refused by the Planning Inspectorate apparently on the basis that the WMS 2015 holds more weight than the Climate Change Act. This inconsistency and lack of agreement on the relative importance of different government policies is severely hampering efforts of the more proactive councils to improve the energy performance of new buildings. Whilst the Planning Inspectorate has committed in its Environmental Policy to “work to reduce the carbon impact of our activities”, this is clearly not translating into decisions that help reduce the carbon impact of local areas. In addition, its decision making is effectively ensuring that occupants of new housing in Lancaster for example have to spend more on their heating bills than people in similar homes in Cornwall or Bath.

The potential for the Local Plan to be found unsound or downgraded at inspection, and an assessment of the associated risks and costs, often leads planning policy makers to play safe and stick with the minimum standards required.

West Oxfordshire Salt Cross Area Action Plan Inspection Report²¹¹ (July 2022) has required the council to downgrade its proposed requirements for net zero operational carbon (Policy 2) to “standards for consideration as part of an energy statement”.

Lancaster City Council's Climate Emergency Local Plan Review aimed to set higher carbon standards than the current building regulations, although not as ambitious as Cornwall or BNES. The Inspectors report²¹² (October 2022) required this policy to be removed on the basis that “Policy DM30a would fail to accord with the WMS and the Planning and Energy Act 2008”.

Reading Borough Council introduced a “zero carbon homes” policy in 2019. Policy H5²¹³ states that “All major new-build residential development should be designed to achieve zero carbon homes”. The Inspector required this to be modified to state that the clause is “subject to viability”.

3. **The Viability Test.** Viability is enshrined in Planning Law. Under the NPPF, viability assessments must be made at the Plan stage, so “planning applications that comply with them should be assumed to be viable”. Developer returns of 15-20% are assumed, before any additional “planning conditions” are added. These conditions include factors such as affordable homes, transport infrastructure and educational provision as well as sustainability requirements. It is no surprise that developers have been able to argue for so long that the sustainability requirements would make the development unviable, as affordable homes are typically a higher priority. Similarly, under these rules, in order for a Plan to be sound, any sustainability requirements must be demonstrated to be viable, or caveated with clauses such as “where viable”. Prioritising requirement to meet the Climate Change Act and ring fencing climate change compatible requirements from other planning conditions would allow LPAs to deliver these without compromising delivery of the other requirements.

²¹¹ <https://www.westoxon.gov.uk/planning-and-building/planning-policy/salt-cross-garden-village/salt-cross-area-action-plan-examination/> and <https://tcpa.org.uk/pins-assault-on-an-exemplary-net-zero-planning-policy/>

²¹² <https://www.lancaster.gov.uk/planning/planning-policy/local-plan-examination>

²¹³ <https://images.reading.gov.uk/2022/03/CD4.35-Policy-H5-Standards-for-New-Housing.pdf>

The legal judgement in case brought by Islington Council in 2018²¹⁴ established that land value must be informed by policy, and therefore a Council should not grant permission for an application that is deficient in developer contribution.

- 4. Time taken to develop a Local Plan:** Local Plans can take up to 10 years to develop and enact. Policies written early in the process can be overruled by national policy changes or government statements (all requiring extra time). Viability assessments which must be carried out at plan-making stage, cannot be revisited, for example, after a further five years, when the baseline assumptions on the costs of zero carbon options have changed significantly. Policies have to be specified in the Local Plan and supported by evidence that is valid at the time, but easily becomes out of date. A viability assessment based on the costs of solar PV in 2012 would now be wrong by a factor of ten. Some authorities have undertaken Local Plan Updates in light of their Climate Emergency Declarations, which can be done before producing a new Local plan, but are still time consuming and subject to Inspection.
- 5. Five-year Housing Supply:** Local authorities are under huge pressure to maintain a five-year supply of housing and to ensure housing delivery, and it is a significant factor in planning decisions. Failure to do so brings the risk of developers being able to build on land outside areas designated in the Local Plan. This pressure means that planners are often unwilling to push for anything seen as “extra” or “nice to have” and risk the development not being built. The 2022 NPPF consultation is proposing to introduce some flexibility on this to ease the pressure on local authorities.
- 6. Future Homes and Buildings Standards:** Although the direction of travel is right, until the details of the standards are published it is not clear that future buildings will actually be zero carbon.
- 7. Definition of zero carbon:** There is no clear and effective definition of “zero carbon buildings”. Building regulations only refer to “regulated emissions” i.e. those relating to heat demand and embedded power for heat, lighting and ventilation, while ignoring the electricity demand for anything plugged in such as appliances, IT equipment, etc. Planning policies often allow an “offset” for emissions reductions to be included in the calculation. This allows buildings to be constructed to lower energy standards creating future problems of inefficiency, and moves the issue away from good design onto finding suitable other sites for emissions reduction, which will at some point run out. Also few policies incorporate life-cycle analysis to include embodied emissions of the construction materials, the construction processes as well as in-use emissions.
- 8. Planning officer time, capacity and knowledge:** Designing and delivering zero carbon buildings is a complex technical challenge. Capacity was reduced in many local authorities due to funding cuts since 2010, in both planning policy and the sustainability specialists who used to be available to provide support. There is now a lack of expertise to be able to develop and defend effective zero carbon policies, very little training available, or time available to become sufficiently knowledgeable on the subject. This knowledge gap extends to planning inspectors who may strip out or water down ambitious targets. There is also a lack of simple calculation tools to support policy makers and development control.

Five London boroughs joined forces to provide evidence needed on carbon pricing so that each borough would not have to do that work, to support their zero carbon buildings policy.

- 9. Developer Power:** It is very clear that there is an imbalance of power between developers and local authorities, particularly smaller authorities and those where land and house prices are low. The planning system is typically portrayed by politicians and the construction sector as the main barrier to development. In giving evidence to BEIS (now DESNZ), Persimmon Homes admitted lobbying government to remove the zero carbon standard, and their “own figures suggest that all of its new homes built in 2018 could have been developed to zero carbon standards for around £165 million. This is a small proportion of the £600 million paid out to its senior managers in bonuses that year.” As Lord Deben, Chair of the CCC commented: “The people who laughed all the way to the bank were the builders who decided in advance that the Government would never get on with that, never prepared for it and are still building houses that are, frankly, not suitable for today’s demands.”
- 10. Energy Performance Gap:** The quality and standard of construction seriously impacts the final energy performance of a building, even when its elements theoretically meet the fabric efficiency standards set at the design stage. A 2016 study²¹⁵ found that carbon emissions in non-domestic buildings were on average 3.8 times the designed level, and the CCC estimates that new build homes lose 50% more heat than they are designed to. There is very little possibility of this being identified by building control during the construction process, and almost no guidance, training, skills or funding to ensure it happens. This has been recognised in part in the Future Homes and Buildings Standards, which propose more detailed guidance and a mandatory standard compliance report.
- 11. Enforcement Capacity:** As in most other areas reported, the capacity of a local authority to enforce Building Regulations has been severely hampered by staff and funding cuts. Since 1984, building control functions in many local authorities have been contracted out to private companies of Approved Inspectors. The Hackitt Review, which reported in 2018 following the Grenfell fire, found the whole system of regulation and enforcement is not fit for purpose, and recommended that local authorities should be funded to enforce standards properly.



²¹⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/497706/Non_Domestic_Building_performance_Summary_2016.pdf

The UKGBC has also reported:

“Local authority Building Control Officers (BCOs) are horribly short of resources and time, and there are too few of them to go out on site at critical junctures. In addition, while Building Regulations have become increasingly complex, BCOs do not generally have the time or resources to undertake training. More must also be done to tackle the fact that under the current system there are incentives for building control competitors (i.e. BCBs and Approved Inspectors) to attract business by offering very ‘light touch’ interventions when measuring compliance.”

Local Authority Building Control (LABC) represents all local authority building control teams in England and Wales and has been developing a pipeline of new inspectors through accredited training and career pathways and rolling out ISO Quality Standards across the country to be ready to expand and improve the system. Following the Hackitt Review and Building Safety Act 2022 LABC has received funding of £20 million over three years to facilitate a competence and capacity building programme²¹⁶ enabling the recruitment of around 110 Trainee Building Control Surveyors and the provision of over 2,000 accredited courses to existing public service building control surveyors.

- 12. Avoidance of planning permission:** In 2013 the government amended the General Permitted Development Order so that conversions of office buildings into new homes would not require planning permission. This removed the local authority’s ability to consider such a conversion under the usual planning process, with consequent implications such as an inability to require affordable homes or other planning standards or conditions. As a result, “homes” have been created that are significantly smaller and of lower quality than those that go through the planning route. Theoretically these conversions should still meet the current standards of Part L, and be monitored by building control, but other sustainability standards may be compromised.
- 13. Quantity over Quality:** Local authorities reported pressure to enable development “at any cost”. There is a huge amount of evidence showing that current construction methods do not even meet the basic building regulations in many areas, including energy performance. This is driven by poor standards, prioritisation of developer profit and lack of oversight or enforcement.
- 14. Right to Buy Scheme:** In April 2021 the government increased the proportion of Right to Buy receipts that councils could retain from 30% to 40% and extended the time period to spend these receipts to 5 years from 3 years²¹⁷. In practice this leads to a low replacement rate as finding the remaining 60% contribution is a major barrier to council investment. The LGA has called for a complete reform of the scheme to enable councils to reinvest all income. Ideally this should be linked to a requirement to meet very high carbon standards. [On 31st March 2023, DHULC announced that local authorities would be able to retain 100% of Right-to-Buy receipts for 2023-25²¹⁸.]
- 15. Lack of knowledge and capacity to build:** Councils that retained no council housing have lost most of the capacity to initiate a building programme. Those that have retained housing but not continued building also need to bring in a different set of skills to manage house building programmes.

²¹⁶ <https://www.labc.co.uk/news/labc-secures-over-ps20m-funding-public-service-building-control>

²¹⁷ <https://www.gov.uk/government/publications/retained-right-to-buy-receipts-and-their-use-for-replacement-supply-guidance/>

²¹⁸ <https://www.themj.co.uk/Councils-to-keep-100-of-Right-to-Buy-receipts-/227601>

5.3 Existing Buildings

Action needed: Deep fabric retrofit, low carbon heating.

This chapter focuses on retrofit of buildings. Low carbon heating is a critical area for investment and is covered in the Energy Infrastructure Chapter.

5.3.1 Minimum Energy Efficiency Standards Legislation

The English Housing Survey estimates that the EPC ratings of existing housing were as follows in 2021.

A/B	C	D	E	F	G
3.0%	44.5%	42.7%	7.1%	2.2%	0.5%

There are no equivalent figures for non-domestic buildings.

Improving the energy performance and reducing carbon emissions associated with existing buildings is arguably the most important infrastructure challenge for the UK in reaching Net Zero emissions. In 2019, the BEIS Committee recommended²¹⁹ “to treat the energy efficiency of all buildings across the UK as a national infrastructure priority.” It also reported a significant difference between public investment on energy efficiency in England (£8 per capita/year) and Scotland (£35), and concluded: “It is unacceptable for the Government to use the Energy Company Obligation to mask its lack of commitment towards energy efficiency.”

In November 2021, the Building Research Establishment reported²²⁰ that the annual cost to the NHS alone of excess cold and damp homes is £895 million, and the annual societal costs, such as those relating to long-term care, mental health and poorer educational achievement, are over £15 billion.

The CCC’s 2022 Progress Report stated that “there is a major gap for policies to drive higher standards of energy efficiency. In particular, owner-occupied households which are not fuel poor lack regulations, funding, or other policies to support improvements”.

The **UK’s Clean Growth Strategy**²²¹ set out aspirations for all owner-occupied domestic properties to be brought up to EPC band C by 2035, and by 2030 for rented homes (where practical, cost-effective and affordable) and for non-domestic rented buildings to be EPC band B by 2030. These remain the basis of the Heat and Buildings Strategy. It also aims to “tackle performance and compliance issues to ensure that new buildings and measures retrofitted in existing buildings perform as they should.”

Improving the energy performance and reducing carbon emissions associated with **existing buildings** is arguably the most important infrastructure challenge for the UK in reaching **Net Zero emissions**

²¹⁹ <https://publications.parliament.uk/pa/cm201919/cmselect/cmbeis/124/12402.htm>

²²⁰ <https://bregroup.com/press-releases/bre-report-finds-poor-housing-is-costing-nhs-1-4bn-a-year/>

²²¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/839555/CCS0819884374-001_Government_Response_to_the_CCC_Progress_Report_2019_Web_Accessible.pdf

Local authorities currently have powers to directly intervene to reduce the carbon emissions of at most 10% of existing homes, although higher rates of local authority building and raising the energy performance standard for rented properties could increase this to around 20% of homes and over 50% of non-domestic buildings.

Local authorities also have a key role in providing local leadership in addressing the climate emergency, and some are clearly leaders in this field. They have previously been major players in housing retrofit programmes, by providing a convening, coordinating and finance-raising role to underpin large scale initiatives, which included private housing. Unfortunately, with the squeeze on funding and staff resources, the focus of most local authority involvement in retrofit has narrowed to homes in fuel poverty and vulnerable people.

Where powers do exist, they are often limited by lack of political will and risk-aversion as well as resources and capacity to use them in any meaningful way. For many local authorities, their current carbon reductions programmes in

buildings will have an almost negligible impact on overall emissions in their area.

Approximately 5% of private rented and less than 1% of social rented homes in England have an EPC of F or G, around 239,000 homes.²²² Just under 2.7 million privately-rented homes (55%) have an EPC of D or below (a reduction of over 300,000 homes on the 2018/19 figures).

Additionally, an estimated 10% of non-domestic buildings are rated F or G and 85% are expected to be rated C or below²²³. Rented non-domestic buildings make up 61% of the stock.

This legislation is collectively referred to as both the Minimum Energy Efficiency Standards regulations (MEES) and Private Rented Sector regulations (PRS). If the proposed changes to MEES detailed below are enacted, this would give local authorities a remit to intervene to improve energy efficiency in around 3 million homes (unless landlords take measures to meet the requirements before the legislation deadlines) and around 1.2 million non-domestic buildings.



²²² <https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-headline-report/english-housing-survey-2021-to-2022-headline-report>

²²³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970192/non-domestic-prs-meets-epc-b-future-trajectory-implementation.pdf

Energy Performance of Buildings (EPB) Regulations 2012²²⁴ (Amended 2015)

- **Energy Performance Certificates (EPC):** The 2012 regulations require an EPC to be produced when a domestic or non-domestic building is constructed, sold or let, with exemptions including for temporary buildings, very short lets, some industrial and agricultural buildings, places of worship and some officially protected buildings.
- **Display Energy Certificates (DEC):** Buildings over 250 square metres that are occupied by the public sector and frequently visited by the public must have a DEC, which differs from an EPC in that it is based on operational energy performance not just the characteristics of the building fabric. DECs are valid for 10 years and must be displayed in a prominent place clearly visible to the public.
- **Air Conditioning Systems over 12kW:** must be inspected at least every five years and hold an Air Conditioning Inspection Report (ACIR).

EPCs, DECs and ACIRs must be accompanied by a recommendations report that includes cost effective measures to improve the energy efficiency of the building or system. All this data must be maintained on a central register. This data may be disclosed in bulk to a local authority or an enforcement authority.

Enforcement of the EPB legislation is the responsibility of the local weights and measures authority (i.e. Unitary, Metropolitan or County Councils), except for local authority buildings which should be enforced under agreement with a neighbouring authority.

²²⁴ <https://www.legislation.gov.uk/uksi/2012/3118/contents>

The Energy Performance of Buildings legislation laid the groundwork for the following energy efficiency legislation.

Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015²²⁵

For domestic properties, from 1 April 2018 a landlord may not grant a tenancy to new or existing tenants for a property with an EPC Energy Efficiency Rating (EER) of F and G and from 1 April 2020 landlords may not continue letting such a property unless they have a valid exemption in place. A landlord is obliged to make energy efficiency improvements to meet an EPC EER of E or above, where these improvements cost up to a cap for the landlord of £3,500. If third party funding is available (e.g. ECO, other grants or Green Deal funding) the cost cap only applies to the landlord contribution. The maximum fine for non-compliance is £5,000 per property.

For non-domestic properties, a property let under a tenancy agreement, excepting very short (<6 months) or very long (>99 years) leases, must have an EPC of E or above. This applies to new tenancies from 2018 and all tenancies from 2023, unless exemptions apply, or all relevant energy efficiency improvements have been made (or that there are none that can be made), and the EPC remains below E. A landlord is obliged to make any energy efficiency improvements, or package of improvements, necessary to reach the minimum standard provided these have a payback of seven years or less, unless implementation would reduce the value of the property by more than 5%. Fines for non-compliance are capped at £150,000 and depend on the length of time the building remains non-compliant and its rateable value.



²²⁵ <https://www.legislation.gov.uk/uksi/2015/962/regulation/36/made>

Local authorities have a duty to enforce this legislation, by undertaking checks of properties, issuing compliance notes to landlords, enforcing financial penalties and publishing details of non-compliance on a public register. The local weights and measures authority is the enforcement authority, but each can decide how to enforce the regulations.

Minimum Energy Performance of Buildings (No. 2) Bill 2023²²⁶

Domestic Properties

This Bill going through Parliament in 2022-23 aims to improve the EPC Rating for **all homes** to at least EPC Band C by 2035, where practical, cost-effective and affordable. The latter three criteria have not yet been defined.

The duty to achieve this is placed on the Secretary of State, with exemptions where:

- an occupant or anyone else whose permission is needed for works needed be carried out has explicitly refused such permission;
- it is not technically feasible to fulfil the duty; or
- the cost of carrying out works to fulfil the duty would exceed £20,000.

All **private rented** properties must reach a minimum EPC of C for all new tenancies by 31st December 2025 and all tenancies by 31st December 2028.

All **social landlords** must ensure that a significant amount of their residential properties are at least EPC Band C by 2035.

All **mortgage lenders** must by 31 December 2030 ensure that the average energy performance level of their domestic portfolios is at least EPC Band C.

For **non-mortgaged owner-occupied homes**, the Secretary of State must take reasonable steps to encourage owners of properties to which this section applies to improve the energy performance of their homes to EPC Band C by 2035 and must make regulations for the purpose of achieving this target.

Non-Domestic Buildings

All **rented non-domestic buildings** must be EPC Band B by 2030, except where it is not technically feasible or cost-effective to do so, in which case such properties must be improved to an EPC level to which these exemptions do not apply.

²²⁶ <https://publications.parliament.uk/pa/bills/cbill/58-02/0150/210150.pdf>

Consultations on changes to MEES for domestic²²⁷ and non-domestic²²⁸ properties were carried out in 2020-21. While the Minimum Energy Performance of Buildings (No. 2) Bill above aims to implement the changes in minimum EPC levels and adds some requirements on organisations other than landlords, the detailed implementation and enforcement issues have not yet been addressed. As a result, there is as yet no clarity for either landlords or local authorities on many key issues.

The key recommendations in the consultation documents relevant to local authorities, are given below:

Domestic Properties

- Raise the level of the civil penalty fine to £30,000 per property and per breach of the requirements to obtain, commission or make available an EPC. Local authorities would retain flexibility as to how they wish to set the fine levels and any monies raised should continue to be retained by local authorities to support enforcement action
- Give tenants powers to request that non-compliant landlords carry out energy performance improvements, although this will require additional primary legislation.

Non-domestic Properties

- Introduce a compliance window requiring EPCs to be submitted to an online compliance and exemptions database by 1 April 2025 two years prior to the requirement coming into force to allow sufficient time to make improvements and for local authorities to note which buildings will need to make these
- Compliance deadline moved away from point of letting to the regulation deadline, then within 6 months of a new tenancy. All landlords must review any existing exemptions at the start of each compliance window to check whether they remain valid
- The limitation on investment based on a seven-year payback to be replaced with “payback calculator”
- Introduce tenant obligations to take on a share of responsibility for MEES compliance, specifically where the tenant is responsible for fitting out a property and this has an impact on the EPC. New primary legislation would be required to place such legal obligations on tenants under the PRS Regulations.



²²⁷ <https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes>

²²⁸ <https://www.gov.uk/government/consultations/non-domestic-private-rented-sector-minimum-energy-efficiency-standards-epc-b-implementation>

Encouraging Compliance and Strengthening Enforcement – all properties

- Introduce a requirement that letting agents and online property platforms may only advertise and let properties compliant with the PRS Regulations, and require landlords to provide an EPC prior to a property being placed on the market, rather than within a 21-day window
- Introduce a new property compliance and exemptions database, allowing local authorities easy access to the data
- Introduce a continual requirement to have an EPC if letting a property
- Widen the scope of use of EPC Open Data, to permit local authorities to use this data for some phases of PRS enforcement
- Require a post-improvement EPC to be undertaken to demonstrate overall compliance, reducing the workload for local authorities to obtain proof of compliance
- Enable local authorities to give notice to landlords that they wish to inspect, requesting permission from landlords and any tenants in situ at the time to carry out an inspection at an agreed time
- Make government guidance to local authorities clearer on delegation of powers for two-tier authorities.



⊗ Implementing MEES and the EPB regulations: Barriers ⊗

Significant barriers to local authority implementation of MEES and the EPB regulations were noted in the 2021 Power Shift report. In 2018-20 a pilot study into Compliance & Enforcement of the Minimum Energy Efficiency Standard (MEES) in the Private Rented Sector²²⁹ was carried out in seven local authorities, with the findings released in July 2022. These findings mirror those reported in Power Shift 2021 and repeated below. The two PRS consultations recommendations, if implemented, would address some of these issues. But tightening the standards and hence increasing the number of non-compliant buildings will place a huge burden on local authorities, that most are not set up to handle.

1. **Data accuracy and accessibility:** Lack of a central register of rental properties and their EPCs is the biggest single issue for enforcement, as local authorities need to spend a disproportionate amount of time working out which properties may not be compliant. The current data sources are not sufficiently accurate and not cross-referenced. Data protection concerns about sharing data from different sources can hamper efforts to identify non-compliant landlords. A related issue is the difficulty in identifying and contacting the responsible landlord even when the property has been identified as non-compliant. The proposed online compliance and exemptions database and requirement to submit post-improvement EPCs will help this work and the ability to monitor impact. However, it will not address properties where landlords do not engage with the system, which typically include many of the worst performing buildings. The 2020 Implementation Report on the EPB Regulations²³⁰ by MHCLG (now DLUHC) noted that: *“There are no accurate estimates of number of buildings that are required to produce a valid energy certificate in any given year. Compliance in some areas could be improved and more effectively monitored if accurate baseline data was to become available.”*
2. **Lack of internal systems and national guidance:** The mechanisms to monitor and enforce compliance are not defined and, while there is guidance on compliance for landlords, there is no equivalent national guidance for local authorities. The authorities involved in the pilot project spent most of the two years of the study setting up the systems needed for data collection, developing and implementing management systems, training staff, agreeing collaborations (two-tier authorities) and obtaining legal advice. This will need to be standardised and simplified if local authorities are to be expected to deal with greater numbers of properties.
3. **Lack of capacity and resources:** The BEIS Strategy Committee reported a *“systematic lack of capacity”* was severely hampering local authorities’ ability to enforce the regulations, and there was not a single entry on the non-compliance register by May 2019.²³¹ A Freedom of Information request by the *“i”* newspaper in July 2020 found that only 17 of the 268 councils that responded had taken any enforcement action and only 17 fines had been issued²³². Enforcement is reported as being a low priority by local authorities, except in cases of tenants with other issues in which the authority is involved, such as health or poverty. The seven authorities involved in the pilot study reported that annual costs of enforcement of the current regulations (housing only, EPC of F or G) could be up to £140,000 depending on the size of the authority, plus the costs of setting up systems and training officers. To maximise the benefits of this legislation, local authorities will need either in-house skills in building energy efficiency assessments and technologies or access to competent external advisors.

²²⁹ <https://www.cse.org.uk/downloads/reports-and-publications/policy/insulation-and-heating/energy-justice/building-performance/compliance-enforcement-of-minimum-energy-efficiency-standard-MEES-private-rented-sector.pdf>

²³⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/885223/Implementation_Report_-_EPB_Regs_2012.pdf

²³¹ <https://publications.parliament.uk/pa/cm201719/cmselect/cmbeis/1730/1730.pdf>

²³² <https://inews.co.uk/news/environment/little-punishment-landlords-flouting-energy-efficiency-rules-527015>

A local authority officer interviewed for the 2021 Power Shift study commented that: “MEES is hardly worth the paper it’s written on.” This will continue to be the case unless a good quality, reliable data system is set up and maintained, and local authorities are provided with the resources and guidance to enable them to monitor and enforce compliance.

In October 2021 the government published a list of 59 local authorities that had been awarded funds through the Private Rental Sector MEES Compliance and Enforcement Competition²³³. Awards of up to £100,000 were made to support local authorities to introduce enforcement and build systems and capacity as well as to tackle fuel poverty.

4. **Quality of EPCs:** EPCs do not provide a good representation of the carbon performance of a building in operation. The production of an EPC is a tick-box exercise based on the presence or absence of building and energy supply elements, rather than how well they perform. Some elements (e.g. underfloor insulation, some roof insulation) cannot be inspected and are typically ignored in the assessment. The calculation methodology is unsuitable for many traditional and rural properties, and the recommendations frequently include measures such as external wall insulation which may be technically unsuitable for these building types. The calculation methodology based on energy cost means that most off-gas properties will never reach a EER of C²³⁴. There is sufficient margin in the assessments for an inspector to award an E or higher if required by the landlord, for a property that could equally be rated F. A 2012 survey of non-domestic building performance and related EPCs²³⁵ found that the average energy consumption of a building was very similar whether its EPC rating was C, D, or E. Many respondents to the MEES consultations have commented on the inadequacy of the EPC calculation methodology for both domestic and non-domestic buildings.

The Energy Performance Certificate for Buildings Action Plan²³⁶ published in September 2020 aims to address some of these issues and published a report on progress in 2021²³⁷, which has not since been updated. However, the Environmental Audit Committee²³⁸ noted that the measures proposed are “*not enough to achieve what is needed to support the decarbonisation of homes.*” Anecdotal evidence from letting agencies²³⁹ suggests that properties which would previously achieve a high D are now being awarded a C, and in a few cases, the maximum achievable EPC rating is being downgraded to limit the scope of potential works required of the landlord.

5. **Exemptions:** It is fairly easy to gain an exemption from MEES on the grounds of cost with the current cap for domestic buildings, especially if the building is hard to treat. BEIS (now DESNZ) estimated that the current cost cap will allow around half of the worst performing rented homes to avoid making improvements. This can act as a disincentive for a local authority to pursue compliance. Raising this cost cap will reduce the proportion of properties exempted on cost grounds.

- **UK100** gave [oral](#) and [written](#) evidence to the House of Lords Environment and Climate Change Committee inquiry on the Government’s Boiler Upgrade Scheme in December 2022.

This included outlining issues with the EPC methodology and a lack of local authority resources to enforce these regulations.

²³³ <https://www.gov.uk/government/publications/private-rented-sector-minimum-energy-efficiency-standard-compliance-and-enforcement-funding-competition-successful-local-authorities>

²³⁴ <https://www.cla.org.uk/sites/default/files/A2429023%20Domestic%20MEES%20Consresp.pdf>

²³⁵ <https://www.betterbuildingspartnership.co.uk/tale-two-buildings>

²³⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/922660/EPC_Action_Plan.pdf

²³⁷ <https://www.gov.uk/government/publications/improving-energy-performance-certificates-action-plan-progress-report>

²³⁸ <https://publications.parliament.uk/pa/cm5801/cmselect/cmenvaud/346/34607.htm>

²³⁹ Personal conversations - unattributable

- 6. Relying on tenants to identify breaches:** At present the main route to identification of a problem is through a complaint from a tenant, or the issue coming to light via fuel poverty measures. It is unlikely that many tenants are aware of the legislation, and evidence collected by Sheffield Hallam University²⁴⁰ shows that tenants do not complain about cold homes for fear of repercussions such as eviction. This is especially true for lower income households who feel they have fewer options.

Under the Housing Act 2004, local authorities currently have powers to introduce selective licensing of privately rented homes to address problems in their area, or any part of them, caused by low housing demand and/or significant anti-social behaviour.

With effect from 1 April 2015 a new General Approval came into force. Local authorities will be required to obtain confirmation from the Secretary of State for any selective licensing scheme which would cover more than 20% of their geographical area or would affect more than 20% of privately rented homes in the local authority area.

Liverpool City Council was one of the authorities involved in the MEES pilot study. Prior to this, from 2015-2020, the council ran a selective landlord licensing scheme across the city which covered 52,000 properties. During this period the council required 37,000 compliance actions to be put in place, issued more than 2,500 legal and fixed penalty notices and prosecuted over 300 landlords. Their application to continue in 2020 was rejected by the government, but it was re-introduced in 16 wards in April 2022, covering 80% of the PRS. The expertise and information gained through the licensing scheme was a considerable help in identifying non-compliant properties and incorporating the MEES requirements into their licensing compliance inspections.

- 7. Lack of finance for improvement measures:** The current MEES regulations place a cap on the amount a landlord is expected to pay for energy improvements in both domestic and non-domestic buildings. For some landlords, an inability or unwillingness to access capital for improvements is expected to cause problems if the cap is increased to £10,000 and the funding listed in the MEES consultation is no longer available. There is an expectation that some landlords may leave the market, especially in areas where rents and returns are low.
- 8. Split responsibilities on enforcement:** MEES enforcement typically falls under the remit of Housing or Environment officers, although monitoring of compliance with EPB legislation sits with Trading Standards. These roles are split across the two-tiers of District and County Councils. The Pilot Study found that district authorities needed to negotiate delegation of enforcement powers from the county council as well as agreements on data sharing and documentation management, which in some cases took a significant part of the project timeline. Local authority staff have no information on which to base a challenge to an EPC classification unless there is sufficient evidence from a tenant or occupant.
- 9. Commercial Leases:** A commercial landlord identified the problem of Repairing Leases, which require the tenant to return the property in exactly the same condition at the end of the lease. This may be seen as a disincentive for long term commercial tenants to invest in any energy efficiency measures which may need to be removed at the end of the lease.
- 10. Failure to address non-rented properties:** While the MEES regulations are specifically aimed at the private rented sector, there is a complete lack of equivalent legislation applying to owner-occupied properties, although there are major trigger points that could be used for similar legislation, such as sale of the property or change of use.

²⁴⁰ <https://www.shu.ac.uk/centre-regional-economic-social-research/publications/energy-in-efficiency-what-tenants-expect-and-endure-in-private-rented-housing---research-summary>

5.3.2 Home Energy Conservation Act (HECA)

The **Home Energy Conservation Act 1995**²⁴¹ requires all local authorities in England to submit reports annually to the Secretary of State setting out the measures they have adopted to improve the energy efficiency of residential accommodation within their area, across all tenures. The revised guidance (2021) sets out seven themes to report against, but all are optional. From 2021 reports only need to be produced in alternate years.

In practice HECA activities focus on homes in fuel poverty and council tenants. They are unlikely to result in much carbon saving as many of these households have very low carbon footprints, but are likely to increase comfort as well as reducing energy demand. Where HECA activities include private sector housing, it is typically small-scale schemes covering a very small number of homes. HECA has no funding attached to it, so the measures reported are funded through other schemes outlined above.

In the early days of HECA, it was a powerful tool to support local authority housing and sustainability officers to initiate and run a wide range of energy conservation activities, but for many it has now become a tick-box reporting exercise.

HECA data could be used to inform national policy, but this does not appear to be happening and collated data is not available to get an overview of the sector, or to identify good practice.

The **BEIS Strategy Committee 2019 Report**²⁴² recommended “that the Government develops a formula to allocate central funding to local authorities based on need. Local authorities should be subject to a new statutory requirement to spend these funds on energy efficiency in vulnerable homes but should retain flexibility in how they do so.” No action has yet been taken on that recommendation.

⊗ Barriers ⊗

1. There is no obligation to take any action. There is no feedback from central government such as a summary of findings, or sharing of information back to local authorities that would help avoid reinventing the wheel. There is no enforcement even of the need to report: in 2017 only 151 out of 326 local authorities submitted HECA reports. Revisions to the system in 2019, including online submissions, increased the number of HECA returns to 219. The revised guidance for 2021 includes reporting on MEES and the Green Homes Grant LAD scheme²⁴³.

²⁴¹ <https://www.legislation.gov.uk/ukpga/1995/10/contents>

²⁴² <https://publications.parliament.uk/pa/cm201919/cmselect/cmbeis/124/12402.htm>

²⁴³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957937/heca-2021-guidance-for-local-authorities.pdf

5.3.3 Vulnerable Households, Health and Landlord Legislation

For the most energy inefficient homes, there are several other pieces of legislation that give powers to local authorities to take action. There is no equivalent power for non-domestic buildings.

Housing Health and Safety Rating System (HHSRS)

Local authorities have powers, under the Housing Act 2004²⁴⁴, to identify hazards in homes and take enforcement action against owners or landlords where there is a danger of harm. It is a risk assessment tool that considers the seriousness of a set of 29 hazards. Based on this assessment, the local authority should determine the Category of hazard and whether or not it has a statutory duty (for Category 1 hazards) or a power (Category 2) to act. Local authority action can include:

- an improvement notice
- a prohibition order
- a hazard awareness notice
- emergency remedial action or an emergency prohibition order
- a demolition order
- declaration of a clearance area.

Local authorities can prosecute landlords who fail to comply and issue fines of up to £30,000. They can also ban a person from managing or leasing property for a defined period, and force the landlord to repay rent either to the tenant or the local authority.

In 2017, a BRE report²⁴⁵ showed that 3% of homes (898,000) in England, Wales and Northern Ireland had an Excess Cold Category 1 hazard. Data for Wales shows Excess Cold is the most significant Category 1 hazard and Damp and Mould Growth the second most significant Category 2 hazard (after Fire).

The **Housing Act 2004** can be used to enforce improvements of the poorest quality private housing. It is typically used for private rented housing, but can also apply to social rented, although the legal position on local authority owned housing means it cannot serve enforcement notices on itself.

Enforcement of HHSRS is the responsibility of Environmental Health Officers (EHOs).

HHSRS could be used to enforce action on a house to bring up standards, for example, if an area-wide energy efficiency improvement scheme were under way. So, it could theoretically be used to oblige a homeowner to join in with the scheme, as a last resort.

In 2019 the Minister for Housing and Homelessness reported on a review of HHSRS and put forward proposals to revise the system to make it easier to understand for landlords and tenants and easier for local authorities to enforce. This has not yet been enacted but MHCLG (now DLUHC) initiated a further two-year review of the HHSRS assessment system and standards, due to report in 2023.

²⁴⁴ <https://www.legislation.gov.uk/ukpga/2004/34/contents>

²⁴⁵ https://files.bregroup.com/bretrust/The-Housing-Stock-of-the-United-Kingdom_Report_BRE-Trust.pdf

Decent Homes Standard 2000

The Decent Homes standard is a minimum standard that triggers action below which no social housing should fall. It applies to all social housing and private housing occupied by vulnerable people. It contains four minimum standards including that:

- a. It meets the current statutory minimum standard for housing
- b. It is in a reasonable state of repair
- c. It has reasonable facilities and services; and
- d. It provides a reasonable degree of thermal comfort. This criterion requires dwellings to have both effective insulation and efficient heating.

Local authorities do not have specific enforcement powers but must rely on the HHSRS. The standard made significant differences to social housing between 2000 and 2010 but has not been updated since 2006, so is of little use in helping to drive better energy performance now.

In November 2020 the government committed to a **Review of the Decent Homes Standard**²⁴⁶. Part 1 of the Review concluded in Autumn 2021 which made clear that changes were needed. Part 2 to define those changes is ongoing. In September 2022, the government consulted on extending the **Decent Homes Standard to the private rented sector**²⁴⁷. This proposes to place a legal duty on landlords to comply, with sanctions including rent repayment orders, fines of up to £30,000, and a banning order prohibiting a landlord from letting housing or engaging in letting agency or property management work. Landlords would be able to self-declare that their property is decent or register an exemption. Enforcement would again be the responsibility of the local authority. The effectiveness of this proposed legislation will depend on improvements in the DHS and the HHSRS being implemented, as well as an online Property Portal for landlords to register their property.

Homes (Fitness for Human Habitation) Act 2018²⁴⁸

The 2018 Act places a duty on landlords/agents to ensure homes are fit for human habitation at the beginning and throughout the tenancy. Where a landlord fails to let/maintain a property that is fit for human habitation, the tenant has the right to take legal action for breach of contract (covenant) on grounds that the property is unfit. There is no specific power of enforcement role under this Act but local authorities are encouraged to use existing powers to support tenants²⁴⁹:

- Banning orders
- Rogue landlord database
- Financial penalties as an alternative to prosecution
- Rent repayment orders
- HHSRS
- Decent Homes Standard.

²⁴⁶ <https://www.gov.uk/guidance/decent-homes-standard-review>

²⁴⁷ <https://www.gov.uk/government/consultations/a-decent-homes-standard-in-the-private-rented-sector-consultation/a-decent-homes-standard-in-the-private-rented-sector-consultation>

²⁴⁸ <http://www.legislation.gov.uk/ukpga/2018/34/enacted>

²⁴⁹ <https://www.gov.uk/government/publications/homes-fitness-for-human-habitation-act-2018/guide-for-local-authorities-homes-fitness-for-human-habitation-act-2018>

Following the 2022 inquest²⁵⁰ into the death of Awab Ishak in 2020 which was found to be directly attributable to mould and damp in his family's socially rented home, the government has again committed to enact changes to HHSRS and DHS before the end of this Parliament (by January 2025) and publish new guidance on the health impacts of damp and mould in homes by summer 2023.

⊗ **Vulnerable households, Health & Landlord Legislation: Barriers** ⊗

- 1. Outdated Base Data:** The assessment of Excess Cold in the HHSRS has been highlighted as difficult as it is based on housing data from the 1990s, when home insulation standards were significantly lower. 97% of EHOs interviewed in 2017 for a review of the HHSRS thought that the standards needed updating. It is expected this will happen as a result of the 2021 review.
- 2. Lack of mandatory enforcement action for Category 2 hazards:** This is a power rather than a duty, so can lead to lack of prioritisation, especially when EHO resources are limited. The Chartered Institute of Environmental Health reported in 2017²⁵¹ that EHOs preferred to use informal enforcement action rather than serving notices. As part of the evidence for her Homes (Fitness for Human Habitation) Act 2018, MP Karen Buck reported that “for the 86,227 referrals to local authorities in 2007, there were just 3,744 notices” and “fewer than one in 10 dwellings with category 1 hazards are dealt with in any year”²⁵².
- 3. Onus on Tenants:** As with MEES, the responsibility for identifying problem homes bringing this to the attention of the local authority typically lies with the tenant. A 2017 survey for Citizens Advice²⁵³ found that 57% of renters were unwilling to force any issue with their landlord for fear of being evicted. Most local authorities do not have sufficient resources to proactively identify problem homes, for much the same reasons as outlined in the MEES section.

250 <https://www.judiciary.uk/wp-content/uploads/2022/11/2022-0365-Response-from-Secretary-of-State-for-Levelling-Up-Housing-and-Communities-and-Department-.pdf>

251 <https://www.cieh.org/media/1166/hhsrs-11-years-on.pdf>

252 <https://publications.parliament.uk/pa/cm201516/cmhansrd/cm151016/debtext/151016-0002.htm#15101634000003>

253 <https://www.citizensadvice.org.uk/about-us/about-us1/media/press-releases/185-million-households-wait-longer-than-they-should-for-a-repair-in-their-home-to-be-carried-out/>

5.3.4 External Funding for Energy Efficiency: Vulnerable and Fuel Poor Households

Local authorities have powers to access funding to run initiatives to improve the energy performance of homes. In some cases, this is not specifically based on their powers but their role is incorporated into the design of the schemes. Although earlier schemes (EEC, CESP, CERT, etc.) enabled measures in a wide range of households, the scope has been narrowed in recent years to only focus on vulnerable or fuel poor households.

- **UK100's [Local Net Zero Delivery Progress Report on Heat and Buildings](#)** recommends that the Government should offer dedicated, large scale, long term, non-competitive funding for place-based solutions to the decarbonisation of existing buildings.

The Electricity and Gas (Energy Company Obligation) Order 2022²⁵⁴: ECO4 runs from 2022-26 and installs energy measures for low income and vulnerable households in homes with an EPC of D-G. Properties with a starting EPC band of F and G must be improved to at least a D, and properties with EPC bands D and E to at least a C. Under the Local Authority and Supplier Flex component of the scheme, up to 50% of the programme can be directed to households that the local authority or supplier has identified as living in, or at risk of fuel poverty or vulnerable to the effect of cold homes. (Local authorities must define criteria that proves residents are eligible.) This extends the scheme to some households that do not receive means-tested benefits. The scheme aims to reduce costs for heating homes by £224.3 million per year.

ECO+ Consultation²⁵⁵: The government proposes to provide £1 billion further support for energy efficiency measures in a wider range of homes from 2023-26. A minimum of 20% of the annual spend is to be targeted at “low-income” groups, as defined under ECO4. The private rented sector will be able to take advantage of this scheme for low-income households and if the home is not already covered by the MEES regulations. Social rented housing may also be eligible with an EPC of E-G or through the low-income group. This will widen the net of support for low-income households that do not meet the criteria for other schemes. The proposals include using the existing Local Authority and Supplier Flex route for referrals to this scheme, and will investigate other local referral routes. Proactive local authorities with sufficient resources and knowledge to access them can deliver more in-depth or innovative home energy efficiency programmes by winning **competitive funding bids**.

Green Homes Grants Local Authority Delivery (LAD)²⁵⁶: This scheme was announced in July 2020 and offered £500 million for local authorities to install energy efficiency measures and low carbon energy in homes with an EPC of E, F or G. The scheme could support owner-occupiers and the social and private rented sector, provided the household income is less than £30,000. Phase 1 was competitive funding and allocated £200 million across 136 projects. It had an extremely limited spending window which coincided with a winter that was also spent dealing with COVID-19. Phase 2²⁵⁷ allocated £300 million to the five regional Local Net Zero Hubs. LAD Phase 3 was again a competitive bid process combined with HUG1 (below) into the Sustainable Warmth Competition²⁵⁸. It allocated £500 million across 78 projects to be delivered from early 2022 to March 2023.

Home Upgrade Grant: The Home Upgrade Grant (HUG) provides energy efficiency measures and low carbon heating to low-income households living in off gas grid homes in England with an EPC of D-F in England. The low-income criteria have been extended to cover entire postcode areas, identified through Indices of Multiple Deprivation, which can then be covered by area-wide schemes. HUG2 will allocate £700 million over 2023-25 and, in a change from HUG1, the funding is set up as a Challenge

²⁵⁴ <https://www.legislation.gov.uk/uksi/2022/875/contents/made>

²⁵⁵ <https://www.gov.uk/government/consultations/design-of-the-energy-company-obligation-eco-2023-2026>

²⁵⁶ <https://www.gov.uk/government/publications/green-homes-grant-local-authority-delivery-successful-local-authorities>

²⁵⁷ <https://www.gov.uk/government/publications/greenhomesgrantlocalauthoritydeliverschemephase2fundingallocatedtolocalnetzerohubs>

²⁵⁸ <https://www.gov.uk/government/publications/apply-for-the-sustainable-warmth-competition>

Fund i.e. available to all local authorities that meet the minimum criteria, rather than competitive funding. 60% of the funding is ringfenced for areas defined as Largely Rural, Mainly Rural, and Urban with Significant Rural. The funding is capped at a maximum of £8,000 - £38,000 per home depending on the house type and measures, with a contribution of one-third of the cost for private landlords and half the cost for social landlords.

Social Housing Decarbonisation Fund²⁵⁹: The 2019 Conservative Manifesto committed to invest £3.8 billion over 10 years in bringing social housing up to at least EPC Band C. The first Demonstrator scheme awarded £61 million to 16 local authorities for projects to be completed by December 2021. These projects aim to demonstrate whole house retrofit at scale, although almost half of involved less than 100 homes. Wave 1 allocated £179 million to 66 authorities to be spent by end January 2023. The Wave 2.1 competition held in late 2022 will allocate up to £800 million to be spent by March 2025.

Innovation Competitions²⁶⁰: A range of competitive funds were available during 2017-21 which aimed to demonstrate innovative solutions in the built environment, some of which were available to local authorities. These are typically small-scale schemes that aim to prove an approach for wider large-scale implementation.

In June 2020 the BEIS Whole House Retrofit Competition²⁶¹ awarded £770 million to three local authority projects which aimed to deliver emissions reductions of around 80% in over 300 homes while reducing the costs of retrofit by 5-20%:

- **London Borough of Sutton:** 91 non-traditional construction homes owned by Sutton Housing Partnership, being retrofitted using the Energiesprong approach.
- **Nottingham City Council:** 181 homes across two project sites – matched with £5m from ERDF
- **Cornwall Council:** 83 1950s semi-detached homes - £2.28m from Cornwall Council and £0.88 from SSE. This project did not go ahead due to “*supply chain pressures caused by the pandemic as well as changes in funding requirements and the scale of the project*”.

Local Energy Assistance Programme: Provides an outreach service to low income and vulnerable households of all tenures, with free energy advice and basic measures. This programme is funded by the energy companies under ECO and works in partnership with local authorities to identify households in need.

Warm Homes and Energy Conservation Act 2000:²⁶² Requires the Secretary of State to produce a Fuel Poverty Strategy to meet the target to ensure that as many fuel poor homes as is reasonably practicable achieve a minimum EPC of Band C by 2030. It enables initiatives to be delivered by local authorities in partnership with other agencies such as Health. The 2021 Sustainable Warmth Strategy²⁶³ is the latest version of this. The various measures detailed above are expected to jointly deliver against this target.

The Warm Homes Oldham²⁶⁴ service was established by a £50,000 grant from Oldham Council and a £125,000 grant from NHS Oldham Clinical Commissioning Group. The service also receives £100,000 from the Disabled Facilities Grant to top-up shortfalls in ECO funding for boiler replacements.

Warm Homes Oldham has delivered a return on investment of 1:4 in external funding, energy bill savings and extra benefits/grants for residents. In addition, the service has helped to reduce fuel poverty and excess winter deaths in the borough.

²⁵⁹ <https://www.gov.uk/government/publications/social-housing-decarbonisation-fund-wave-2>

²⁶⁰ <https://www.gov.uk/government/collections/innovations-in-the-built-environment>

²⁶¹ <https://www.gov.uk/government/publications/whole-house-retrofit-competition-successful-bids>

²⁶² <https://www.legislation.gov.uk/ukpga/2000/31/contents>

²⁶³ <https://www.gov.uk/government/publications/sustainable-warmth-protecting-vulnerable-households-in-england>

²⁶⁴ Oldham Council HECA Report 2019

Home Improvement Agency (HIA): Grants are targeted at older, disabled and vulnerable people and can include measures to improve energy efficiency in private homes. They are typically managed by an external organisation, and cover around 90% of local authority areas. The power for local authorities to set up or commission HIA programmes is enabled under the Regulatory Reform (Housing Assistance) (England and Wales) Order 2002²⁶⁵.

Under the **Housing Grants, Construction and Regeneration Act 1996**²⁶⁶ local authorities have the power to carry out works that would attract the grant for people with disabilities. This is often used in tandem with other funding streams to provide a package of home improvement measures in a single intervention, including energy efficiency measures funded through ECO or HIAs.

⊗ External Funding for Energy Efficiency: Vulnerable and Fuel Poor Households: Barriers ⊗

1. **Capacity:** To develop bids for competitive funding has been raised as a significant barrier, and still applies to some authorities. However, for the main funding programmes such as LAD and HUG, smaller authorities are now joining forces for combined programmes to reduce the administrative burden. For example, the Midlands Net Zero Hub bid led by Nottingham City Council covers authorities across the Midlands.
2. **Scheme delivery speed:** For deep retrofit or innovation competitions, it is noticeable that the winning councils are already considered leaders in the local authority energy field. There are significant barriers to other councils in bidding for these schemes: particularly the time and resources needed to develop bids, which may not be successful. Additionally the speed of the schemes post-pandemic faced significant supply chain challenges by putting sudden pressure onto an already weakened supply sector.
3. **True cost:** Pilot programmes and demonstration projects are not good at delivering measures at scale. They focus on high profile media-accessible headline projects with an expectation that once “done”, anyone else can use the results. However they generally do not demonstrate the true business case as they rely on grant funding for all the background project development and management costs and do not develop the capacity for other organisations to replicate them. Systematic long-term programmes are needed to deliver the wide-scale improvements needed and provide confidence in the supply market to invest in the skills needed.

- UK100's [Skills for Local Net Zero Delivery Insight Briefing](#) identifies the practical and policy barriers to developing local Net Zero skills, with a focus on developing the skills base for retrofitting.

We responded to the [Public Accounts Committee's Inquiry: Developing workforce skills for a strong economy](#) advocating that the Government should:

- Develop a Skills for Net Zero framework for delivery incorporating local and national action
- Embed Skills for Net Zero funding into local authority settlements
- Introduce a national strategy, led by local authorities, for home energy efficiency

²⁶⁵ <https://www.legislation.gov.uk/uksi/2002/1860/contents/made>

²⁶⁶ <https://www.legislation.gov.uk/ukpga/1996/53/contents>

5.3.5 External Funding for Energy Efficiency: Able To Pay Households

At present there are few government schemes for retrofit for the able to pay, except for properties that may fall into the “infill” category to enable area-based schemes funded by Sustainable Warmth and ECO4. While this is not directly the responsibility of the local authority, they need the tools to engage and support the able to pay to invest. Local authorities are well-placed to develop area-wide programmes that suit the housing and demographics of their area.

Previous area-wide programmes have been able to benefit both social tenants and private homeowners e.g. Kirklees Warm Zone ran for three years and offered free loft and cavity wall insulation to every home in the borough, installing these in over 50,000 homes.

The **Green Homes Grant** scheme introduced in September 2020 closed in March 2021 due to significant failings in its design and operation. It offered vouchers of £5,000 (or £10,000 for households in receipt of certain benefits) for a range of energy measures. The Public Accounts Committee²⁶⁷ reported that the scheme *“underperformed badly, upgrading only about 47,500 homes out of the 600,000 originally envisaged and delivering a small fraction of the expected jobs. The project accounted for just £314 million of its original £1.5 billion budget, and £50 million of that was administration costs - more than £1,000 per home upgraded.”*

The **Boiler Upgrade Scheme** provides grants of £5,000 for an air source heat pump (ASHP) or biomass boiler and £6,000 for a ground source heat pump. Biomass boilers are only available for

homes in rural areas off the gas grid. £450 million of grant funding is available over three years from 2022 to 2025: equivalent to 80-90,000 systems. The homeowner contribution for an ASHP is typically £7,000 – £8,000 and over £20,000 for a ground source heat pump. In February 2022, the House of Lords Environment and Climate Change Committee concluded that the scheme is failing to deliver on its objectives²⁶⁸. There is a significant shortage of skilled installers, the homeowner contribution is a major barrier and without electricity market reform, the operating costs can outweigh those of gas boilers, although this was reported to have reached price parity for an exemplar 3 bedroom semi-detached home during the height of the energy price crisis in 2022/23.

ECO+ Consultation²⁶⁹: The government proposes to provide £1 billion further support for energy efficiency measures in a wider range of homes from 2023-26. Support will be offered to all homes in Council Tax bands A-D in England (A-E in Scotland and A-C in Wales) with an EPC of D and below. Households in the “general group” (i.e. not low-income) will be expected to make a contribution to costs, but the levels have not yet been defined. The proposals include using the existing Local Authority and Supplier Flex route for referrals to this scheme and will investigate other local referral routes. If this scheme goes ahead and is implemented properly, with a sufficient supporting framework of skills development and householder engagement, it could start to address the able-to-pay homes again.

UK100 responded to the Government’s Design of the Energy Company Obligation (ECO+) consultation in December 2022.

We advocated that the Government should take a place-based approach to allocating funding and expand the role of the local authority referral routes.

²⁶⁷ <https://committees.parliament.uk/committee/127/public-accounts-committee/news/159264/pac-report-green-homes-grant-scheme-underperformed-badly>

²⁶⁸ <https://committees.parliament.uk/committee/515/environment-and-climate-change-committee/news/186300/the-boiler-upgrade-scheme-is-failing-to-deliver-says-lords-committee/>

²⁶⁹ <https://www.gov.uk/government/consultations/design-of-the-energy-company-obligation-eco-2023-2026>

The **Greater Manchester Combined Authority Retrofit Plan**²⁷⁰ is a comprehensive programme to develop the retrofit market across the city region, including action on skills, funding and finance, and delivery. There are specific measures aimed at the Willing to Pay households, including free impartial advice on suitable measures and costs. To support this, GMCA is partnering with the Green Finance Institute to trial and scale financing solutions for home energy efficiency improvements such as green mortgages and rental agreements²⁷¹. GMCA is also launching a green bond in which businesses and individuals can invest alongside public investment. The funds raised will be used to train retrofit professionals and deliver retrofitting schemes in social housing and other energy-inefficient homes. Through this Plan, GMCA aims to upgrade 60,000 homes per year.

⊗ External Funding for Energy Efficiency: Able To Pay Households: Barriers ⊗

- 1. Involving Households:** The Able-to-Pay market for retrofit has largely been ignored by local authorities in recent years. Some local authorities have started to partner with local community energy organisations providing retrofit advice, such as Devon County Council. Supporting this group of householders to become aware of the potential of ECO+ and providing confidence in the scheme will require authorities to commit to major new initiatives in partnership with other local and regional organisations.
- 2. Lack of trusted independent advice:** It is difficult for householders to identifying the measures needed and insufficient independent advice on the most suitable ones for the home, particularly for older and traditional buildings.
- 4. Skills gap:** Local authorities trying to support vulnerable and low-income households are already finding that the construction supply chain cannot deliver. This problem will be exacerbated by expanding programmes to a larger number of homes. Some Combined Authorities have provided funding to support retrofit assessor and coordinator training programmes, and retrofit skills bootcamps.
- 5. Access to funds:** These homeowners will need to contribute towards the costs of measures. Many will not have easy access to capital and in the main the finance sector does not yet offer suitable loan products.

- **UK100** responded to a [BEIS consultation on Phasing out fossil fuel heating systems in homes which are off the gas grid](#) arguing that local authorities play a key role in facilitating the partnerships that can deliver local projects for heat decarbonisation and act as trusted brokers to ensure that suppliers are trustworthy and reliable.

²⁷⁰ <https://www.greatermanchester-ca.gov.uk/media/6018/retrofitgm.pdf>

²⁷¹ <https://greenergreatermanchester.com/posts/greater-manchester-to-trial-and-scale-green-funding-to-lower-energy-bills-through-housing-retrofit-solutions/>

5.3.6 External Funding for Energy Efficiency: Non-Domestic Buildings

Several local authorities have provided support to small businesses to reduce energy use and carbon emissions, typically through a scheme that offered an energy audit followed by a grant of around 40% towards the capital costs of improvements. Most schemes were funded through the ERDF programme and have now closed for applications. Because of this funding, they were also not available to retail, education or finance businesses. Micro-businesses, often in premises similar to housing, were typically too small to meet the carbon savings requirements of the schemes.

Worcestershire County Council runs a Business Energy Efficiency Programme²⁷² which offers a free energy audit and grants of up to £20,000 (or 40% of the project cost) for energy efficiency measures. The scheme is due to close as it is reaching the end of its funding.

⊗ External Funding for Energy Efficiency: Non-Domestic Buildings: Barriers ⊗

- 1. Interaction with businesses:** Business support generally falls under the remit of economic development teams, for whom growth policies are a priority, and which generally do not have specialist climate change expertise. As a result, opportunities to interact with businesses on energy and net zero are missed.



- **UK100** responded to a [BEIS consultation on phasing out fossil fuel heating systems in businesses and public buildings which are off the gas grid](#)
- advocating that a ‘fabric first’ approach should be adopted which ensures that all buildings are adequately insulated before heat pumps are installed.

²⁷² <https://www.worcestershire.gov.uk/support-businesses/grants/business-energy-efficiency-programme>

5.3.7 Major alterations requiring planning permission

Approximately 200,000 households per year apply for planning permission to extend or carry out major refurbishment of their property. This is a trigger point that could be used to make a significant improvement in home energy performance, as the householder has already committed to the cost and disruption associated with building work.

Similar trigger points exist for non-domestic buildings, and there are also contact points with local authorities that are frequently related to business investment, such as applying for a change of use, change of external features such as signage, or licensing. Local authorities have no power to require energy performance improvements at these points, but can have influence and offer advice and support on reducing energy bills.

Local Planning Authorities have a role in enforcing standards in building renovation through their Building Control function.

Numerous studies²⁷³ have noted that this is an important market for energy efficiency upgrades, and a 2017 BEIS Call for Evidence²⁷⁴ noted that “in 2016 homeowners in the UK spent around £18 billion on repair, maintenance and improvement to their homes.”

Parts L of the Building Regulations set out standards for the energy performance of major renovations of existing buildings or thermal elements of a building (e.g. roof, windows). Part F covers the related area of ventilation. These standards were tightened in 2021 and now also include a requirement for new extensions to have low temperature heat distribution systems in order to be suitable for future heat pump installations.

The **Levelling-up and Regeneration Bill: Reforms to National Planning Policy**²⁷⁵

proposes some changes affecting existing buildings. *“To support energy efficiency improvements, significant weight should be given to the need to support energy efficiency improvements through the adaptation of existing buildings, particularly large non-domestic buildings, to improve their energy performance (including through installation of heat pumps and solar panels where these do not already benefit from permitted development rights).”*

LPAs may incorporate additional standards of energy performance into their Local Plan for works that require planning permission. However, very few councils are making use of this.

To support energy efficiency improvements, **significant weight** should be given to the need to support energy efficiency improvements through the **adaptation of existing buildings**

²⁷³ E.g. Energy Saving Trust, *Trigger Points: An Inconvenient Truth, Promoting Energy Efficiency in the Home*, 2010; UKERC, *Understanding Homeowners' Renovation Decisions: Findings of the VERD Project*, 2017

²⁷⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/653731/Call_for_Evidence_-_Building_a_Market_for_Energy_Efficiency_Final.pdf

²⁷⁵ <https://www.gov.uk/government/consultations/levelling-up-and-regeneration-bill-reforms-to-national-planning-policy/levelling-up-and-regeneration-bill-reforms-to-national-planning-policy>

Stockport Development Management Policy SD-2

3.23 Planning applications for changes to existing domestic dwellings will be required, where possible and practical, to undertake reasonable improvements to the energy performance of the existing dwelling. This will be in addition to the requirements under Part L of the Building Regulations for the changes for which planning permission is sought. Improvements will include, but not be restricted to: loft and cavity wall insulation, draught-proofing, improved heating controls and replacement boilers.

3.24 Applicants will be asked to complete a checklist (see C.2 'Energy Efficiency Checklist') to identify which measures are appropriate to their home. The total cost should be no more than 10% of the total build cost and payback in less than seven years. The Council will support homeowners in delivering efficiency improvements by identifying financial support initiatives both regionally and nationally.

Stockport Council estimates that this has been applied to 1,400 home extensions, saving 500 tCO₂/year.

City of York Council Local Plan Policy CC2 Conversion of Existing Buildings and Change of Use

Applications for conversion of existing residential buildings or change of use to residential should achieve BREEAM domestic refurbishment 'Very Good' and non-residential conversions or change of use will need to achieve BREEAM 'Excellent'.

If proposals relate to buildings of heritage and conservation value these standards would only be required where they can be achieved in a manner consistent with the appropriate conservation of that asset. The extent to which they can be achieved must be demonstrated by the applicant.

5.3.8 Compliance with Standards for Building Measures

Under the Building Regulations and other powers, local authorities have duties to ensure that energy related retrofits comply with minimum standards set out in the relevant legislation, such as:

Boiler Plus (2018):²⁷⁶ Set minimum energy efficiency standards for all new boilers and additional measures required when a combi-boiler is installed. It sits under the building regulations so the local authority has an enforcement role.

Replacement of windows and doors: Since 2002, all replacement glazing is covered by building regulations and must be logged with building control or a Competent Person scheme such as FENSA. The documentation must also be produced when a property is sold.

Roof repairs or replacement of thermal elements: When replacing or repairing more than 25% of the thermal envelope or 50% of a roof, the insulation must be increased to the current standard for new dwellings. This must be lodged with Building Control unless the work is carried out by a Competent Person in which case the work can be self-certified.

Smoke Control Areas: Under the Clean Air Act 1993, local authorities can declare a Smoke Control Area which prohibits the purchase or burning of any non-authorized fuel in that area. Offences may be dealt with by EHOs.

Wood or multi-fuel stoves burners: While the installation of such heating is generally not subject to building regulations, the 2019 Clean Air Strategy²⁷⁷ aimed to regulate fuel and stoves and gives local authorities more powers to take action in areas of high pollution. The Environment Improvement Plan 2023²⁷⁸ reduces emissions from new wood burning stoves in Smoke Control Areas from 5g to 3g per hour and enables local authorities to charge a penalty of up to £300 for releasing too much smoke and up to £1,000 for burning unauthorised fuel without an exempt appliance.

²⁷⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718569/Boiler_Plus_Factsheet_v3.pdf

²⁷⁷ <https://www.gov.uk/government/publications/clean-air-strategy-2019>

²⁷⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1133967/environmental-improvement-plan-2023.pdf

⊗ **Compliance with Standards for Building Measures: Barriers** ⊗

1. **Planning capacity:** As this sits within the local authority planning function, the barriers are similar to those outlined for new developments: insufficient resources, knowledge and capacity.
2. **Lack of funding:** These measures need to be installed at the same time as another major investment, and householders' budgets may be limited to just the project they were planning.
3. **Construction sector skills and knowledge:** Most small renovation jobs are carried out by small local building companies or sole traders. Many are unaware of changes in legislation and there is very little incentive for them to insist on meeting the standards in a competitive market with little oversight.
4. **Lack of resources:** To deal with all except the most significant problems. There is also no means of identifying non-compliant installations, unless there is a complaint.

5.3.9 Own Estate

Most local authorities have been working to improve the energy performance of their own estate for at least the last 15 years. They have full powers to make such improvements, although this is often constrained by investment criteria and lack of capacity to manage projects.

There has been a wide range of support to identify and implement such measures, such as:

- Carbon Trust Local Authority Carbon Management Programme
- APSE Energy support programme
- Salix Finance
- Re:Fit.

Councils can also use their own reserves, borrow through PWLB loans or raise finance through bonds – see Chapter 3.

The **Public Sector Decarbonisation Scheme (PSDS)**²⁷⁹ was launched in Autumn 2020 to support the aim of reducing emissions from public sector buildings by 75% by 2037. It has committed funding of £2.5 billion until March 2025. The **Low Carbon Skills Fund** runs alongside the PSDS providing £60 million to support public sector organisations to help develop and deliver their decarbonisation projects and develop a heat decarbonisation plan. However, these schemes are competitive: the time and effort required to bid for competitive funding acts against best value and the authorities most in need of support are those least likely to bid due to lack of capacity.

Competitive funding acts **against** best value

■ 279 <https://www.gov.uk/government/collections/public-sector-decarbonisation-scheme>

5.4 Buildings Conclusions

Establishing a long-term framework that supports all local authorities to decarbonise buildings and heat in a manner that suits the nature of buildings in their area is essential to enable the delivery of zero carbon new buildings and retrofit and significantly contribute to UK Net Zero targets.

5.4.1 New Buildings

There is huge scope for councils to be more ambitious in delivering buildings that meet the needs of the Climate Emergency. While this research has focussed on low emissions buildings, that scope includes all the other aspects of sustainable buildings such as avoiding overheating, water efficiency, sustainable drainage systems, adaptation to climate risks, reduced transport demand, green spaces and tree cover.

Those authorities that have made progress in this area have usually done it in the face of unsupportive government policy and often at risk of challenge. It is typically the larger authorities that have the confidence to take these risks, and ones with very supportive leadership. Frequently it is one individual within Housing or Planning who has taken the lead and been able to introduce ambitious policies or programmes, sometimes under the radar until they are sufficiently embedded to demonstrate the benefits.

As a direct result of changes to government policy, building standards have lacked the ambition needed to deliver Net Zero from the sector. The volume house builders have lobbied strongly against increased standards for homes, and have retained the right to use “viability” as a trump card. Consequently, hundreds of thousands of new homes will need to be retrofitted to meet Net Zero.

The Future Homes and Future Buildings Standards will start to make progress in delivering zero carbon buildings, but the Levelling Up reforms to the NPPF may also pose a threat to leading local authorities by removing their ability to be more ambitious. LPAs must be supported to deliver locally-appropriate genuinely zero carbon buildings ahead of the baseline position set out in Building Standards, without fear of challenge on viability grounds.

Authorities that have made progress in this area have usually done it in the face of unsupportive government policy and **often at risk of challenge.**



5.4.2 Existing Buildings

The energy performance of existing buildings is one of the most difficult carbon challenges we face. Current policies limit local authorities' ability to make any significant contribution to reducing emissions. Retrofit of existing buildings has been woefully under-funded. The stop-start nature of support and badly designed, highly-centralised, programmes such as the Green Deal and Green Homes Grant have only served to reduce capacity in the construction sector to support delivery, and eroded trust from the sector in government policies.

Although powers exist, and could give local authorities an important role in devising programmes and enforcing compliance, the underlying policies have not been sufficiently ambitious or resourced. There are some indications from government that retrofit is now being taken seriously. However there is insufficient detail on the necessary supporting infrastructure of skills and finance to know whether these strategies will translate into reality, given the high cost and commitment needed from government. In practice, support needs to be available to all local authorities, not just those that already have the capacity to win competitive funding rounds.



Establishing a long-term framework that supports all local authorities to decarbonise buildings and heat in a manner that **suits the nature of buildings** in their area is essential to enable the delivery of zero carbon new buildings and retrofit and significantly contribute to **UK Net Zero targets.**

5.4.3 Recommendations for Buildings Powers

UK100 Top Three Buildings Recommendations

- 1** Significantly increase funding for energy performance improvements to all buildings, which is non-competitive with longer timeframes, and bring forward targets to achieve higher standards across all building types and tenures. Provide support for local authorities to have the capacity to work alongside partners to develop and deliver large scale area-wide retrofit programmes.
- 2** Require local authorities to enforce and report on MEES, with the scope and processes involved significantly revised so that it is a useable tool to manage carbon improvements across the existing building stock. Increase resources, capacity and skills development for local authorities to enable this: across planning policy and building control, housing, environmental health, trading standards and Elected Members.
- 3** Embed a requirement for local planning authorities to prioritise The Climate Change Act in Planning Policy over developer viability and remove competition between climate mitigation and adaptation criteria and other “planning contributions.” Ensure all Planning Inspectors fully understand the priority placed on climate change and apply it in their inspection decisions.



Key supporting policy, frameworks and resources are required from national government to underpin local authority powers:

- Provide training for the Planning Inspectorate in climate change and Net Zero buildings and planning policy
- Rapidly introduce zero carbon building standards for all buildings, and apply the proposed “in operation” energy and carbon performance requirement to homes as well as non-domestic buildings
- Revise the maximum permitted local authority uplift on Building Regulations in the Planning and Energy Act 2008 and revoke the WMS of 25th March 2015
- Extend MEES standards to cover all buildings at the point of sale, change of use, and major renovation or refurbishment
- Set up long term and flexible funding schemes for landlords, private householders and businesses to enable them to meet improved EPC requirements
- Introduce mandatory landlord licencing and a national database of EPCs for tenanted properties: with a requirement to supply information back to local authorities
- Revise the EPC system to better reflect in-use energy performance and to be appropriate for all different building types
- Expand research to define a set of measures that are appropriate for all different housing types including traditional buildings, based on evidence from building types across the UK
- Support the training providers and the construction industry to rapidly invest in skills and capacity to deliver zero carbon buildings and install appropriate retrofit measures to existing buildings without harming the building fabric.

Powers in Place: the Handbook of Local Authority Net Zero Powers

Energy Infrastructure:



Electricity decarbonisation has been the biggest driver of UK emissions reductions in recent years due to the reduction in coal-fired generation and the rise of gas and renewables. Decarbonising the heat supply system is the next significant challenge in energy infrastructure.

Emissions from the generation and supply of energy are included in the figures in the previous chapters for the point of use, such as buildings and transport.

Action is needed across the energy system to:

- Integrate planning for heat, power and transport to achieve a balanced, appropriate and cost-effective net zero local energy system
- Continue the decarbonisation of the electricity grid through ongoing installation of renewable and low carbon energy
- Decarbonise heat – which needs to be carried out in tandem with building energy efficiency measures (see Buildings chapter): this must be the dominant form of new heating by the early 2030s
- Ensure the electricity grid is resilient and flexible for rising demand from the electrification of heat and EVs.

At present local authority involvement in energy system planning is piecemeal, ranging from some authorities developing system wide plans encompassing all aspects of energy supply and demand, to others in which their only involvement in the energy system is in determining planning applications.

Key Strategies

The **Net Zero Strategy**²⁸⁰ 2021 commitments include:

- Take action so that by 2035, all our electricity will come from low carbon sources, subject to security of supply
- Accelerate deployment of low-cost renewable generation, such as wind and solar through the Contracts for Difference (CfD) scheme by undertaking a review of the frequency of the CfD auctions
- Deliver 40GW of offshore wind, including 1GW of innovative floating offshore wind by 2030.
- Deliver the actions in our recent Smart Systems and Flexibility Plan and Energy Digitalisation Strategy to maximise system flexibility
- An ambition for 5 GW UK low carbon hydrogen production capacity by 2030, with large scale trials to assess whether hydrogen should be used for heating to take decisions in 2026
- Continuing to grow and decarbonise the UK Heat Network market through the £338 million Heat Network Transformation Programme [...] and new heat network zones by 2025
- Making heat pumps as cheap to buy and run as a gas boiler by growing the heat pump market to support 600,000 installations per year by 2028.

Decarbonising the heat supply system is the next **significant challenge** in energy infrastructure.

■ 280 <https://www.gov.uk/government/publications/net-zero-strategy>

The **Heat and Buildings Strategy**²⁸¹ 2021 sets out the importance of heat pumps and heat networks in enabling the decarbonisation of buildings and recognises the critical role of local authorities in developing appropriate and effective local energy systems and solutions. *“To make these decisions on buildings decarbonisation in a coordinated way across these levels, we may need to rely on or increase the responsibilities of existing bodies and groups of organisations (such as local authorities, cities, Ofgem, system operators, network owners and operators, and markets).”*

The **Hydrogen Strategy**²⁸² 2021 sets out proposals to define the future role of hydrogen in the energy system and remove barriers to the development of a hydrogen industry. The major impact for local authorities is in decarbonising transport and heating. The government plans to deliver large scale trials of hydrogen for heating, to inform a strategic decision on the relative role of hydrogen and electrification in heating by 2026. The lack of clarity means that local authorities are developing Local Area Energy Plans and making decisions on home heating that may not align with future national strategy. Signals from the CCC²⁸³ are that hydrogen is unlikely to be widely used in domestic heating due to the pressure on water resources and electricity system in producing the required volumes of low-carbon hydrogen to decarbonise heat as well as provide hydrogen for industry use.

The **Energy Security Strategy**²⁸⁴ 2022, published in response to the invasion of Ukraine and energy crisis, increases the targets for renewable energy, alongside financial support for householders to help with high energy bills. It introduced a chink of opportunity for onshore wind developments in England, proposing to *“consult this year on developing local partnerships for a limited number of supportive communities who wish to host new onshore wind infrastructure in return for benefits, including lower energy bills”*. However, there was very little additional support to take advantage of the huge potential to improve energy security through energy efficiency, and very little recognition of the role local authorities and Local Area Energy Plans can play.



- **UK100** responded to the [Environment Audit Committee's Call for Evidence on Accelerating the transition from fossil fuels and securing energy supplies](#)
- arguing that reducing energy demand should be a key part of the Energy Security Strategy - but that this has been overlooked.

²⁸¹ <https://www.gov.uk/government/publications/heat-and-buildings-strategy>

²⁸² <https://www.gov.uk/government/publications/uk-hydrogen-strategy>

²⁸³ <https://www.theccc.org.uk/publication/delivering-a-reliable-decarbonised-power-system/>

²⁸⁴ https://assets.publishing.service.gov.uk/government/attachment_data/file/1069973/british-energy-security-strategy-print-ready.pdf

The **Smart Systems and Flexibility Plan**²⁸⁵ 2021, however, strongly recognises that the most efficient and effective zero carbon energy systems can only be delivered through local action. *“Decarbonisation of our buildings, transport systems and energy system will require lots of action at a regional and local level. Heat and transport decarbonisation, in particular, needs to be delivered in a way that meets local needs and with the involvement of local decision makers.”*

The **Energy Bill**²⁸⁶ 2023 currently going through parliament introduces a wide range of regulations around energy supply, heat networks, the regulation and licensing regime, consumer protection and energy security. Areas of interest for local authorities are mainly related to heat networks and the introduction of heat network zoning.

Ofgem are starting to investigate the market and governance arrangements that would make the energy system fit for Net Zero with consultations in 2022 on the **Review of Electricity Market Arrangements**²⁸⁷, and a **Call for Input: Future of local energy institutions and governance**²⁸⁸. These consultations start to recognise the role of local authorities in planning and delivering a net zero local energy system, but it is too early to say whether they will translate into more powers and a well-defined role for local authorities in determining their local energy system.



- **UK100** responded to **BEIS's Review of Electricity Market Arrangements consultation** advocating that local authorities have an equally important role in forward investment and realising local network transformation and that there needs to be a balance between central coordinating bodies and local delivery to maximise the effectiveness of the system, which could be overseen by the Independent Systems Operator.

²⁸⁵ <https://www.gov.uk/government/publications/transitioning-to-a-net-zero-energy-system-smart-systems-and-flexibility-plan-2021>

²⁸⁶ <https://bills.parliament.uk/bills/3311>

²⁸⁷ <https://www.gov.uk/government/consultations/review-of-electricity-market-arrangements>

²⁸⁸ <https://www.ofgem.gov.uk/publications/call-input-future-local-energy-institutions-and-governance>



Key Powers Local Authorities have relating to the Energy System and the Net Zero transition

Relevant Legislation	Power enabled
Planning Act 2008	Set energy standards above building regulations and require on-site renewables for new developments. Consenting renewable generation <50MW
Planning and Compulsory Purchase Act 2004	Preparation of local development documents that support decarbonised heat, district heat networks, heat pumps and smart energy systems
Town and Country Planning Act 1990	Planning consent for district heating schemes and for electricity storage schemes
National Planning Policy Framework 2019 revision; s.151 and 153.	Plans should increase the use and supply of renewable and low carbon energy and heat; developers should comply with policies on decentralised energy supply unless they can prove it is not viable/feasible
Electricity Act 1989 (Amended by the Utilities Act 2000) and the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001	Selling small scale electricity
Sale of Electricity by Local Authorities 2010	Permitting the sale of renewable electricity generated
Local Government (Miscellaneous Provisions) 1976	Production and sale of heat
Local Government Act 2003	Financial borrowing and investment powers
Localism Act 2011	Establishing a company or co-operative
Highways Act 1980	Installation of EV charging
Local Government Act 1972	Powers to acquire and dispose of land; local authorities can own land (on which they can install renewable energy generation/district heat networks)
Local Government Act 1972, (Section 123) General Disposal Consent 2003	Local authorities can dispose of land including for less than the best consideration that can reasonably be obtained ... to secure the promotion or improvement of the economic, social or environmental wellbeing of its area
Energy Bill 2023 (not yet enacted)	Powers to identify heat network zones and require buildings and energy sources within those to connect to the network.
Permitted Development Rights afforded to the Local Authority in Part 12 of the Town and Country Planning (General Permitted Development) Order 1995 (as amended)	Local authorities can bring forward a district heat network on land it owns or for which it is the Highways Authority
Town and Country Planning Act 1990	Local Development Order for 'class based' planning permission for an area for district heating networks
Public Contracts Regulations 2015	Procurement of Services Works and Supplies – for example, for procuring a district heat network
Concessions Contracts Regulations 2016	Award of concessions by public bodies – for awarding a concession for a district heat network
Section 59 of the New Roads and Street Works Act (1991) (NRSWA).	Local authorities have a duty to coordinate Street Works.

Energy System Background

In the 1940s, before the nationalisation of the UK energy system through the Electricity Act 1947 and the Gas Act 1948, municipal energy companies could supply electricity and gas. Manchester Corporation, precursor to Manchester City Council was one, supplying electricity to the city centre from 1893.²⁸⁹ Nationalisation created five electricity boards and 12 gas boards and centralised management of generation and distribution grids. These were then privatised and separated in the 1980s under the Electricity Act (1989) and the Gas Act (1986).

Due to the centralised supply of energy in the UK, particularly the gas networks (when European neighbours were installing district heating schemes), local authorities did not take an active role in energy supply between 1948 and the early 2000's, apart from installation of heating networks in some cities (serving around 2% of homes).

The UK energy system is regulated by Ofgem and consists of:

- electricity generators (coal, gas, nuclear and renewable) and gas suppliers (off-shore gas, interconnectors and liquefied gas)
- transmission system (National Grid Electricity and National Grid Gas)
- distribution system (six electricity District Network Operators (DNOs) and four Gas Distribution Networks).

Liquid and solid fuels (vehicle fuel, coal, wood, oil, etc.) are a free market with a degree of government intervention in the form of taxes and product standards.

The electricity system has been changing rapidly as renewable energy generators off-shore and on-shore are brought into what was a one-way centralised generation and distribution system. Increasing electrification of heat and vehicles will place greater demands on the electricity grid. DNOs are increasingly digitising and preparing for new smart technologies and business models.

The electricity and gas distribution companies and system operators are privately owned and pass on the costs of investment to customers through charges for the use of the grid. Network investment plans are approved by Ofgem, which sets price caps to protect customers, effectively limiting how much will be invested. The costs of rapid investment could fall on current customers, while benefiting future customers; and costs in one part of the grid must be shared fairly between customers (described as the 'socialisation of costs') and not leave more vulnerable customers or geographies behind.

■ 289 <https://carbon.coop/2019/12/power-in-the-city-a-walk-through-manchesters-electric-past/>

One key issue for decarbonisation is that the costs of programmes to support renewable energy and home insulation have been passed on to consumers through charges on electricity bills rather than gas bills. This puts an additional burden on households using electricity for heating and acts as a disincentive to invest in technologies such as heat pumps by increasing their running costs compared with gas. Heat decarbonisation requires a shift to electricity from gas, so this price imbalance needs fixing. The CCC 2022 Report to Parliament²⁹⁰ noted that “*While HM Treasury has promised a consultation on reforming gas and electricity pricing, this has not yet been published. A clear policy decision must be made before next winter. This should allow for a ratio of gas to electricity prices that incentivises heat pumps, ensuring they will be cheaper to run than gas boilers.*”

The development of the original energy system in the 19th century was for the benefit of local people and businesses; there is again a need to recognise local authorities’ role in determining and delivering parts of the energy system. The Energy Bill is starting to address some of these governance issues by defining a role for local authorities in determining and managing areas suitable for local heat networks.

6.1 Local Area Energy Plans (LAEPs)

Energy planning is a means to an end, rather than a direct power a local authority can use to deliver on its climate change ambitions.

Smart Local Energy Systems are an integrated approach to managing energy supply and demand across a local area, combining renewable generation, distribution systems, demand reduction, system management measures and market support mechanisms to optimise the energy system.

Local Area Energy Plans are a data driven, evidence-based approach to defining the most suitable decarbonisation pathways for the whole energy system for specific local areas, resulting in a spatial plan to deliver that system.

The development of the original energy system in the **19th century** was for the benefit of local people and businesses; there is again a need to **recognise local authorities’ role** in determining and delivering parts of the energy system

- UK100’s [Local Net Zero Delivery Progress Report on Energy](#) recommends the development of a national framework to ensure seamless development and delivery of local area energy planning, plus a clearer acknowledgement from the government that local authorities are key to delivering Net Zero energy.
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290 <https://www.theccc.org.uk/publication/2022-progress-report-to-parliament/#key-messages>

UKRI research²⁹¹ found that implementing place-based local energy systems instead of generic place-agnostic solutions to meet the UK's net zero target would

- Reduce investment by over two-thirds, saving £137 billion
- Almost double the energy bill savings for consumers to £108 billion
- Increase the social value of these systems from £444 billion to £825 billion.

LAEPs underpin the Smart Systems and Flexibility Plan, with £100 million committed to support local areas develop smart local energy system plans through the Prospering from the Energy Revolution²⁹² programme.

The Scottish Government recognised that local areas need to have appropriate plans to manage the transition to decarbonised heat and introduced requirements for local authorities to produce Local Heat and Energy Efficiency Strategies (LHEES) in 2017. The Welsh Government has commissioned LAEPs for each of its local areas.

Energy Systems Catapult has developed a **Place Net Zero Toolkit**²⁹³ which provides a foundation for local leaders and decision-makers to develop and deliver LAEPs. The guidance will help local authorities to:

- Identify, understand, assess and use robust technical evidence and data specific to the whole area energy system
- Understand and assess the wider non-technical factors which need to be addressed
- Develop a well-considered process which engages appropriate stakeholders effectively, uses the technical evidence appropriately, and manages vested interests effectively to ensure the plan is representative and viable
- Develop a credible and sustained approach to governance and delivery
- Provide confidence in funding the LAEP.

LAEPs can be carried out at combined authority and larger unitary authority level or smaller authorities aggregated to a scale that makes sense in terms of governance and distribution networks.

The Ofgem consultation ahead of the RIIO-ED2 price control methodology decision was supportive of the use of LAEPs to help DNOs to develop local investment plans. However, in the final decision²⁹⁴ in 2020 LAEPs were not made mandatory, as they are not sufficiently advanced or widespread a tool to underpin legal requirements on DNOs, but they will be helpful to provide evidence to support investment proposals.

A LAEP can help direct focus on particular actions in key areas, such as identifying areas that are more likely to be suitable for heat pump deployment, or to initiate discussions about investment. They can also equip the local authority with useful information for discussions with the DNO or gas Network Operator. However, they do not produce information to identify particular areas for heat zoning, and will need to be adjusted should government move forward with policy on heat zones. LAEPs do not produce a list of projects and costings for individual investments, such as sites for solar PV etc.

²⁹¹ <https://www.ukri.org/wp-content/uploads/2022/03/IUK-090322-AcceleratingNetZeroDelivery-UnlockingBenefitsClimateActionUKCityRegions.pdf>

²⁹² <https://www.ukri.org/what-we-offer/browse-our-areas-of-investment-and-support/prospering-from-the-energy-revolution/>

²⁹³ <https://es.catapult.org.uk/tools-and-labs/our-place-net-zero-toolkit/>

²⁹⁴ https://www.ofgem.gov.uk/system/files/docs/2020/12/ed2_ssmd_overview.pdf

In the past, Regional Spatial Strategies included energy, outlining renewable energy generation opportunities across the wider area. These were material to planning decisions, and meant that LPAs did not need to duplicate evidence gathering and policy-making as they now do. Combined Authorities such as London and Greater Manchester have powers to develop spatial frameworks which can support local energy or heat plans and provide powers to local authorities to secure low carbon or renewable energy developments.

The **Ofgem Call for Input: Future of local energy institutions and governance**²⁹⁵ (April 2022) starts to take a serious look at the local governance arrangement that will be needed to deliver net zero transition. This sets out three energy system functions that need to have local governance: “*energy system planning, market facilitation of flexible resources and real time operation of local energy networks. We also note a cross-cutting enabling function, digitalisation, which will be needed at a sub-national level to facilitate information flows and support the net zero transition.*” The four governance framework models suggested all feature a role for local authorities in energy system planning, with varying degrees of leadership and direct influence. As this governance work progresses, it is likely that LAEPs will become a key component of the future energy system, and local authorities will need to develop the capacity to deliver them. However, government has not mandated them and there is no specific approach that has been officially endorsed. So currently they are optional for local authorities. Anecdotally, it appears that LAEPs are most effective when the commissioning local authority is very clear about what it wants to use the LAEP to do – i.e., it is used to deliver specific outcomes, not as another evidence base that does not result in clear action.

Heat studies which provide evidence to feed into LAEPs have previously been carried out with Heat Networks Delivery Unit (HNDU) funding, but these can no longer be supported through that fund.

- **UK100's [Energy Networks: Insight Briefing](#)** highlights how energy systems reform needs to put local authorities at the centre of the transition to Net Zero.

- We responded to [Ofgem's RIIO-ED2 call for evidence on the business plans of the UK's six Distribution Network Operators](#) (DNOs). We recommended that each DNO should develop a strategic forum to work with local authorities to develop LAEPs. We added that Ofgem should ensure that there is a robust framework for LAEPs and that local authorities should have a formal role in the emerging structures of the DSO.

We also responded to [Ofgem's 2022 Call for Input on the Future of Local Energy Institutions and Governance](#), advocating that DNOs should be required to work with local authorities on local energy planning. We are currently preparing a response to their [2023 Call for Input on the Future of local energy institutions and governance](#) which is open until the 10 May 2023.

As this governance work progresses, it is likely that LAEPs will become a key component of the **future energy system**, and local authorities will need to develop the **capacity to deliver them**.

■ 295 <https://www.ofgem.gov.uk/publications/call-input-future-local-energy-institutions-and-governance>

Greater Manchester Local Energy Market²⁹⁶ supported by Innovate UK, is a project to define a smart local energy system across the 10 boroughs in order to meet the city's 2038 carbon neutrality target. It balances a mix of local renewable energy supply, demand reduction, different heat supply technologies and EV charging infrastructure suitable for each locality. Each borough has completed its own LAEP which forms the basis of the LEM. The key focus of these LAEPs is to:

- Set out priority areas for different elements of the energy system in Greater Manchester, including insulation measures
- Identify areas where heat pumps and heat networks are cost effective to use, transitioning the heating systems of around 120,000 homes
- Identify priority/opportunity areas for the introduction of other technologies at pace
- Continue to build capability, capacity and understanding so further wide-scale transition can be delivered.

The project is run in a partnership of the combined authority, local authorities, Electricity North West and private and third sector suppliers of technologies and retrofit experts.

Oxfordshire's Project LEO²⁹⁷, is also part-funded by Innovate UK under the Prospering From the Energy Revolution programme. The £40 million project is a partnership across the local authorities, Low Carbon Hub, DNO, universities and businesses to trial a number of different technical, market and system approaches to developing a smart local electricity system. It involves:

- place-based neighbourhood trials to investigate how local flexible demand and supply can be managed equitably, and how local people can or want to be involved in a smart system
- asset-based trials to understand how renewable electricity generators can viably respond to flexibility requirements
- market trials to investigate mechanisms to pay for local flexibility
- data trials to understand what data is needed and how this should be managed in order to support delivery of the local energy system.

²⁹⁶ <https://gmgreencity.com/projects-and-campaigns/local-energy-market/>

²⁹⁷ <https://project-leo.co.uk>

⊗ Local Area Energy Plans: Barriers ⊗

1. **Lack of consistent structure and approach:** Energy Systems Catapult ran pilot projects²⁹⁸ through the Smart Systems and Heat Programme on the energy transition in Bridgend, Bury and Newcastle. The 2018 report on this noted that “despite the high-level support for local area planning there is a barrier to achieving energy system change at a local level due to a lack of consistency in central government’s national energy policy.”

Citizens Advice commissioned a study of LAEPs in 2021²⁹⁹ and also found a lack of consistency in approaches to energy planning, making it difficult for citizens to understand and engage with.

Secondly they noted that *“one of the main barriers to low carbon transition is that current local government structures and regulatory frameworks do not have a formal ‘place’ for the adoption of local energy strategies, unlike other spatial plans. This means there is no formal process to submit energy plans for approval and sponsoring local officers must try to gain consensus on a voluntary basis despite focus being much easier to achieve where councils are obliged to have formal processes, strategies and spatial plans.”*

The NPPF 2019³⁰⁰ outlines the role of LPAs in:

- Promoting low carbon and renewable heat
- Identifying suitable areas for renewable and low carbon energy sources and supporting infrastructure
- Identifying opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

However, this suggests each part of the system can be looked at in isolation and does not really require the development of a coherent whole system Net Zero LAEP. Use of terms such as “promoting” and “identify” downgrade the importance of these activities.

The fact the whole planning system is now under review, could be an opportunity or a threat. The *“Levelling-up and Regeneration Bill: reforms to national planning policy”* contains no mention of local energy strategies.

The Smart Systems and Flexibility Plan 2021 notes that *“A key part of this work will consider the role of area-based mapping and planning to enable further understanding of local energy infrastructure, inform decision-making and support local delivery plans for decarbonisation.”* But it sets out no concrete plan to achieve this.

2. **Lack of technical capability:** The Ofgem governance Call for Input notes that “Whilst local government institutions have a democratic mandate to carry out energy planning, and have shown clear ambition to do so, resource constraints as well as skills gaps have made this challenging, especially on technocratic elements.” Larger authorities, particularly combined authorities, can overcome this constraint, but smaller authorities will struggle to develop and resource it. The DNOs have this technical capability, but not the accountability or local democratic mandate to devise system-wide energy plans which include transport and demand reduction as well as the traditional DNO role in supply. Local authorities will need to work in strong and trusted partnerships with organisations that can provide technical support on LAEPs, including the DNOs.

²⁹⁸ <https://es.catapult.org.uk/wp-content/uploads/2018/12/Local-Area-Energy-Planning-Insights-from-three-pilot-local-areas.pdf>

²⁹⁹ https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/LocalEnergyExploration_Finalreport_February2021.pdf

³⁰⁰ <https://www.gov.uk/guidance/climate-change#how-can-the-challenges-of-climate-change-be-addressed-through-the-local-plan>

- 3. Focus on the technical and modelling aspects of LAEPs:** The governance and social aspects of developing LAEPs which formed a strong element of the early methodology work carried out by CSE³⁰¹ with Energy Systems Catapult is not always given sufficient emphasis. Engagement with local authority staff, large energy users, the DNO, large public sector energy users and social housing providers is important in the process. Equally important is how the outputs will be used, and if and how local people might access or learn about the possible local pathways for their area.

Oldham Council has carried out complementary projects³⁰² to their LAEP to produce Community-Led Energy Plans (CLEPs) with local institutions and communities which are then used to inform development.

- 4. Cost:** LAEPs are costly for Local Authorities to commission ranging from £80,000 for a single area to £300,000 for a whole county. They produce static results valid for around 3 - 5 years so will likely need an update. Some local authorities are developing 'digital twins' for their LAEPs which will be kept up to date with live data, such as Calderdale Council and the West Midlands Combined Authority.
- 5. Pace and capacity:** The heat transition needs to take place over the next 10 – 13 years and will involve a large number of buildings. The pace at which the planning system works is slow. Given constrained capacity, resources and specialist skills especially in smaller LPAs, it is questionable whether LAEPs can be made and delivered within this timeframe using existing powers.



³⁰¹ <https://www.cse.org.uk/research-consultancy/consultancy-projects/local-area-energy-planning/>

³⁰² <https://oldhamenergyfutures.carbon.coop/2022/09/26/new-direction/>

6.2 Heat Networks

Heat networks provide the opportunity to supply low or zero carbon heat to homes and other buildings, predominantly in areas of high density such as cities or apartment blocks. There are over 14,000 heat networks in the UK, providing heating and hot water to approximately 480,000 consumers³⁰³, with larger networks in major cities such as Sheffield, Southampton, London and Manchester and at smaller scales across over 12,000 schemes in blocks of flats and estates. Heat networks can also provide cooling to buildings.

However, in the transition to Net Zero, heat networks could become a source of locked-in carbon, as most are based on gas combined heat and power (CHP) or gas boilers. As the carbon intensity of the electricity grid is decreasing, the carbon savings associated with district heating based on gas are disappearing. Investment in heat networks only provides low carbon heat if the heat is generated from low or zero carbon sources, such as water, ground and air source heat pumps geothermal heat, biogas, biomass and waste heat from industrial processes or Energy from Waste facilities.

Shared loop heating systems are a hybrid means to extract heat from the ground into a distribution system that serves a number of buildings, combined with much smaller individual heat pumps to bring the heat up to a usable temperature.

Local authorities have a strategic role in the delivery of district heating networks. Currently they have formal powers to enable and deliver district heating networks through:

- Planning powers
- Investment and miscellaneous powers.

Heat networks are a key component of the **Heat and Buildings Strategy** and **Net Zero Strategy**. The government has committed to invest £338m in the Heat Network Transformation Programme, and to enable heat network zoning³⁰⁴. The **Energy Bill** introduces the initial legislation to support further development of heat networks, drawing on the findings of the 2022 consultation on heat zoning³⁰⁵. However, it is not yet clear when this legislation will be enacted, or how long it will take thereafter for the systems to be set up to enable the widespread use of the powers.

³⁰³ <https://www.gov.uk/government/news/next-generation-of-heat-networks-to-power-uks-green-revolution>

³⁰⁴ <https://www.gov.uk/government/publications/energy-security-bill-factsheets/energy-security-bill-factsheet-heat-networks-regulation-and-zoning>

³⁰⁵ <https://www.gov.uk/government/consultations/proposals-for-heat-network-zoning>

Part 7 of the Energy Bill³⁰⁶ introduces:

- Regulation of heat networks by the Gas and Electricity Markets Authority (GEMA), to enable better protection for heat network customers
- Heat Network Zones (HNZ - areas suitable for heat networks) with the requirement to establish a HNZ Authority and designate HNZ Co-ordinator, which may be a local authority
- Powers for Zone Co-ordinators to:
 - require heat sources and buildings to be connected to a heat network within a HNZ
 - deliver and grant consent for heat networks
 - set emissions limits on heat networks in zones
 - collect information related to the heat network
 - enforce regulations and impose penalties.

The **Green Heat Network Fund³⁰⁷** (GHNF) 2022-25 will provide £288 million capital grants to support the delivery of heat networks. Projects must be for a minimum demand of 2GWh per year in urban areas and 100 homes in rural areas and the funding will cover up to 50% of the costs. Applicants can be from the public, private or third sectors. Hull and Peterborough were awarded the first two grants totalling £27 million in December 2022. The **Heat Network Investment Project³⁰⁸** provided similar capital funding from 2016-22.

The **Heat Network Delivery Unit³⁰⁹** continues to provide support and funding for heat network project development, with over 250 projects funded across 170 local authorities. In 2022, the scheme was opened up to other public sector applicants, registered social landlords, universities and property developers. It also publishes guidance on all aspects of scheme development.

The **Heat Network Efficiency Scheme³¹⁰** launched in spring 2023 and will provide £30 million over two years to part-fund measures to deliver performance improvements, and optimisation study projects to identify such measures, for operational district heating networks and communal heating systems.

Brooke Street³¹¹ is an off-gas grid development on the edge of a rural village in South Derbyshire. In 2012, eighteen local authority flats (built in 1982) were connected to a new district heating scheme, to replace their previous electric storage heaters. A set of ground source heat pumps are used to supply the heat network. When the heat network and heat pumps were installed, the flats also received building fabric insulation upgrades to improve their thermal efficiency.

306 <https://bills.parliament.uk/bills/3311>

307 <https://www.gov.uk/government/publications/green-heat-network-fund-ghnf>

308 <https://www.gov.uk/government/collections/heat-networks-investment-project-hnip-overview-and-how-to-apply>

309 <https://www.gov.uk/guidance/heat-networks-delivery-unit>

310 <https://www.gov.uk/government/publications/heat-network-efficiency-scheme-hnes>

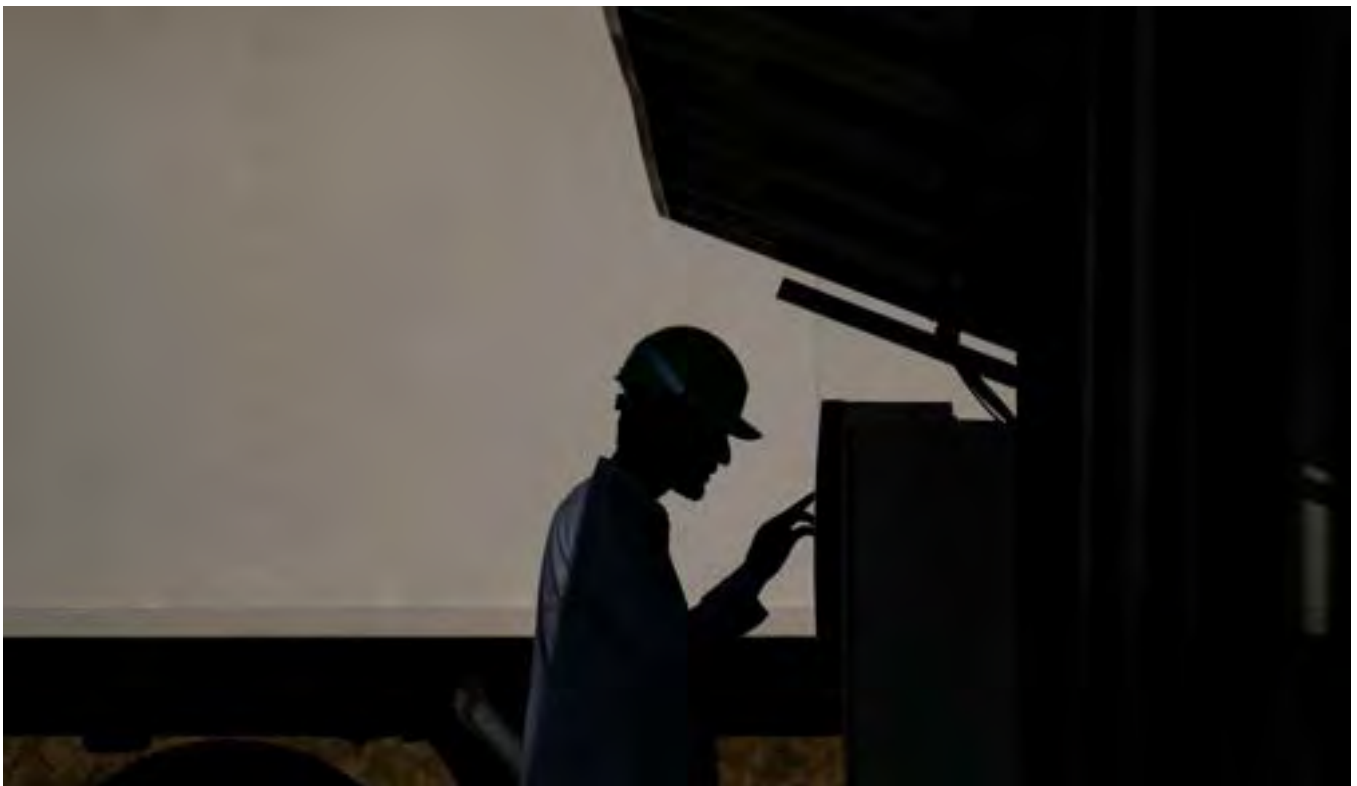
311 <https://heatpumpingtechnologies.org/annex47/wp-content/uploads/sites/54/2019/07/brooke-street.pdf>

Bunhill Heat and Power Network:³¹² Islington Borough Council is extending the existing CHP powered district heating scheme serving 800 homes to use waste heat from London Underground to supply a further 550 homes and a school. The new Energy Centre can supply additional buildings that wish to connect. The scheme is part of Islington's commitment to reducing carbon emissions, helping lower heating bills, improving air quality and making London more self-sufficient in energy.

West Dunbartonshire Council owns and operates the Queens Quay Energy Centre³¹³ and district heating network. It uses two 2.65MW water source heat pumps to extract heat from the River Clyde to supply council premises, health and education buildings, businesses and 1200 new homes. Funding was provided in part from the Scottish Government's Low Carbon Infrastructure Transition Programme.

Glasgow Housing Association³¹⁴ (GHA) has installed industrial scale 700kW air source heat pump low carbon district heating for 350 homes in multi-storey blocks.

Enfield Council has installed a shared ground array serving 402 flats in eight tower blocks³¹⁵. Each flat then has its own smaller ("shoebox") heat pump and residents pay for the electricity to run those. Previously the flats had underfloor electric heating that was paid for as part of the service charge. Residents are seeing average annual heating and hot water bills reduced to £200-400 from £800-£1,100 (2019 prices). The scheme is supported by the Non-Domestic Renewable Heat Incentive.



³¹² <https://www.islington.gov.uk/environment-and-energy/energy/bunhill-heat-network>

³¹³ <https://www.queens-quay.co.uk/district-heating/>

³¹⁴ <https://localenergy.scot/casestudy/glasgow-housing-association/>

³¹⁵ https://www.london.gov.uk/sites/default/files/enfield_ground_source_case_study.pdf

6.2.1 District Heating and Planning

Under the **Planning and Compulsory Purchase Act 2004** LPAs can prepare local development documents that support decarbonised heat, district heat networks, heat pumps and smart energy systems.

Under the Town and Country Planning Act 1990 a Local Development Order for ‘class based’ planning permission can be granted for an area for district heating system.

As with renewable energy, local authorities can adopt pro-district heating planning policy. Where a district heating network is installed or planned, planning conditions for other developments can require them to:

- Connect to an existing or planned network where it is feasible and viable to do so
- Future-proof the development to enable it to be connected to a future network.

District heating is more likely to be achieved in developments if Local Plans require evidence that master planning and energy planning have happened concurrently and that district heating is a design parameter from as early as the master planning stage for any new development. This is supported by the NPPF.

Local authorities can also simplify the construction of district heating networks and connections through Local Development Orders which grant automatic planning permission for specified developments in defined areas, or through permitted development.

They can use a s.106 agreement as a condition for planning consent, and Plymouth City Council has built up a s.106 fund which is used towards installing its district energy network.

If the Energy Bill is enacted, powers to define and enforce heat network zones will be placed with the Zone Coordinator, which is expected to be a local authority, combined authority or partnership of local authorities, thus removing the need for specific heat network policies in planning.

The **New London Plan 2021**³¹⁶ is London’s spatial strategy and is material to planning decisions in the London Boroughs and City of London. Policy SI 3 Energy Infrastructure provides extensive information on future energy demand mapping, energy master planning, identifying energy infrastructure requirements and locations, planning heat networks and provides a heat map to assist this. Section D states: “Major development proposals within Heat Network Priority Areas should have a communal low-temperature heating system: 1) the heat source for the communal heating system should be selected in accordance with the following heating hierarchy: a) connect to local existing or planned heat networks b) use zero-emission or local secondary heat sources (in conjunction with heat pump, if required) c) use low-emission combined heat and power (CHP) (only where there is a case for CHP to enable the delivery of an area-wide heat network, meet the development’s electricity demand and provide demand response to the local electricity network) d) use ultra-low NOx gas boilers.” It also requires a decarbonisation plan to be put in place where CHP is to be used.

Plymouth and South Devon Joint Local Plan 2014-2034³¹⁷, DEV 32 Delivering Low Carbon Development states: “Developments will be required to connect to existing district energy networks in the locality or, where there is a future network planned, to be designed to be capable of connection to that network. Where appropriate, proportionate contributions will be sought to enable a network to be established or completed.”

³¹⁶ https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf

³¹⁷ <https://www.plymouth.gov.uk/plymouth-and-south-west-devon-joint-local-plan>

⊗ District Heating and Planning: Barriers ⊗

- 1. Planning inconsistency:** A CSE/Town and Country Planning Association interim Local Plan review³¹⁸ findings on 12 local plans found that six included policies requiring the incorporation of district heating infrastructure into new developments. However, there is often no connection between the district heating policy and land allocations. In those plans that included a district heating policy, few had included the requirements for district heating in the site allocation policies.
- 2. Early funding and support:** Defining areas suitable for district heating requires early funding and support for heat mapping and energy master planning, and further feasibility studies for identified areas. This is important as evidence for the Local Plan and helps to prove that district heating is a viable option. This requires capacity and skills within what may be a constrained Planning Team. This barrier should be removed by the Energy Bill as long as sufficient funding and support is provided to carry out the Zoning process.
- 3. Viability:** As outlined in the Buildings chapter, developers can only be required to connect to a district heating scheme if it is viable to do so. Proving viability can be challenging. The pressure to develop homes can overrule the planning officers' motivation to insist on developers installing district heating networks, even in developments ideal for them. This can be particularly true in areas of low land value. Many developers do not want to take an additional risk of installing new technologies when it is cheaper and simpler to connect to the gas network, or to install direct electric heating without a radiator system. The changes proposed in the Future Homes and Buildings Standards and the Energy Bill will reduce but not eliminate this viability argument.
- 4. Lack of technical expertise:** There is a limited pool of consultants with technical and economic expertise and planning officers may lack experience of district heating networks, although some training is available. Planners and developers alike need to increase their skills and knowledge to deliver decarbonised heating, including district heating schemes.
- 5. District heating scheme problems:** Examples of schemes that did not go to plan, have underperformed due to being oversized or that have experienced technical difficulties with dissatisfied customers can lead to a belief that 'these schemes never work.' Raising awareness of successful schemes, such as those available from the Association for Decentralised Energy is important in making district heating a norm. To date there has been little consumer protection for customers supplied by district heating, but that is changing with the planned introduction of Ofgem as the regulator for heat networks. The Heat Trust provides consumer protection for many schemes on a voluntary basis in the interim.

■ 318 <https://www.cse.org.uk/news/view/2484>

6.2.2 Local Authority as a Developer

Local authorities can develop, or catalyse the development of, district heating schemes in their areas. They have powers to set up companies or partnerships to develop and operate district heating schemes and to sell heat and electricity; or to procure concessions that develop, invest, own and operate schemes. They have powers to procure and operate schemes, using their own funds and assets or to borrow and invest.

BEIS (now DESNZ) has issued District Heating Guidance,³¹⁹ with lawyers Lux Nova and Browne Jacobson: Guidance on Powers, Public Procurement and State Aid — which shows that there is a statutory basis for pursuing district heating schemes. It also details a few more Powers than this report – such as how much can be charged to secure tenants under the Housing Act 1985.

Local Authorities have a range of powers that can help deliver district heating schemes:

- Permitted Development rights [Part 12 of the Town and Country Planning (General Permitted Development) Order 1995 (as amended)] where the local authority owns the land and highways needed to deliver the project and the total volume of development is less than 200m³
- Local Development Orders (LDO): allowing permission that meets the criteria of the LDO across a designated area. A district heating network could fall into this designation
- The Local Government (Miscellaneous Provisions) Act 1976 (as amended by the Electricity Act 1989) allows local authorities to generate and sell heat and electricity, purchase and supply heat, and construct or contribute to the cost of construction of a district heat system
- Local authorities which are housing authorities, and which operate a heating installation and supply premises with heat produced at that installation, may also charge for that heat under the Housing Act 1985³²⁰
- The LCC General Powers Act 1949 and the Gas Act 1986 allow apparatus to be installed in the highway
- The Local Government Act 1972 gives powers to dispose of land at an undervalue, as long as State Aid rules are complied with
- Under the Local Government Act 2003 s.1, a local authority may borrow money for any purpose relevant to its, or for the purposes of the prudent management of its financial affairs. It has a duty to set an affordable borrowing limit. A local authority has a power to invest for the same purposes, under s.12 of the same Act.

319 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/717804/Procurement_and_State_Aid_guidance.pdf

320 <https://www.legislation.gov.uk/ukpga/1985/68/contents>

The **Energy Bill** will formalise powers to develop heat networks for authorities designated as Zone Coordinators.

Bristol City Leap has signed contracts for £1 billion in private investment to deliver the build out of significant low carbon smart energy infrastructure, such as heat networks, renewable energy generation, battery storage and energy efficiency. Heat networks are one element of this programme and being developed or expanded in eight areas of the city by 2027³²¹. Bristol has been the biggest recipient of HNDU funding, with over £1.3 million in development support over 3 rounds, and subsequent capital funding from HNIP.

Plymouth City Council³²² developed a city-wide strategy for district energy in 2017 and has since started installing the Plymouth Heat Network which will cover central Plymouth and other areas across the city, powered by low carbon sources. A range of resources for developers, architects and businesses along with planning policy has been developed. The low carbon team is managing these schemes, and also working on wider retrofit and heat pump projects across the city. The council has also stated in its charging structure that connection costs for developers will be no more than the cost that the developer would have incurred to supply heat, had the network not been available. The programme has received funding in six rounds of HNDU.

Manchester City Council used its buildings as the anchor for the Civic Quarter Heat Network serving six buildings initially. The Oxford Road Corridor is home to the city's second energy network, serving the University, NHS Foundation Trust, other educational premises as well as commercial and domestic properties. The latter is being developed by Manchester Energy Partnership Ltd³²³, which involves the local authority, GMCA, private contractors and the DNO. There are two further heat networks in Greater Manchester and the city region is taking part in the Heat Networks Zoning Pilot study to inform the national policy.

The **Swaffham Prior Community Land Trust** and **Cambridgeshire County Council**³²⁴ community heating network went live in 2022. It serves a rural village of 300 households, replacing oil boilers. The scheme uses ground and air source heat pumps and solar PV to provide heat through a district heating network, with electric boilers to provide back up. It is owned and operated by the County Council.

³²¹ <https://www.bristolcityleap.co.uk/heat-networks/>

³²² <https://www.plymouth.gov.uk/district-energy>

³²³ <https://octagonproject.co.uk>

³²⁴ <https://www.cambridgeshire.gov.uk/residents/climate-change-energy-and-environment/climate-change-action/low-carbon-energy/community-heating/swaffham-prior-heat-network>

⊗ Barriers ⊗

1. **Time and resource and funding intensive:** The time and resources taken to apply for funding in a competitive round, appoint and manage consultants, process the findings and options, then develop the technical, legal and economic investment case, are significant and may not even lead to pipes in the ground. The Centre for Sustainable Energy works with local authorities and says “Planning a local heat network is a drawn-out, expensive and complex business, not least because of the lack of consistency in methods employed by local authorities and developers and the time and effort needed to make on-going design tweaks, which invariably require repeat analysis.”³²⁵ Islington Council’s 2003 borough wide heat map³²⁶ was the basis for a 2010 heat strategy with the first Bunhill district heating scheme operational in 2012. Plymouth City Council’s earliest studies date from 2009 and a large number of studies have been delivered in the interim, with pipes in the ground in 2019³²⁷.
2. **Capacity and skills:** As mentioned previously in this report, local authorities have suffered funding cuts which have affected the capacity and skills available to develop complex projects. This varies across local authorities, and some, such as Nottingham City Council, Plymouth City Council, Cambridgeshire County Council and the larger cities and combined authorities have larger teams or skilled individuals available. Some authorities have other skills, such as assets management or commercial development know-how. But many smaller authorities will not have these skills available.
3. **Complexity and cost:** District heating schemes are technically complex, with evolving technology and the “best” technology may have changed over the 10 years between initial studies and installation. The challenge of aligning the supply and demand and managing the infrastructure investment costs are specialist skills. Local authorities are motivated by carbon reductions but also want to tackle fuel poverty and provide affordable heat to customers.
4. **The lack of an overall national strategy:** A national strategy is finally emerging but, prior to this, local authorities have been conducting studies and developing strategies that may not align with future national strategy. This can lead to repeated studies and reports being carried out, often with national funding, but no decisions being made, and endless further studies being commissioned.
5. **Operating in an under-regulated market:** Local authorities may be wary of the heat market, as the previous legislation (Heat Network (Metering and Billing) Regulations 2014)³²⁸ focused on the requirement to meter heat but offered little consumer protection. The Heat Trust operates a Code of Practice to protect consumers but is voluntary. The 2021 Heat Network Market Framework consultation response³²⁹ has led to requirements for consumer protection being included in the Energy Bill.
6. **Funding and subsidies and tax:** Funding for studies has been forthcoming from the HNDU and investment via the HNIP, and now the GHNF but meanwhile the Renewable Heat Incentive closed at the end of March 2021. This altered the business case, particularly for larger schemes. Designing viable schemes in a moving policy and subsidy context is challenging and can render what seemed to be a viable scheme unviable.

³²⁵ <https://www.cse.org.uk/news/view/2483>

³²⁶ <https://www.theade.co.uk/case-studies/local-authority/islington-councils-bunhill-heat-and-power>

³²⁷ <https://www.plymouth.gov.uk/sites/default/files/PlymouthCityWideEnergyStrategy.pdf>

³²⁸ <https://www.legislation.gov.uk/uksi/2014/3120/contents>

³²⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043640/heat-networks-market-framework-consultation-govt-response.pdf?_sm_au_=iVVJ7nF34bPjHqk734kv8KHMJK1v0

- 7. Difficulties in adding customers:** District heating networks need anchor demand customers, but also need a sufficient number of buildings to join the scheme to be viable. The Gas Act 1986 does not allow the local authority to disconnect customers from gas, so in extending a network to areas of existing housing, there is no requirement for a householder to join it. The Zoning Co-ordinator powers under the Energy Bill aim to address this issue, but will allow exemptions.
- 8. Safeguarding the grid:** Energy networks in a particular area will need to operate as a whole system, so there may be a need to prevent the installation of other heating technologies that disrupt the system, or that do not contribute to it.

Plymouth City Council has discouraged direct electric heating in new buildings: Electric resistive heating is not allowable under Planning Policy DEV32 for a number of reasons. These include the finite capacity of the electrical distribution network in the city and an anticipated increase in demand on the network from other uses such as charging EVs. Furthermore, projected reductions in the carbon intensity of grid electricity over time are predicated on the use of heat pumps, and not the widespread adoption of resistive heating as a replacement for gas boilers. Direct electric heating is also significantly more expensive to run for the end user.

- 9. Stranded Assets:** There is a risk that new heat networks do not deliver the customer numbers required, if other technologies such as heat pumps or hydrogen-based boilers, are installed in an area that is later defined as a Heat Network Zone. The 2021 Building Regulations Part L³³⁰ sets a maximum temperature for wet heating systems for new homes of 55°C, while most existing heat networks operate at high temperature. The ongoing iron gas mains replacement programme also acts as a barrier to delivering district heating networks because it is investing in a potentially stranded asset. For identified district heating opportunity areas, and heat pump and retrofit areas, it may need to be suspended, unless it is not safe to do so. Bristol City Council has asked that this be reviewed as they plan to end the need for a gas network in the city by 2030.

6.2.3 Highways Authorities' role in enabling Heat and Electricity Networks

There could be an opportunity for local authorities which have identified zones for district heating to install pipes ahead of need when the road is being dug up for other purposes. Trench sharing could save on the costs of excavation and would reduce repeated disruption.

Under the **New Roads and Street Works Act 1991**, Code of Practice for the Co-ordination of Street Works and Works for Road Purposes and Related Matters 2012³³¹ Highways Authorities have a duty to coordinate street works; and have powers to direct the timing of works and to direct the placement of apparatus. They also hold a register of planned works, and encourage forward planning information on long term programmes from all works promoters to help highway authorities to coordinate works.

Forward planning helps works promoters to identify opportunities for joint working and to coordinate the timing of resurfacing. This might include mains replacement programmes or reconstruction of main roads, which will be planned several years ahead.

Plymouth City Council is installing district heating network pipework in anticipation of need. Highway works proposed in one of the district heating network areas will have pipes installed while the street is being dug up, to make the most of the opportunity.

Highways Authorities' role in enabling Heat and Electricity Networks: Barriers

1. **Delayed revenue:** Installing pipework or grid reinforcement in district heat or heat pump areas a long time ahead of need could result in spending and investment in infrastructure that does not result in a revenue stream for a long time.
2. **Slowing other works:** There is a risk of slowing or complicating other works and contractors.
3. **Specification risk:** There is a risk if the specification for a district heating network changed that low temperature/high temperature pipe could be installed in the wrong place.

330 <https://www.gov.uk/government/publications/conservation-of-fuel-and-power-approved-document-l>

331 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/43578/street-works-code-of-practice.pdf

6.3 Renewable Energy in Planning

Local Planning Authorities are the primary decision-makers for most renewable energy schemes, except the very large or very small. Onshore wind developments have been effectively banned in England since the WMS of June 2015³³² which stated that “*when determining planning applications for wind energy development local planning authorities should only grant planning permission if:*

- *the development site is in an area identified as suitable for wind energy development in a local or neighbourhood plan; and*
- *following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.”*

Previous guidance had advised against identifying areas suitable for wind in local plans, so very few had that included. LPAs then had to decide whether to develop the evidence base needed to identify such suitable areas in new Local Plans.

Large scale renewable generation over 50MW (excluding on-shore wind and off-shore wind under 100MW) is determined nationally under the Nationally Significant Infrastructure Projects (NSIP) regulations within the Planning Act 2008³³³. Decisions on on-shore wind over 50MW were returned to the LPA In 2016 under the Infrastructure Planning (Onshore Wind Generating Stations) Order³³⁴.

Planning applications since 2016 have been dominated by solar PV, which have increased in scale from sites of typically 5MW sites in 2105 to 50MW in 2022, with a few applications for 500MW schemes. Applications for battery storage have increased significantly since 2019.

Only 16 planning applications for onshore wind energy submitted after the WMS 2015 have been approved in England, with a total capacity of 55MW, of which only five are operational. In contrast, in Scotland, 110 developments totalling 5.3GW were approved in the same period.³³⁵

Data for 2021 shows that Cornwall has the highest number of renewable generating sites in England³³⁶, at 21,482, of which 21,021 are solar PV and 426 on-shore wind sites, followed by Wiltshire, Dorset and Peterborough. Shropshire has the highest number of anaerobic digestion facilities (37 sites), reflecting its rural nature, and its strong support in the Local Economic Partnership’s Energy Strategy.³³⁷

³³² <https://www.parliament.uk/documents/commons-vote-office/June%202015/18%20June/1-DCLG-Planning.pdf>

³³³ <https://www.legislation.gov.uk/ukpga/2008/29/contents>

³³⁴ <https://www.legislation.gov.uk/uksi/2016/306/contents/made>

³³⁵ <https://www.gov.uk/government/publications/renewable-energy-planning-database-monthly-extract>

³³⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1107327/Regional_renewable_electricity_in_2021.pdf

³³⁷ <https://www.marcheslep.org.uk/marches-lep-energy-plan/>

Planning Applications Approved 2016-22 by Technology

Technology	Number of Applications	Total Installed Capacity (MWelec)
Solar Photovoltaics	1011	7878
Battery	349	9376
Energy from Waste Incineration	31	937
Biomass (dedicated)	30	78
Anaerobic Digestion	26	49
Wind Onshore	16	46
Hydrogen	10	29
Small Hydro	10	4
Advanced Conversion Technologies	8	135
Landfill Gas	4	16
Air Energy Storage	3	55
Geothermal	2	

There is concern about emissions from the growing numbers of Energy from Waste (EfW) applications which may be lower carbon than current alternatives, but will have long term emissions if abatement technologies cannot be installed. Any new facilities consented should be constructed with CCS in mind for future connection.

Local Planning Authorities are the **primary decision-makers** for most renewable energy schemes, except the very large or very small

6.3.1 Planning Powers for Large Scale Renewable Energy

LPAs have the powers to determine large scale on-shore renewable energy generation up to 50MW under the Planning Act 2008.

As of 2016, they have had the power to determine applications for on-shore wind over 50MW, when the Infrastructure Planning (Onshore Wind Generating Stations) Order³³⁸ returned the decision-making to LPAs.

Local authorities can use their planning policy and powers to encourage and consent renewable energy generation in their areas. The NPPF 2019 sets out the following plan-making requirements:

“To help increase the use and supply of renewable and low carbon energy and heat, plans should:

- a. provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and maintenance, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);*
- b. consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and*
- c. identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co- locating potential heat customers and suppliers.*

Local planning authorities should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood planning.”

However, the footnotes to these clauses retained the underlying assumption that wind energy should not be supported with the restrictive requirement that *“a proposed wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan and, following consultation it can be demonstrated that the planning impacts identified by the affected local community have been fully addressed and the proposal has their backing.”*

The Written Ministerial Statement of 6th December 2022³³⁹ addresses some of the barriers to onshore wind stating *“We believe that decisions on onshore wind are best made by local representatives who know their areas best and underpinned by democratic accountability. To deliver this, and our commitments in the British Energy Security Strategy, we will consult on a more localist approach that provides local authorities more flexibility to respond to the views of their local communities.”*

338 <https://www.legislation.gov.uk/uksi/2016/306/contents/made>

339 <https://questions-statements.parliament.uk/written-statements/detail/2022-12-06/hlws406>

340 <https://www.gov.uk/government/consultations/levelling-up-and-regeneration-bill-reforms-to-national-planning-policy>

The NPPF 2022 consultation³⁴⁰ eases the previous restrictions somewhat:

“Wind energy development involving one or more turbines can be granted through Local Development Orders, Neighbourhood Development Orders and Community Right to Build Orders, if it can be demonstrated that the planning impacts identified by the affected local community have been appropriately addressed and the proposal has community support.”

Except for applications for the repowering of existing wind turbines, a proposed wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in either the development plan, or a supplementary planning document identifies an area as suitable for wind energy development (where the development plan includes policy on supporting renewable energy); and, following consultation it can be demonstrated that the planning impacts identified by the affected local community have been satisfactorily addressed and the proposal has community support.”

Local authorities with older existing wind farms will be seeing applications for their repowering, installing fewer, larger more efficient turbines on the same site, which can increase generating capacity.

In **Calderdale**, Ovenden Moor Windfarm was built in 1993 with 23 turbines, these were removed in 2017 and replaced with 14 larger turbines. This more than doubled the output from 9.2MWh to 22.5MWh with an expected generation lifetime of 25 years.

The Energy Security Strategy committed to support repowering and the 2022 proposed changes to the NPPF include provisions for this:

“To help increase the use and supply of renewable and low carbon energy and heat, plans should: a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and maintenance, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts)”

“When determining planning applications for renewable and low carbon development, local planning authorities should: (c) approve an application for the repowering and life-extension of existing renewables sites, where its impacts are or can be made acceptable. The impacts of repowered and life-extended sites should be considered for the purposes of this policy from the baseline existing on the site.”



- **UK100** responded to the [BEIS Committee's Decarbonisation of the Power Sector Inquiry](#) calling for the Government to provide clarity on how they will identify and work with local communities who wish to host onshore wind infrastructure, and for the Government to prioritise readily available renewable energy options that would have an immediate impact on fuel costs and emissions, rather than relying on nascent technologies like CCS.

Cornwall Council's 2016 Local Plan³⁴¹ positively supported renewable energy including safeguarding existing renewable energy installations. In 2021 its **Climate Emergency Development Plan Document**³⁴² significantly strengthened these policies.

Policy RE1 - Renewable and Low Carbon Energy

1. Proposals for renewable and low carbon energy-generating and distribution networks, will be supported in the context of sustainable development and climate change, where:
 - a. they contribute to meeting Cornwall's target of 100% renewable electricity supply by 2030; and
 - b. they balance the wider environmental, social and economic benefits of renewable electricity, heat and/or fuel production and distribution; and
 - c. It will not result in significant adverse impacts on the local environment that cannot be satisfactorily mitigated...

Policy RE2 - Safeguarding strategic renewable energy sites

Planning permission for proposals that are not renewable energy installations within areas identified on the Policy Map as being potentially suitable for wind energy will only be granted where it can be demonstrated that the proposal would:

- Not introduce adverse impacts within close proximity or interfere with the operation of any installed or permitted or proposed (at planning applications) renewable energy installation and enabling infrastructure; or
- is a temporary use that will be re-located or removed prior to the renewable energy proposal commencing and there is a mechanism to ensure that this happens; or
- It can be demonstrated that there is no reasonable likelihood of a renewable energy installation coming forward on or within reasonable proximity to the application site or that an exception should be made based on substantial public benefits of the proposal.

At inspection, the draft policy was strengthened to allow, for example, wind turbines to be approved in areas outside those identified as "broadly suitable for wind" provided they had community support.

³⁴¹ <https://www.cornwall.gov.uk/media/ozhj5k0z/adopted-local-plan-strategic-policies-2016.pdf>

³⁴² <https://www.cornwall.gov.uk/planning-and-building-control/planning-policy/adopted-plans/climate-emergency-development-plan-document/>

6.3.2 Solar Farms

Solar farms have typically been seen as less controversial than wind. The capacity of solar schemes approved in 2022 was at the highest level since the Feed-In-Tariff was removed in 2014 although there has been a very public backlash against some very large schemes³⁴³. Government guidance to planning authorities calls for a “strong presumption” against solar farms on the best and most versatile (BMV) land, classified in law as Grade 1, Grade 2 or Grade 3a. In October 2022, a proposal was put forward by Defra to reclassify Grade 3b land, on which the majority of solar farms are built, to BMV land, which would have had a significant impact on new solar sites. However, this change appears to have been ruled out in December 2022³⁴⁴.

6.3.3 Planning Powers for Electricity Storage

Due to the nature of the technology (large capacity within a small footprint), in 2020 the government legislated to remove **electricity storage** over 50MW, except pumped hydro, from the NSIP regime,³⁴⁵ so local authorities have responsibility for larger electricity storage developments. Storage is critical to maximising the use of renewable energy generated and to flatten peaks in demand. As yet there is no specific mention of energy storage in the NPPF.

6.3.4 Microgeneration

Microgeneration is typically permitted development under the Town and Country Planning (General Permitted Development) (England) Order 2015,³⁴⁶ so there is no role for local authorities (other than where exclusions apply, such as sensitive sites: listed buildings, conservation areas, World Heritage Sites, Scheduled Monuments).

For domestic premises this covers:

- Solar PV and solar thermal on or within the curtilage of domestic buildings, subject to conditions on size, location and not including sensitive sites
- Ground, water source heat pumps
- Air source heat pumps subject to restrictions on size, noise, location, use and co-location with wind turbines
- Microgeneration wind turbines, subject to restrictions on size, noise, location and co-location with air source heat pumps
- Biomass boilers and micro-CHP systems subject to flue height restrictions.

343 https://www.solarpowerportal.co.uk/blogs/uk_solar_farm_approval_hits_record_capacity_level_in_2022

344 https://www.solarpowerportal.co.uk/news/ministers_rule_out_changes_to_land_categorisation_in_turning_point_for_the

345 <https://www.legislation.gov.uk/uksi/2020/1218/contents/made>

346 <https://www.legislation.gov.uk/uksi/2015/596/schedule/2/part/14/made>

For non-domestic buildings, the following are permitted development:

- Solar PV or solar thermal up to a maximum capacity of 1MW, subject to size and location restrictions. Prior approval from the LPA is required for solar PV schemes over 50kW
- Ground, water source heat pumps, subject to size restrictions
- Biomass boilers and micro-CHP systems subject to flue height restrictions.

Under the Planning and Energy Act 2008, local authorities have the power to include policies imposing reasonable requirements for a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development.

This led to the introduction of a number of “Merton-rule” style policies, as noted in the Buildings chapter. However, it is an under-used tool and the majority of new homes or non-domestic buildings do not have renewable energy installed. This represents a lost opportunity as it is far cheaper to install at the time of construction than to retrofit later.

Examples and barriers have been covered in the Buildings chapter.

6.3.5 Planning for Energy from Waste

Under the Planning Act 2008 local authorities are responsible for approving planning applications for EfW plants. Where they are also the Waste Planning Authority, they are responsible for developing and delivering the waste management plans that may include EfW. (See Waste Chapter). Although they have been important in diverting waste from landfill, EfW is a contentious policy in climate change terms: plants require a high calorific value of waste feed, which can work against ambitions to reduce emissions from waste by reducing products such as plastics and textiles from the waste stream. EfW plant should be required to be CCS ready, with the pipes and space in place for Carbon Capture and Storage.

6.3.6 Carbon Capture Use and Storage (CCUS)

CCUS is an essential component of the Net Zero Strategy. Planning for CCUS comes under the Planning Act 2008. The Energy Security Bill addresses some elements of CCUS³⁴⁷, including establishing the regulatory framework and market mechanisms. Energy generation plants which emit carbon, including EfW plants, will at some point come under regulations to install Carbon Capture and Storage equipment. Local authorities should be mindful of this in determining planning applications for such plants. Under the Carbon Capture Readiness (Electricity Generating Stations) Regulations 2013³⁴⁸, the planning authority already must not give consent without an assessment “*whether it is technically and economically feasible to retrofit the equipment necessary to capture the carbon dioxide that would otherwise be emitted from the plant, and to transport and store such carbon dioxide from the site*”.

Local authorities have powers to take decisions which contribute to GHG emissions or lock-in carbon emissions.

This includes decisions on fossil fuels.

³⁴⁷ <https://www.gov.uk/government/publications/energy-security-bill-factsheets/energy-security-bill-factsheet-carbon-dioxide-transport-and-storage-regulatory-investment-model>

³⁴⁸ <https://www.legislation.gov.uk/uksi/2013/2696/memorandum/contents>

6.3.7 Planning for Fossil Fuel Sources

While local authorities have powers they can use to tackle the climate emergency, they also have powers to take decisions which contribute to GHG emissions or lock-in carbon emissions. This includes decisions on fossil fuels.

Waste and Minerals Planning Authorities (WMPA) produce plans for minerals and waste, including extraction of fossil fuels such as coal, oil and hydraulic fracturing or “fracking” for shale gas, and these authorities determine planning applications. In practice however it is usually the Secretary of State who makes the final decision as it is standard practice for the industry to appeal any planning refusal by the WMPA.

The NPPF 2019 does not apply the same broadly unsupportive wording to oil, gas and coal exploration and extraction as it does to wind energy, except in the case of coal where national benefits, such as security of supply or economic benefits can override other impacts:

“Planning permission should not be granted for the extraction of coal unless:

- a.** the proposal is environmentally acceptable, or can be made so by planning conditions or obligations; or
- b.** if it is not environmentally acceptable, then it provides national, local or community benefits which clearly outweigh its likely impacts (taking all relevant matters into account, including any residual environmental impacts).”

There is no reference to climate change in this section of the NPPF. The Energy Security Strategy clearly supports new oil and gas exploration and remains “open-minded about our onshore reserves”. As a result, it is likely that energy security will trump carbon reduction in fossil fuel planning decisions, either at the national or local level.

A joint WMS on 17 May 2018³⁴⁹ announced the government’s intention to consult on the principle of whether non-hydraulic fracturing shale gas exploration development should be granted planning permission through a permitted development right, removing the local authority planning role. In November 2019 the government declared a moratorium on fracking, due to seismic activity. This moratorium was briefly lifted by Prime Minister Liz Truss in September 2022 before being reinstated³⁵⁰ under Prime Minister Rishi Sunak a month later. It is not yet clear whether local authorities will retain planning decisions if the government reverts to supporting the technology.

349 <https://questions-statements.parliament.uk/written-statements/detail/2018-05-17/HCWS690>

350 <https://questions-statements.parliament.uk/written-statements/detail/2022-10-27/hcws346>

Lancashire County Council had refused planning consent for fracking at Preston New Road in 2016, but was overruled by the government. Following the government announcement of a moratorium on fracking in late 2019, further planning applications in Lancashire were dropped. Greater Manchester authorities also announced a presumption against fracking in their planning policies in 2019³⁵¹.

In a controversial decision in October 2019, **Cumbria County Council** gave planning consent³⁵² for a new coal mine in the west of the county. The Secretary of State for Housing, Communities and Local Government called in this decision in early 2021, following pressure particularly from the CCC, that it is inconsistent with the UK policy on carbon reduction.³⁵³ However the planning approval was allowed in December 2022 despite significant opposition.

Surrey County Council gave permission in 2019 for four new oil wells near Gatwick, and 20 years of production³⁵⁴. A judicial challenge to this decision argued that the council failed to consider the direct and indirect GHG emissions of the project in relation to the government's Net Zero target, but the case was dismissed in December 2020.³⁵⁵ A separate application for exploratory oil drilling was rejected in 2020, which was overruled at appeal in 2021, but a challenge to the appeal ruling by Waverley Borough Council on climate grounds has been allowed to go ahead in 2023³⁵⁶.

A more recent planning issue is applications for Gas Peaking Plant or Electricity Peaking Stations. Peaking stations, also called peak-opping plants, are power plants designed to help balance the fluctuating power requirements of the electricity grid that run on mains and stored natural gas. Peaking stations typically operate in standby mode, and then when there is a peak in demand for power from the electricity grid the gas engines receive a signal to commence operation. Due to their flexibility and robustness they are able to provide a rapid response to fluctuating demand.

In 2019, **East Devon District Council** refused permission for a 40MW gas-fired peaking plant to be built near Exmouth, on the grounds that it was not consistent with the Council's climate emergency declaration and plans to go carbon neutral by 2040. This decision was overturned at appeal in 2020³⁵⁷ with the inspector's report stating that "local climate declarations cannot be used in an 'emergency' fashion to override adopted planning policy."

In the near future, local authorities will also be called upon to make planning decisions on hydrogen plants.

Local authorities need to be aware of the overall carbon impact of such installations and take into account their climate ambitions in decision-making. However, this requires up to date knowledge of the technologies or access to independent technical support. The absence of any clear guidance or consistency from government about the importance of the Climate Change Act and how it should be used in planning decisions means that local authorities will continue to have to make decisions that are open to legal challenge, and often contradictory to their stated Climate Emergency declarations.

³⁵¹ <https://www.greatermanchester-ca.gov.uk/news/mayor-sets-out-bold-ambition-for-greater-manchester-to-be-carbon-neutral-by-2038/>

³⁵² <https://councilportal.cumbria.gov.uk/mgAi.aspx?ID=54074>

³⁵³ <https://www.gov.uk/government/publications/decision-to-call-in-west-cumbria-coal-mine>

³⁵⁴ <https://mycouncil.surreycc.gov.uk/documents/g6651/Public%20reports%20pack%20Wednesday%2011-Sep-2019%2010.30%20Planning%20and%20Regulatory%20Committee.pdf?T=10>

³⁵⁵ <https://drillordrop.com/2020/12/21/breaking-surrey-campaigner-loses-legal-fight-over-climate-effects-of-20-years-of-oil-production-at-horse-hill/>

³⁵⁶ <https://www.waverley.gov.uk/Council-updates/Read-our-latest-news/waverley-wins-right-to-statutory-review-of-loxley-well-decision>

³⁵⁷ <https://acp.planninginspectorate.gov.uk/ViewCase.aspx?caseid=3247638>

⊗ Renewable Energy in Planning: Barriers ⊗

1. **Negative presumption towards renewable generation:** Most Local Plans include policies on renewable energy. However, following the NPPF guidelines, and in contrast to housing for example where there is a presumption in favour of developments, policies “supporting” renewable energy developments in planning policy typically face an assumption that there will be adverse impacts. For example:

“Proposals for the generation of energy from renewable resources will be permitted provided that any detrimental effect on features and interests of acknowledged importance, including local character and amenity, is outweighed by environmental benefits...”

This is particularly the case for the most cost-effective renewable technology (onshore wind) and as a result most planning authorities have assumed an outright ban.

Interim research shared in July 2020 by CSE³⁵⁸ and the Town and Country Planning Association found that of 12 local planning authorities, a minority of Local Plans reviewed had a positive and proactive energy policy that sought to maximise renewable energy generation. Two urban councils had no renewable energy policy at all, and the rural councils tended to focus on the negative impacts or limited the size of schemes; three gave support without listing the types of suitable schemes that might be acceptable with just four giving in principle support and defining suitable areas for different technologies. This is changing as local authorities review their Local Plans in light of their Climate Emergency Declarations and slight changes in the direction of the NPPF and statements from government. However, the time taken to develop new plans and guidance means that the presumption against large scale renewables will remain for some time.

2. **Local opposition, real or perceived:** There can be vocal opposition to renewable energy schemes, just as there can be to other forms of development. Good community engagement in forming local plans or neighbourhood plans can address this. On the other hand, local communities can be very supportive of renewable energy schemes, particularly community energy schemes which are owned by ordinary investors and which reinvest profits for local benefit.

Ambition Community Energy³⁵⁹, Bristol is one of the few onshore wind projects to receive planning permission in recent years. The 4.2MW turbine will be owned by a community energy company, and its planning application received 67 letters of support from the local community (and one objection, from the nearby power station).

3. **Cost of appeals:** Large scale energy developments are contentious and the energy development industry has deep pockets. Without a presumption that the Climate Change Act is a significant material consideration in planning, there is a strong risk that the threat of appeal and subsequent time and resource commitment placed on the local authority leads to decisions that are not consistent with the climate change target.
4. **Lack of knowledge of technologies and impacts:** The impacts of renewable energy schemes are changing as the technologies develop. It is difficult for planning officers to keep up to date on these without specialist support, either internally or in national guidance (which also needs updating). For example, “glare” is one of the possible reasons for objecting to large solar schemes, but panels are designed to absorb sunlight and minimise glare, and on some roofs such as metal sheeting, can actually reduce the visual impact of the roof.

³⁵⁸ <https://www.cse.org.uk/news/view/2484>

³⁵⁹ <https://ambitioncommunityenergy.org>

6.4 Local Authority Investment in Renewable Energy

Local authorities can invest in their own or other renewable energy schemes. As well as contributing to low carbon generation, these investments are generally used to provide an income stream, often supporting work on affordable warmth.

Under the Local Government Act 2003 s.1, **a local authority may borrow money** for any purpose relevant to or for the purposes of the prudent management of its financial affairs. It has a duty to set an affordable borrowing limit. **A local authority has a power to invest** for the same purposes, under s.12 of the same Act.

In 2013 **Bristol City Council** built two 2.5MW turbines on land owned by the council at Avonmouth, specifically as a project to reduce the council's carbon emissions³⁶⁰.

Various local authorities have invested through PWLB borrowing (see chapter 3; PWLB rates have recently risen, and the Prudential Code amended) in large scale solar PV schemes either on their own land, local area, or out of area including:

Swindon Borough Council set up Public Power Solutions³⁶¹, with the Science Museum Group, to install a 61 MW solar PV scheme at former RAF airfield, Wroughton. Warrington, Newham and Thurrock Borough Councils are now investors in the scheme.

West Sussex County Council installed a subsidy-free 7.4MW solar plus battery storage scheme at Westhampnett³⁶², on the former landfill site in 2018; this adds to the council's 5MW scheme at Tangmere.

South Somerset District Council has invested £43.5 million in two battery storage facilities³⁶³: 30MW installed in 2020 on the outskirts of Taunton (within their district), and 60MW near Fareham in Hampshire. The two facilities are owned by a joint venture company, SSDC Opium Power Ltd, with income being optimised by LimeJump. The council expected to achieve an IRR of 14% on the projects.

Others have used Re:FIT or Salix finance to install renewables on their own estate, schools and other public buildings. Local authorities are also raising finance through Bonds or ISAs.

There are many more examples of local authorities installing renewable energy which can be found in case studies from the Solar Trade Association.³⁶⁴

Further detail on the powers local authorities can use to borrow, invest and establish companies are covered above in the finance section in chapter 3.

³⁶⁰ <https://www.bristol.gov.uk/files/documents/5241-climate-emergency-action-plan/file>

³⁶¹ <https://www.publicpowersolutions.co.uk>

³⁶² https://www.solarpowerportal.co.uk/news/uks_second_subsidy_free_solar_farm_completed_by_west_sussex_council_using_b

³⁶³ <https://www.southsomerset.gov.uk/news/2020/9/next-steps-to-expand-existing-renewable-energy-investment-are-complete-as-new-investment-in-second-advanced-battery-energy-storage-facility-is-announced/>

³⁶⁴ <https://www.solar-trade.org.uk/wp-content/uploads/2018/04/local-authority-solar-guide-WEB.pdf>

⊗ **Local Authority Investment in Renewable Energy: Barriers** ⊗

- 1. Capacity, skills, resources and time:** The powers are available to local authorities wishing to invest in renewable energy. The barriers relate to capacity, resources and skills to develop schemes and go through the commercial, technical, legal and financial steps to deliver them. It has taken many years for local authorities such as Warrington Borough Council and Swindon Borough Council to develop the skills and confidence to invest in significant sized schemes. This time and resource is not available in many local authorities.
- 2. Funding:** The barriers are further outlined in chapters 3 and 4.
- 3. Risk:** The energy market in the UK is evolving fast, and there is no simple method for other local authorities to replicate large scale renewable generation schemes. Changes to subsidies, borrowing rates, the addition of battery storage and expected changes to the Prudential Code governing borrowing will mean new schemes will face new challenges.

6.5 Energy Infrastructure Conclusions

Local authorities need a recognised role in planning the most suitable energy infrastructure for their areas. Local Area Energy Planning in particular is under-valued and under-resourced. While local authorities have the power to develop these, they have no formal place in the energy system and there is no formal role for local authorities in energy system governance.

Powers to influence local energy infrastructure have increased in recent years, and the leading authorities have made use of their powers in planning and finance. As in other areas, the main barriers are the lack of supportive policy, resources and capacity. The critical area in need of more local power is in delivering an integrated low carbon energy plan, to replace the current piecemeal approach.

6.5.1 Recommendations for Energy Infrastructure Powers

UK100 Top Three Recommendations for Energy

- 1** A national framework for LAEPs should be put in place giving a strategic role and more powers to local and regional authorities to develop a balanced energy system which combines a mix of large scale power generation, local decentralised energy systems and demand management, as part of a wider priority focus of reaching Net Zero.
- 2** Funding and resources for LAEPs to be developed and then implemented, including significant capacity building within local authorities and partnerships that include communities to deliver across local authority boundaries; this should not be competitive between local authorities as that impedes cooperation and learning.
- 3** Require all planning decisions to be compatible with meeting our Net Zero target. This must include giving local authorities the power to refuse consent for fossil fuel extraction or development of carbon-based energy infrastructure if it is not aligned with the Net Zero target, without the expectation of their decision being overturned on appeal by the Inspectorate.

To support this, local authorities will need enabling powers including:

- A formal power to determine and govern Local Area Energy Plans, with a wider remit than just heat zone co-ordination
- The powers set out for Heat Network Zone Coordinators in the yet to be enacted Energy Bill:
 - Coordinate the identification and delivery of Heat Network Zones
 - Require buildings to connect to district heating schemes in identified heat network zones.
- Power to override national constraints on energy technology deployment such as on-shore wind (i.e. withdraw 2015 Ministerial Statement) when supported by local evidence, either in a LAEP or separately.

Key supporting policy, frameworks and resources are required from national government to underpin local authority powers:

- **A cost-effective system** to fund and develop LAEPs supported by resources to share learning and data; this should not be competitive between local authorities as that impedes cooperation and learning
- **Governance:** policy from Ofgem for a defined role in governance and management of local energy systems and supporting LAEP standards
- **A requirement and appropriate mechanism** to incorporate LAEPs into ongoing DNO business plans, to enable and provide a fair long-term distribution of upfront infrastructure costs needed to deliver Net Zero
- **Supporting policy in the NPPF** to ensure that every area is covered by a Net Zero LAEP, including the removal of the viability constraint, alongside guidance relevant to different area types
- **A significant increase in funding local energy infrastructure planning and delivery** including where this investment may not provide a revenue stream for a significant time
- **Staff resource and training in energy systems and energy markets** to build local authority capacity. There is a limited range of consultants with the capability to undertake techno-economic modelling for local energy and district heating schemes. Building local authority capacity will avoid reliance on external consultants, save costs, and enable local authorities to be 'good clients' and effective project coordinators. It will also enable them to guide public discussions with confidence
- **Elected Member training** which will be important for Members on Planning Committees, Scrutiny Committees and for their public engagement role
- **Resources and guidance** for public engagement on the Net Zero energy transition and what it will mean for local residents and businesses, to build up awareness and engagement on likely options for local areas
- **Planning policy reform to put Net Zero at the heart of decision making:** allowing climate change impacts to override other issues, including national energy security, enabling local authorities to refuse fossil fuel-based proposals without the expectation of their decision being overturned on appeal.
- **Supporting policy** for Planning and Building Regulations as set out in the Buildings chapter.

Waste:

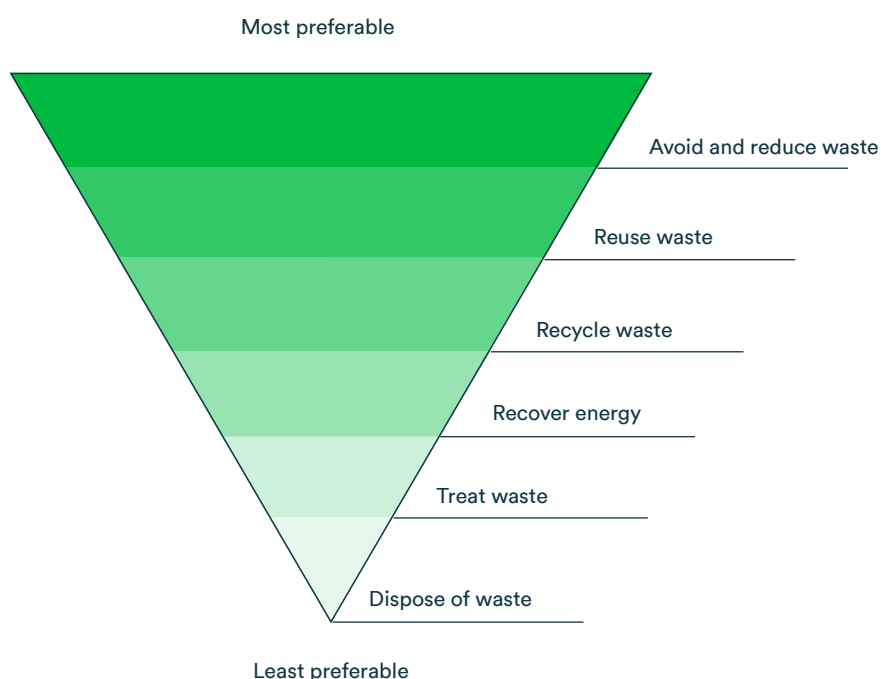


Emissions from waste represent 6% of total 2020 UK GHGs. Overall waste emissions declined 5% in 2020 compared to 2019. This was driven principally by a 9% reduction in methane emissions from landfill, which accounts for over half of the emissions from the sector³⁶⁵.

However, Energy from Waste plants (EfW) and incineration is responsible for about a quarter of the sector's emissions and this has increased by 3% since 2019.

The CCC states that to be on track for Net Zero, sending biodegradable waste to landfill must stop by 2030 or earlier and that municipal recycling rates should increase from around 45% in England to 65% by 2025 and 70% by 2030³⁶⁶. The key challenges identified by the CCC for the waste sector are to end the landfilling of biodegradable waste and reduce reliance on incineration by delivering a step-change in recycling, re-use and waste prevention.

The waste hierarchy should form the basis of action to reduce emissions from waste.



Reducing waste at source is essential to reducing emissions, both from the waste itself and in producing industries. This will involve moving to a circular economy: designing out waste, reusing/recycling of waste as raw materials, devising new business models around services rather than ownership, enabling repair and developing a sharing economy. Such changes could also help protect biodiversity, reduce pollution from extractive industries and create new, better-quality jobs.

³⁶⁵ <https://www.theccc.org.uk/publication/2022-progress-report-to-parliament/>

³⁶⁶ Climate Change Committee, The Sixth Carbon Budget 2022.

<https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf>

Local authorities' role is primarily in the bottom half of the hierarchy, as they have no statutory powers in the most important areas of waste reduction and re-use. Although emissions from waste are a much smaller proportion of a local area's emissions than those from buildings and transport, and fall within Scope 3 GHG reporting (indirect emissions), it is still important that local authorities act to reduce waste emissions. Local authorities of all tiers have a direct responsibility for waste collection and/or disposal, so they need to use their role to influence emissions reductions across the waste hierarchy.

The Government's **Environmental Improvement Plan**³⁶⁷ provides high level targets and commitments such as exploring options for the near elimination of biodegradable municipal waste to landfill from 2028 (i.e. within the CCC advice) and halving 'residual' waste (excluding major mineral waste) produced per person by 2042. 'Residual' waste is defined as waste that is sent to landfill, put through incineration or used in energy recovery in the UK, or that is sent overseas to be used in energy recovery. Interim targets for January 2028 are provided in the Plan, giving % reductions in each waste type per person, for example, reducing residual municipal food waste by half, glass waste by 48% and residual waste by a third.

Local authorities in England spent £3.8 billion in 2020-21 on waste collection, minimisation, recycling and disposal³⁶⁸, up from £3.6 billion in 2017-18.



³⁶⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1133967/environmental-improvement-plan-2023.pdf

³⁶⁸ <https://www.gov.uk/government/statistics/local-authority-revenue-expenditure-and-financing-england-2020-to-2021-budget-individual-local-authority-data>



Key Powers

Relevant Legislation	Power enabled
Environment Act 2021 The Environmental Protection Act 1990 s.45 amended under the Environment Act 2021 replaced with s.45A	Duty to collect household waste Collection of household waste separate from collection of recyclable household waste Recyclable household waste must be collected for recycling or composting Household food waste must be collected at least once a week Recyclable waste should be collected separately (unless not technically or economically practicable) but food and garden waste cannot be collected together with other recyclable waste such as plastics, paper/card, metal and glass
Waste and Emissions Trading Act 2003	Duty to report waste data Duty on two-tier authorities to produce a joint waste strategy
The Environmental Protection Act 1990 s.59	Power to require removal of waste unlawfully deposited on land; under certain circumstances can remove waste and charge for removal
The Environmental Protection Act 1990 s.55	Powers to purchase, sell and utilise recycled waste
Local Government Act 1972 s.101(5) and 102	Power to set up committees, made up of several local authorities
Town and Country Planning Act 1990	Planning permission for Waste Treatment/EfW facilities by the LPA
Sale of Electricity by Local Authorities (England and Wales) Regulations 2010	Sale of electricity, e.g. if an EfW plant is publicly owned
The Controlled Waste (England and Wales) Regulations 2012	Local authorities can charge for some kinds of waste from schools, prisons etc.
s.51 of the Environmental Protection Act 1990	Local authorities may provide commercial waste collection and disposal
s.51 of the Environmental Protection Act 1990	Local authorities may give prescribed financial assistance directions to assist in the disposal of commercial or industrial waste
The Environmental Protection (Plastic Straws, Cotton Buds and Stirrers) (England) Regulations 2020 Enforced through civil sanctions set out in regulations using powers in Part 3 of the Regulatory Enforcement and Sanctions Act 2008 ³⁶⁹	Council enforcement of restrictions on the supply of single-use plastic straws and stirrers, and plastic-stemmed cotton buds; and from October 2023, the supply of single-use plastic plates, trays, bowls, cutlery, balloon sticks, and certain types of polystyrene cups and food containers Similar bans are in place in Scotland and Wales with a ban in line with the EU Single Use Plastic Directive due in Northern Ireland
Section 34(2A) of the Environmental Protection Act 1990 in England	Local authority powers to issue a Fixed Penalty Notice for failure to meet duty of care – e.g. waste that is fly tipped, private waste transferred to an unauthorised waste carrier or to an unauthorised person on a site without a permit

Under the **Waste and Emissions Trading Act 2003**³⁷⁰, 2013 regulations, local authorities must submit quarterly data on Municipal Waste Management to the Environment Agency on the WasteDataFlow website. A penalty is imposed if this data is not submitted. Waste Collection Authorities, Waste Disposal Authorities and Unitary Authorities submit data; this is mainly reported in tonnages collected and processed, types of materials collected and destinations (recycling, anaerobic digestion (AD), incineration, landfill, etc.) and does include some data on quality of materials collected as it includes data on rejections from processing facilities.

In December 2022 Defra produced **Experimental Statistics on the carbon impact of waste from households managed by local authorities in England**³⁷¹ which provide useful insights for local authorities into the carbon emissions resulting from different types of collected waste and recycling. These statistics are based on outputs from Carbon WARM³⁷² which has been developed by WRAP on behalf of Defra to allow monitoring and evaluation of the impacts of the Resources and Waste Strategy in terms of its Greenhouse Gas emissions impact, measured as carbon dioxide equivalent (CO₂e).

The report highlights the most emissions-effective methods of waste disposal and helps move waste up the waste hierarchy. For example, it highlights that sending food waste for AD is the best way to handle food waste, followed by composting. It also highlights the extremely high emissions from burning plastics of any kind in EfW plant. In England more waste is incinerated than recycled.

Whereas Scotland and Northern Ireland are doing better, and Wales has shown it is possible to reduce landfill whilst limiting incineration by increasing recycling rates³⁷³.

- In 2020 around 11.0 million tonnes or 86% of residual waste was sent for incineration with energy recovery (EfW). Some 1.8 million tonnes or 14% of residual waste was sent to landfill in 2020.
- Dry recycling was 5.9 million tonnes in 2020 and made up 60% of total recycling. Around 76% of dry material processing was sent for “closed loop” recycling (that is recycling materials back into the raw material it was made from – e.g. glass for glass gullet; steel for making cans) which is negative emissions; and 24% to “open loop” (that is where other products are made from the recycled materials e.g. glass used in aggregate, or plastics used in board). Open loop recycling results in carbon emissions.
- Separately collected food waste was 491,000 tonnes in 2020, 5% of total recycling. Some 87% of food waste was sent to AD plants, with the remainder sent for in-vessel composting.
- Other organics was 3.4 million tonnes in 2020. This waste, comprising mixed garden and food, and green garden waste, was 35% of total recycling. The majority of this material was reported as being sent for composting, with the remainder going to AD.

Ideally a whole-system approach will be taken in England, as in Wales, where local authorities have recycling targets, greater support and planning restrictions on EfW plants.

- **UK100's [Local Net Zero Delivery report on Waste](#)** analyses the progress made towards reducing emissions from waste at a local level in the UK in the past year.

We recommended that a framework should be implemented for more cohesive national collection and behaviour change to promote a circular economy.

³⁷⁰ <https://www.legislation.gov.uk/ukpga/2003/33/contents>

³⁷¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1123468/Statistics_on_carbon_emissions_Waste_Households_England_v8_2018.pdf

³⁷² <https://wrap.org.uk/resources/report/carbon-waste-and-resources-metric>

³⁷³ [Progress-in-reducing-emissions-2022-Report-to-Parliament.pdf](#) (theccc.org.uk)

7.1 Waste Responsibilities

7.1.1 Waste Collection Authorities

As waste collection authorities, District Councils, Unitary Councils and Metropolitan Borough Councils have a **duty to collect household waste** under **The Environmental Protection Act 1990** s.45.³⁷⁴ This has been amended by the **Environment Act 2021** and waste collection authorities will have to collect residual household waste separately from recyclable waste, collect food waste weekly, ideally collect each type of recyclable material separately, or at a minimum collect recyclable and compostable waste separately. Waste collection authorities can apply to the Secretary of State to collect recyclable and compostable waste in just two streams if it is not technically or economically feasible to collect separately. They can also collect commercial waste, if requested, for which they can charge a fee.

In May 2021 Defra held a consultation on consistency in household and business recycling in England³⁷⁵ the results of which are awaited in early 2023.

Under s.32 of the **Waste and Emissions Trading Act 2003** local authorities in a two-tier area must produce and publish a joint municipal waste management strategy; this would include County Councils and the District Councils in their area.

Local authorities have powers to set up committees, including committees made up of several local authorities, under s.101(5) and s.102 of the Local Government Act 1972 and Regulations 7 and 11 of the Local Authorities (Arrangements for the Discharge of Functions) (England) Regulations 2012.



³⁷⁴ <https://www.legislation.gov.uk/ukpga/1990/43/section/45>

³⁷⁵ <https://www.gov.uk/government/consultations/consistency-in-household-and-business-recycling-in-england#full-publication-update-history>

7.1.2 Waste Disposal Authorities

Under the Environmental Protection Act 1990 Waste Disposal Authorities are:

- County Councils
- London – has four Waste Disposal Authorities
- Greater Manchester – the Greater Manchester Combined Authority has taken over the role of Greater Manchester Waste Disposal Authority and is the Waste Disposal Authority for nine of the ten local authorities (Wigan operates as a unitary authority and disposes of its own waste)
- Merseyside Recycling and Waste Authority for the six authorities in the Combined Authority area
- Metropolitan Borough Councils.

How Waste Disposal Authorities operate varies. Some local authorities contract out waste disposal in long-term contracts; some own waste collection infrastructure such as depots, transfer stations, fleet, household reuse and recycling centres, while others also own disposal assets such as processing centres and EfW facilities. Some have set up local trading companies, Public Private Partnerships or joint ventures.

The extent of the power that the Waste Disposal Authority has over what happens to the waste is constrained by the facilities available for recycling and waste disposal in the UK and in the global market (see barriers below). A Waste Disposal Authority's ability to reduce emissions from waste depends on the type of facilities it invests in, and the terms of the disposal contracts, and then beyond that, the performance of the supply company. Writing emissions targets into the waste disposal contracts is fundamental to the local authority driving GHG emissions reductions, but this must be affordable and sustainable. Some waste authorities have contracted with EfW operators to provide a certain level of calorific value over a specified term to give developers certainty – however this effectively disincentivises increasing recycling rates for that period.

Sunderland City Council has approved planning permission for a new plastics recycling facility at Port of Sunderland. The facility will take 100,000 tonnes of low value mixed plastic waste from the north of England that otherwise would have gone to EfW or landfill and will produce a raw material for use in further high-grade plastics, reducing emissions by 70% compared to the plastics being used in EfW. It will open in 2025³⁷⁶.



³⁷⁶ <https://www.portofsunderland.org.uk/news/planning-permission-granted-quantafuels-new-plastics-recycling-plant>

7.1.3 Waste Planning Authorities

Waste Planning Authorities (County councils, Unitary and National Park Authorities) are responsible for planning waste developments such as landfill sites, waste transfer stations, material recovery sites, recycling facilities, anaerobic digestion facilities, energy from waste incineration, incineration facilities etc.

Larger developments, such as developments of generating sites with a capacity exceeding 50MW, hazardous waste sites handling more than 100,000 tonnes or final disposal of 30,000 tonnes annually and wastewater treatment sites for populations of more than 500,000, are handled under the Planning Act 2008.

7.4.1 Funding the Waste System

Local authorities fund waste collection and some disposal from council tax. In joint Waste Disposal Authorities across several authorities such as West London or Greater Manchester, a levy is paid by the member councils to the disposal authority, and in Waste Partnerships recharges are made from local collection authorities to the disposal body. Waste Disposal Authorities providing the service aim to cover the costs from selling the materials collected while trying to keep the waste levels and costs down in the face of population increases and multiple material streams. Waste disposal authorities are concerned that for them to secure funding through the extended producer responsibility (EPR) system from 2024, the sampling and data reporting requirements will be much greater.

7.2 Household Waste Management

7.2.1 Waste Minimisation

Local authorities have no specific powers to reduce waste at source (i.e. before it becomes waste). Yet waste minimisation is critical to reducing the need to deal with any waste. Global and national action will be needed to move to a circular economy, with a significant role for the manufacturing and construction industries to design out waste. Local authorities have a role in encouraging the reduction of waste, but cannot enforce it.

During the 2000s, waste minimisation schemes such as the National Industrial Symbiosis Programme (NISP) and similar schemes were supported by government funding to work with industrial sectors and clusters to identify, match and reuse waste materials.

Five Interdisciplinary Circular Economy Centres were announced in 2020 to support industry to reduce waste and boost recycling in textiles, electronics, metals, construction and chemicals. The government has committed to continued support to WRAP and work with the Ellen McArthur Foundation.

Waste minimisation is also enabled through voluntary agreements such as the Courtauld Commitment³⁷⁷ which aims to reduce the impacts of the food and drink industry and which has new targets for 2025. Various industry initiatives and sectors are undertaking voluntary measures to design out or reduce waste, and move towards a circular economy, some of these can be found on the WRAP website³⁷⁸, and include the UK Plastics Pact, Electrical and Electronic Equipment Sustainability Action Plan and Sustainable Clothing Action Plan.

³⁷⁷ <https://wrap.org.uk/taking-action/food-drink/initiatives/courtauld-commitment>

³⁷⁸ <https://wrap.org.uk>

Many Waste Disposal Authorities are positioning waste as Resource Management and are promoting circular economy principles. Combined and local authorities are also developing circular economy policies, zero waste strategies and becoming Sustainable Food Cities and Places. This tackles upstream waste reduction as well as driving co-benefits such as improved health, enterprise and jobs.

- **UK100** [responded to DEFRA's consultation on the Environment Act 2021](#) calling for policy to prioritise waste prevention first, then reuse, followed by recycling and finally energy recovery, with incineration or landfill being used only when none of the above are possible. Energy recovery/EfW should not be used where waste prevention, reuse or recycling is possible.

The **Kent Joint Municipal Waste Strategy**³⁷⁹ Future Thinking section includes actions to develop metrics and means to focus on quality and value of resources as opposed to traditional weight-based targets; and to target materials streams and specific sectors to identify and implement management options in a circular economy context.

Greater Manchester Combined Authority's 5-year Environment Plan 2019-24³⁸⁰ Sustainable Consumption and Production sector has a priority to move to a circular economy through producing goods and services more sustainably, as well as encouraging and enabling residents to become more responsible consumers with linked aims to manage waste sustainably and reduce food waste.

West London Waste Authority's Business Plan³⁸¹ 2020-2025 covers six London boroughs and incorporates UN Sustainable Development Goals on sustainable consumption and production, climate change and partnership.

Devon County Council is the waste disposal authority for Devon's eight districts. As part of Recycle Devon³⁸², it has employed a part-time Re-use Project Officer since February 2015 who coordinates The Big Fix, an annual event to promote repairing which has now become nation-wide. At last year's event 1100 items were fixed saving 30,900kg CO₂e. They also loan out Clothes Swap (or Swishing) kits comprising rails, mirrors, hangers, and promotional materials for community groups to run their own events, as well as organising an Upcycle Day and Reuse Week. Additionally, the Re-use Project Officer attends regular and ad hoc events, such as the Devon County Show and RHS Rosemoor Go Green Weekend, and collaborates with Community Action Group Devon, which provides first-hand support to Repair Cafés, Community Fridges, Community Larders, and Green Schemes.

Local authorities, through their economic development role may provide resource efficiency advice to support businesses, particularly small to medium sized enterprises to reduce waste and support business growth. These programmes were largely ERDF funded and local authorities and LEPs³⁸³ will need to replace this funding or develop a paid-for service in order to continue to provide support to small businesses.

³⁷⁹ https://www.kent.gov.uk/_data/assets/pdf_file/0018/10098/Kent-Joint-Municipal-Waste-Management-Strategy.pdf

³⁸⁰ <https://www.greatermanchester-ca.gov.uk/what-we-do/environment/five-year-environment-plan/>

³⁸¹ <https://westlondonwaste.gov.uk>

³⁸² <https://www.recycledevon.org>

³⁸³ ERDF - European Regional Development Funding, LEP - Local Economic Partnership

Greater Manchester Combined Authority, with its partner Suez, has established a **Renew Hub**³⁸⁴ – this takes all the items that have been donated at recycling centres to be cleaned and prepared for resale, or selected for upcycling. At more than 5000m², the Renew Hub is the UK's largest, newest and most unique reuse operation in terms of opportunity and scale. Hundreds of tonnes of pre-loved items which would have otherwise gone to waste are brought to the Hub for repair and resale, with all of the money going back to the local community. Along with making great strides towards a circular economy, the Hub provides training and employment in green skilled jobs along with working with local charities.

Re-London³⁸⁵ created the Advance London programme to support local small businesses. It offered tailored support to explore new circular economy markets, revenue streams, and business models. By the end of 2018, Advance London had provided 700 hours of bespoke support to 112 businesses and helped to facilitate 20 product-market collaborations which generated five new circular products or services.³⁸⁶ In 2021-22, they ran a similar support programme for a further 80 businesses.

Essex County Council have participated in developing The BLUEPRINT Model³⁸⁷, a project designed to help local authorities transition to a circular economy across England and France. It focusses on four key areas: procurement, waste management, training and job opportunities and behaviour change. Local authorities can download the baselining spreadsheet from the website (which will remain live post-project) and then follow the model pages and training to work their way through implementing their own circular strategies and campaigns. It provides support for baselining, supporting social enterprise in delivering circular economy training, and provides resources for community engagement on waste and recycling.

Waste systems have been driven through EU regulation and national policy, such as **The Producer Responsibility Obligations (Packaging Waste) Regulations 2007** which requires obligated packaging producers to purchase Packaging Waste Recovery Notes (PRNs) that help fund the UK's waste and recycling infrastructure. The **Waste Electrical and Electronic Equipment (WEEE)** regulations introduced in 2007 (and updated in 2019) set targets for the collection, recovery and recycling of electrical and electronic equipment (EEE). Producers are also required to provide free and accessible written information to customers on the services they provide for collection and recycling, as well as information on how they can reuse and recycle EEE. With the UK's exit from the EU, waste-related directives were transposed to UK legislation as detailed in the July 2020 Circular Economy Package Policy Statement³⁸⁸ through the Statutory Instrument: **The Waste (Circular Economy) (Amendment) Regulations 2020**.³⁸⁹ This includes a provision that waste collected separately for recycling or reuse should not be accepted for incineration or for landfill and as such, should increase recycling rates. It also puts into law the commitment in the Recycling and Waste Strategy to recycle 65% of municipal waste and to have no more than 10% of municipal waste going to landfill by 2035.

³⁸⁴ <https://greatermanchester-ca.gov.uk/what-we-do/waste-resources/renew/>

³⁸⁵ <https://relondon.gov.uk>

³⁸⁶ <https://www.ellenmacarthurfoundation.org/case-studies/stimulating-and-scaling-circular-breakthroughs>

³⁸⁷ <https://projectblueprint.eu/>

³⁸⁸ <https://www.gov.uk/government/publications/circular-economy-package-policy-statement/circular-economy-package-policy-statement>

³⁸⁹ <https://www.legislation.gov.uk/uksi/2020/904/made>

The **Environment Act 2021**³⁹⁰ introduces new requirements on producers and waste collection and disposal authorities. The act has the potential to drive waste prevention and reuse, rather than simply changing recycling rates. For now, it includes changes to the existing system, introducing extended producer responsibility (EPR) to make producers responsible for the full costs of the disposal of materials.

Extended Producer Responsibility, based on ‘the polluter pays’ principle, is a policy outlined in the government’s 2018 Waste and Recycling Strategy³⁹¹, and provided for in the Environment Act 2021, which will be fundamental to reducing waste at source and providing resources to manage waste. In 2021, the Government carried out a consultation on Introducing EPR for Packaging.³⁹² Local waste authorities interviewed for this report expressed concern that the EPR will provide funding for waste recycling facilities in its early years, but then there may be a risk of stranded assets as producers redesign products and packaging to avoid the costs of EPR. They are also concerned that in order to secure funding from the scheme they will have to carry out more complicated waste reporting. There is also a desire expressed by local authorities for much stronger regulation, for example, the volume of single use plastics such as plastic bottles could be reduced through a ban on imported water.

The **Environmental Protection (Plastic Straws, Cotton Buds and Stirrers) (England) Regulations 2020**³⁹³ restricts the supply of single-use plastic straws and stirrers, and plastic-stemmed cotton buds. From October 2023 this ban will be extended to include single-use plastics in food outlets (not supermarkets), such as plates, trays, bowls, cutlery, balloon sticks, and certain types of polystyrene cups and food containers. Councils will be responsible for enforcing the ban.

Similar bans are in place in Scotland and Wales with a ban in line with the EU Single Use Plastic Directive due in Northern Ireland.

⊗ Barriers ⊗

- 1. Lack of a whole-system policy:** Funding to assist the change to consistent collection is restricted to helping local authorities invest in collection (vans, boxes, staff) but not the disposal infrastructure (depots, investment in disposal technologies such as new AD plants to handle greater volumes of food waste, or improvements in mechanical recovery facilities to identify different types of plastics). This means that Waste Disposal Authorities may end up receiving separate collection streams and actually mixing them back up again to go to existing facilities or meet existing contracts.
- 2. The waste market:** Waste management companies may find it difficult to meet particular targets as they operate in a volatile global market. In 2019, the UK exported 61% of its plastic packaging for recycling³⁹⁴. The Chinese Government’s decision to refuse some low-grade recycling streams had a big impact on the industry, as did the COVID-19 pandemic, which revealed a lack of sufficient reprocessing facilities in the UK. In January 2021, the government amended the Waste Shipment Regulations limiting when waste can be shipped to or from the UK. The Environmental Improvement Plan 2023 states that Defra will ban the export of plastic waste to countries that are not members of the Organisation for Economic Cooperation and Development (OECD). This will help ensure that waste exported is recycled to UK equivalent standards. From January 2025 waste electrical and electronic equipment can only be exported if the destination country agrees. This aims to increase protection for vulnerable countries from unwanted imports and the health and environmental impacts of undocumented waste. This will be further cemented as the UN Plastics Treaty comes into play, addressing the whole plastics lifecycle to end plastic pollution. This points to a need to start to reduce recycling exports overall and invest in more UK based recycling facilities.

390 <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

391 <https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>

392 <https://consult.defra.gov.uk/extended-producer-responsibility/extended-producer-responsibility-for-packaging>

393 <https://www.legislation.gov.uk/ukdsi/2020/978011193631>

394 <https://www.bpf.co.uk/press/exporting-plastic-waste-for-recycling.aspx>

7.2.2 Recycling and Food Waste

The CCC states that to be on track for Net Zero, sending biodegradable waste to landfill must stop by 2030 or earlier and that recycling rates should increase from around 45% in England to 65% by 2025 and 70% by 2030. The Government's Environmental Improvement Plan 2023 commits to "explore options for the near elimination of biodegradable municipal waste to landfill from 2028".

Household recycling rates in England have risen from around 11% in 2000/01 to about 45% but have plateaued since 2013.³⁹⁵

Under the **Environmental Protection Act 1990**³⁹⁶ a local authority must (save in exceptional circumstances) collect at least two types of recyclable waste together or individually separated from the rest of the household waste unless they have applied for and been granted a dispensation not to do so. Under the Act, local authorities have powers to specify what containers are used, to charge for these, and to collect non-household waste and charge for this.

This has been amended by the **Environment Act 2021** and waste collection authorities will have to collect residual household waste separately from recyclable waste, collect food waste weekly, ideally collect each type of recyclable material separately, or at a minimum collect recyclable and compostable waste separately. Waste collection authorities can apply to the Secretary of State to collect recyclable and compostable waste in just two streams if it is not technically or economically feasible to collect separately.

The Environmental Improvement Plan 2023³⁹⁷ introduced new targets and commitments.

"We will halve 'residual' waste (excluding major mineral waste) produced per person by 2042. For the purposes of the target, we define 'residual' waste as waste that is sent to landfill, put through incineration or used in energy recovery in the UK, or that is sent overseas to be used in energy recovery."

The residual waste target is underpinned by the following interim targets, by 31 January 2028:

- Reduce residual waste (excluding major mineral waste) produced per person by 24%.
- Reduce residual waste (excluding major mineral waste) in total tonnes by 21%.
- Reduce municipal residual waste produced per person by 29%.
- Reduce residual municipal food waste produced per person by 50%.
- Reduce residual municipal plastic waste produced per person by 45%.
- Reduce residual municipal paper and card waste produced per person by 26%.
- Reduce residual municipal metal waste produced per person by 42%.
- Reduce residual municipal glass waste produced per person by 48%.

Recycling in urban areas is relatively low, at around 45% due to houses of multiple occupation, flats and student accommodation. Recycling services in sparser rural areas are difficult for district councils to provide because of the large distances for collection teams to travel.

³⁹⁵ <https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england/resources-and-waste-strategy-at-a-glance>

³⁹⁶ <https://www.legislation.gov.uk/ukpga/1990/43/section/45A>

³⁹⁷ <https://www.gov.uk/government/publications/environmental-improvement-plan>

Somerset Waste Partnership has raised its participation rates to 85% with multi-stream collections of dry recycling (using different containers) as well as separate weekly collections of food waste since 2004. By providing a consistent kerbside sort service, they are confident they can recycle what they collect.

Liverpool City Council's wholly owned company, Liverpool Streetscene, introduced underground refuse systems in parts of the city. The £1.5m scheme has been designed to create a cleaner waste solution in 90 locations for 27,000 terraced households, in hundreds of inner-city streets, which do not have the space to use a wheelie bin.

Reading Borough Council introduced a weekly residential food waste collection service in February 2021, with a pilot scheme having started the previous October³⁹⁸. The introduction of food waste collections led to an increase in the council's recycling rate from 32% in April 2020 to 52% in April 2021, exceeding the project target of 44% and the Council's wider target of 50% recycling by 2020.

The **Environment Act 2021** will introduce Deposit Return Schemes. In March 2021 the government launched a consultation³⁹⁹ on their proposals to drive up recycling rates for drinks containers, reduce waste stream contamination and reduce littering. The consultation notes that valuable materials will be removed from the local authority waste streams and that DRS and EPR may affect the viability of local collections. A government response to the consultation was published in January 2023.

The Government's slow action on implementing changes to waste is giving rise to frustration and uncertainty amongst local authorities because it takes time to plan and procure waste collection and disposal contracts and facilities, and communicate changes to the public and businesses. Contracts tend to be long term, covering 20 years, with seven years being the norm for an interim contract. Changes to the funding formula are described as 'terrifying' with local authorities afraid of being a net loser.

The Scottish Government is aiming to introduce a separate DRS scheme in summer 2023, but it requires an exemption from UK-wide trade regulation. In March 2023 it was reported that the UK government may block this scheme⁴⁰⁰.



³⁹⁸ <https://www.getreading.co.uk/news/reading-berkshire-news/reading-food-waste-collection-bins-19010692>

³⁹⁹ <https://www.gov.uk/government/consultations/introduction-of-a-deposit-return-scheme-in-england-wales-and-northern-ireland>

⁴⁰⁰ <https://www.theguardian.com/politics/2023/mar/13/uk-government-poised-to-block-scottish-bottle-recycling-scheme>

⊗ Recycling and Food Waste: Barriers ⊗

- 1. Lack of power:** Local authorities have no power to enforce recycling or separating food waste by householders. They must rely on persuasion, marketing and provision of good collection services.

They cannot charge for residual waste to incentivise improved levels of recycling.
- 2. Poor quality recycling:** This results in contaminated materials streams which can be rejected at the gate by materials recycling facilities and therefore affects the income stream for the disposal authority. The Environment Act 2021 intends to address contamination issues through introducing consistency in collection of separate waste streams at the kerbside. But councils do not all want to collect waste in the same way – they want flexibility to devise collection schemes that are suitable to their local context, for example, city centre flats, Houses of Multiple Occupation and rural areas; and do not want to have to amend existing contracts with financial penalties; they are concerned about the economic costs and technical feasibility stating that how materials are collected should be a local decision⁴⁰¹.
- 3. Funding:** Government funding announced in the 2021 budget⁴⁰² is available for local collection authorities to make changes to collection systems. However, this does not provide funding for new processing facilities. Collecting food waste separately without having AD facilities in place to process it could mean that separate collection of food waste and green waste is carried out only to be mixed up again for In Vessel Composting. Greater investment (perhaps also providing a commercial service for AD processing of commercial foodwaste) is needed to provide the best way to process new forms of collection.
- 4. Multiple material streams:** The multiple streams of different materials, including plastic trays and films used by producers, makes it harder to provide a recycling service and confusing for the householders.

7.2.3 Energy from Waste

Local authorities use waste to generate energy. This is covered in the Energy Infrastructure chapter. In light of the increased growth of GHG emissions from EfW facilities, the CCC recommended in its 2020 Progress Report to parliament that “local councils should be carefully considering the fossil emissions from waste to energy plants, and how these plants will retrofit CCS in the future, plus the impact of waste reductions and improved recycling.”

In its 2022 Progress Report the CCC questions the government’s plans for reducing emissions from waste and raises concerns that resource efficiency to reduce waste overall and therefore reduce waste going to EfW facilities has not been addressed. The CCC modelling for Net Zero by 2050 assumes that Carbon Capture and Storage (CCS) technologies need to be fitted to EfW plants from 2040 with all EfW plants fitted by 2050.

This means that Waste Planning Authorities need to carefully consider whether to consent new EfW plants at all, and if so, to consider where they are sited in the country so that if built, they are located nearby to planned CCS facilities. Where this is not the case, and for existing EfW plants, the captured CO₂ will need to be transported as a gas to locations able to handle, process or store it. There is no definitive CCS infrastructure plan yet on which to base any decisions on new EfW plants and CCS.

⁴⁰¹ <https://www.local.gov.uk/consultation-consistency-recycling-collections-england-lga-response>

⁴⁰² <https://www.mrw.co.uk/news/councils-to-get-295m-for-food-waste-collections-19-10-2021/>

7.3 Commercial Waste

Under s.51 of the **Environmental Protection Act 1990** local authorities have the power to provide commercial waste collection and disposal and they may charge for this.

Local authorities and the Environment Agency have a duty to ensure that commercial waste is collected and disposed of by a licensed collector; and to ensure that all movements of waste are recorded.

The **Environment Act 2021** s.34CA introduces electronic tracking whereby waste regulations may impose requirements on relevant waste controllers, or a waste regulation authority, to take specified steps to secure the entry into the system of specified information about, or which is relevant to the tracking or regulation of, specified relevant waste.

Data on commercial waste is of poor quality and not visible to local authorities, so it is difficult for local authorities to understand the commercial waste being produced in order to reduce the emissions associated with it. This also means that local authorities wanting to devise commercial solutions, particularly for poorly served SMEs which find recycling expensive and which have low volumes of waste, cannot do so. But commercial and industrial waste has bigger volumes than domestic or municipal waste – in 2018 43 million tonnes of waste was produced by the commercial and industrial sector and 26 million tonnes by the household sector⁴⁰³.

Many local authorities would like to offer a monopoly service for small businesses, included with the household recycling services, to improve recycling rates and add scale to the materials streams they collect. However, this is not possible due to competition rules. It would also help them to meet recycling targets set for them by boosting commercial recycling rates when it is too challenging to deliver improvements in household recycling rates.

The ability to zone or franchise local areas and provide a concession for that whole area to a single commercial waste provider who had been vetted for quality could also improve recycling rates in small businesses. This could reduce the number of trucks and streamline the service, and prevent a proliferation of bins, address air quality issues and improve commercial waste recycling. Again, this is not possible under current regulations.

Extending powers of the local authority to be able to influence or further licence commercial waste operators in line with the Net Zero target would be desirable.

The Environment Act 2021 provides for regulations relating to Producer Responsibility which will see a change in the way producers are charged for packaging they are responsible for. This aims to incentivise organisations to reduce packaging and to use packaging that is easier to recycle. From January 2023⁴⁰⁴ organisations that handle and supply packaging to consumers and business will have to collect data; pay a waste management fee (to the environmental regulator; a fee is also payable for packaging that is collected from households or street bins by the local authority), buy waste packaging recycling notes or waste packaging export notes and report 'nation data' – where packaging has been sold, hired, loaned, gifted or discarded. Small organisations will start reporting in 2024.

⁴⁰³ <https://www.theccc.org.uk/wp-content/uploads/2022/06/Progress-in-reducing-emissions-2022-Report-to-Parliament.pdf>

⁴⁰⁴ <https://www.gov.uk/guidance/packaging-waste-prepare-for-extended-producer-responsibility>

7.4 Recommendations for Waste

UK100 Top Three Waste Recommendations

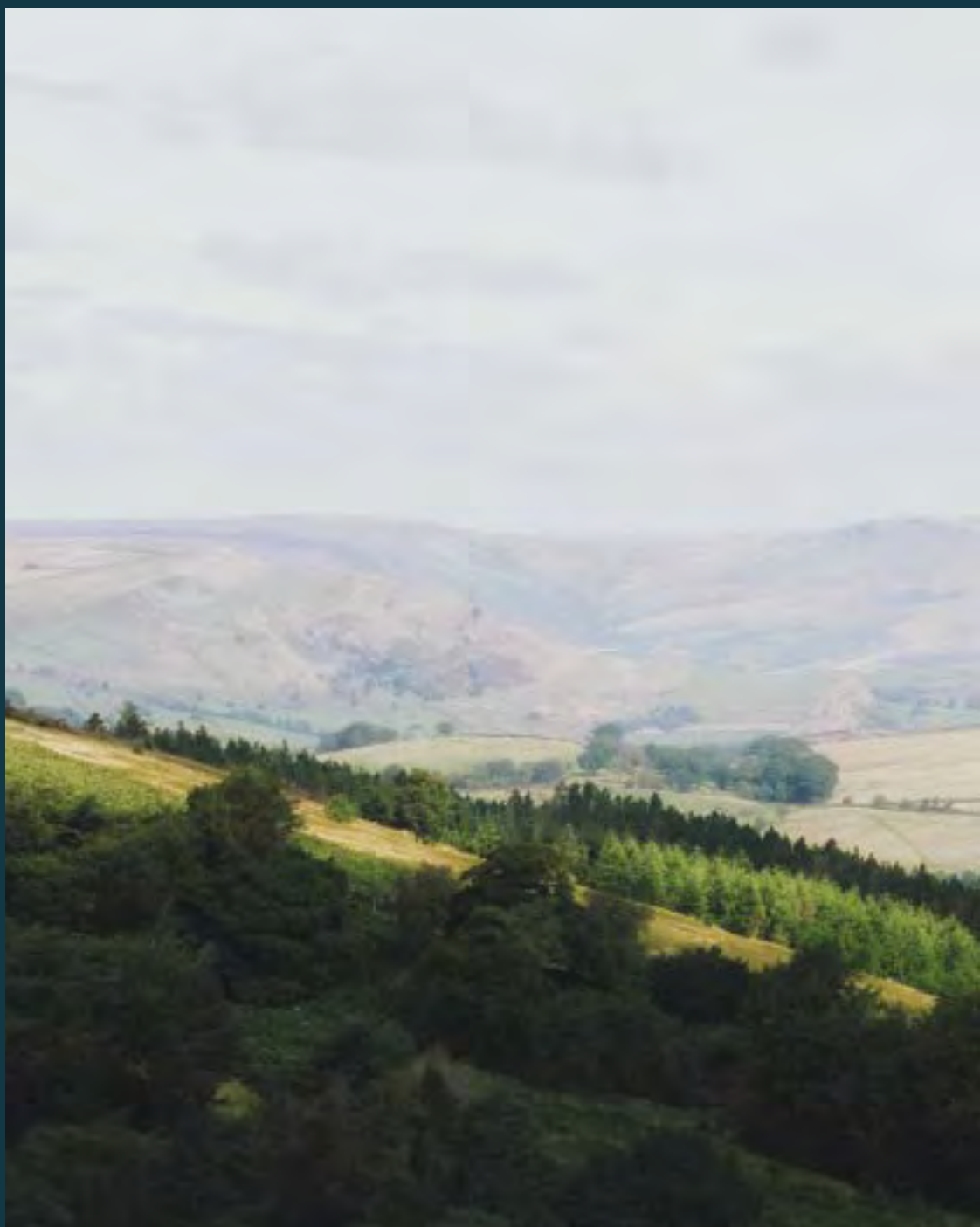
- 1** Provide powers to reduce residual waste from both domestic and commercial settings. This includes the power to enforce recycling separation (e.g. avoidance of putting food into residual waste) and the power to intervene in the commercial waste market in line with Net Zero ambitions, including zoning and franchising for commercial waste and recycling collection.
- 2** Provide clarity, support and funding for local authorities to meet the new requirements on waste collection in the Environment Act 2021. Government needs to invest more in increasing the capacity of the UK's recycling infrastructure and conduct a mapping exercise to determine where infrastructure is needed and coordinate with councils to deliver that.
- 3** Fast track policies on producer responsibility, deposit return schemes and the circular economy to reduce waste at source.

To support this, local authorities will need enabling powers including:

Key supporting policy, frameworks and resources from national government to underpin this include:

- Extending work on producer responsibility and circular economy to reduce waste at source
- Increasing resources to support behaviour change on waste reduction and recycling
- Improve waste and recycling data including for the commercial sector
- Taking prompt decisions to give local authorities time to implement changes without incurring additional contractual costs. Local authorities need a long run-in time to make changes to waste collection and disposal arrangements.

Conclusions and Recommendations:



This is a critical point in local climate action: many local authorities are endeavouring to deliver on ambitious climate targets but that level of ambition is not supported by government. Our leading authorities are learning from one another, but also increasingly looking for city and municipal role models internationally. For every ambitious and determined authority there is another that is simply not fully committed to Net Zero, or committed but under-resourced, meaning that local residents and businesses are at risk of missing out on the benefits a place-based approach to Net Zero can bring. Climate action, a fair transition, clean air, reliable energy systems, access to nature and green jobs cannot become a postcode lottery.

Two years on from the original **Power Shift** report, there have been visible changes in the Net Zero policy landscape, and a noticeable recognition in government that local authorities can be powerful actors in delivering Net Zero. But the original conclusions still remain:

- **Local authorities do have many existing powers with which to make a real contribution to reaching Net Zero**
- **The barriers are a lack of power, resources, and a coherent, enabling framework and supporting ecosystem to enable local and national Net Zero delivery.**

Government can unlock greater action through much more open, joined up policy-making, real devolution of funding and specifying outcomes rather than outputs while backing greater capacity and capability in local authorities. This should be a system-wide approach, not just delivered through special devolution deals or one to one relationships that typically leave out the less well-resourced or smaller local authorities. The wider context of private sector, suppliers, investors and the public need to be involved and acting, and enabling systems such as data visibility need to be put in place. Some proposed legislative changes will place more duties on local authorities (e.g. MEES for commercial buildings, Environment Act for waste and nature recovery), but nothing will happen without a supportive system in place to ensure that policy is actually deliverable and delivered.

Government should also be putting a strong obligation on all local authorities to act, aligning everything to a fair transition and delivering Net Zero, and removing barriers that prevent the ambitious authorities from taking local action ahead of government policy.

This report has identified a set of barriers that hamper local action in specific areas. However, there are a few overarching themes that run through all of these.

Government's intermittent and piecemeal approach to climate change: Despite over 30 years of evidence and campaigns demonstrating that climate change is a serious issue, it has not been treated as such by the UK (or most other governments). The recent enthusiasm for action on climate change has produced a welcome set of strategies and plans that aim to address some of the urgent issues identified in this report. It is yet to be seen whether these will follow through with concerted, coordinated delivery, or whether in reality they will continue the trend of short term, poorly designed and competitively-funded schemes, that fail to transform investment, develop skills and cut emissions across the country.

Lack of a coherent plan for local delivery: Local authorities are critical to delivering change at the local level, yet there is limited mention of this role in many of the Net Zero strategies, nor of Net Zero in other strategies such as Levelling Up. While government has finally acknowledged the need for a clear plan for local delivery, and has established the Local Net Zero Forum, there is little sign of progress on a clear plan setting out where and how integrated action is best delivered at the local level or requirements for local authorities to act.

Lack of capacity: A decade of funding cuts have fallen disproportionately across authorities and departments, and those departments that have power to make significant impacts on emissions have seen higher levels of cuts e.g. planning and enforcement, sustainability officers, environmental protection, transport subsidies and housing. Smaller local authorities in particular have lost the skills and knowledge needed to support action on climate change. Alongside this, without programmes to develop the skills needed and confidence that climate change will remain a national priority, capacity across private sector actors in manufacturing, construction and finance is insufficient to deliver the scale of change needed. Rebuilding capacity and skills to deliver Net Zero across the public and private sectors requires long-term stable policy and resourcing to see the right skills developing through for a workforce fit for a Net Zero future.

Funding: Funding mechanisms for local authority investments have historically worked against emissions reductions (especially in transport) and funding for building energy efficiency has been reduced to helping only the most vulnerable households, who typically have the lowest carbon impact. In recent years, funding for local climate action has been through pilot projects and competitive bids, which primarily benefit those areas that already have capacity and skills. Areas with devolved funding in particular have been able to advance faster. As a country we cannot hope to deliver the measures needed to meet our carbon targets without investment at scale, and in delivery at the local level, through organisations that have the potential to deliver locally-appropriate investment.

Disconnect between department priorities at national and local level: BEIS (now DESNZ) has a focus on energy and fuel poverty, while DLUHC has a focus on house building in large numbers, the DfT is primarily concerned with road-building and large-scale national infrastructure and Defra has a wide remit from agriculture to nature recovery, waste and tree planting. The Treasury has been reluctant to support Net Zero aligned funding, and climate change requirements have not been included in major place-based funding such as Levelling Up. There is no common Net Zero aligned message from across government that reaches local authorities, nor a single common point of guidance and support from government for local authorities wanting to act on place-based schemes that deliver across multiple government department outcomes.

In order to address these barriers, a national framework of support is needed to provide the infrastructure to enable local delivery of Net Zero, including additional powers.

Framework and Ecosystem

The Government should engage with local authorities to define the role for local authorities in its Net Zero Strategy. It then needs to put in place the supporting infrastructure to enable local authorities to deliver, including:

- Political commitment across all government departments to prioritise Net Zero action
- A coherent comprehensive plan for local delivery co-designed with local authorities
- Non-competitive funding and resources for local authority action that enables blending and value-stacking to deliver coherent programmes and multiple benefits
- A mechanism for co-operative constructive dialogue between local and national government to inform policy and delivery, along with a delivery unit (or Office for Net Zero, as recommended by Chris Skidmore MP)
- The financial infrastructure to support private and public sector investment in Net Zero across all sectors
- A comprehensive investment in skills and capacity building across all sectors so that delivery is not constrained.

The key recommendations in each of the emissions areas are summarised below.

Overarching Duty

While no authorities interviewed asked for more **duties**, the earlier experience of an overarching duty to develop area-wide plans to address climate change and report against these has shown that there is also a role for more duties. If addressing climate change mitigation and adaptation remains an option rather than a duty, it is at risk of dropping back off the priority list for council spending, if the political pressure to act is reduced. Without a duty, English local authorities will remain split into leading front-runners, and lagging authorities that simply cannot afford to put climate ‘ahead’ of the basic services they are obliged to provide.

1. National policy and regulatory frameworks must be revised and co-ordinated to enable local, regional, national and devolved governments to work more effectively in partnership towards Net Zero and adapting to climate change. The Local Net Zero Forum should determine in detail how local and national (and cross-departmental) collaboration will work and develop a clear delivery framework to be supported by a Net Zero Delivery Unit.
2. Within a Net Zero Delivery Framework, there should be a requirement on local authorities to take action to contribute to achieving the UK’s climate change targets. The UK government should put in place a Net Zero Local Powers Bill which permits, obliges and resources relevant levels of authority to undertake climate change action to satisfy the Climate Change Act. The bill should be accompanied by appropriate policy and guidance which identifies public funding and potential private sector investment levers, and better cross-departmental alignment within government to support local areas that satisfy these obligations.
3. There should be a requirement for local authorities to report local area emissions, and clear and consistent guidance from national government on monitoring and reporting for local authorities to enable progress to be tracked.

Transport Powers

Allow strategically defined local areas the power to determine area-wide network requirements with increased devolution of transport funding such that local areas' aspirations to greener transport are not blocked by funding mechanisms and investment is not concentrated in already economically rich or climate active areas.

1. Devolve the powers for local leaders to develop a London-style integrated, reliable, more affordable, and simpler to use regional public transport services. This includes incorporation of the oversight of buses into the local transport authority role, giving local authorities the power to require bus and rail operators to collaborate on timetabling and cross-ticketing and requiring National Highways to cooperate with local authorities on emissions reduction schemes on major highways within the local area.
2. Devolve and pool local authority transport funding to provide longer term certainty, with funds allocated in a non-competitive way on the basis of local transport plans. Local authorities should have the power to access transport funding using alternative justifications to WebTAG and WebTAG should be revised to increase the value assigned to traffic reduction, active travel and health impacts.
3. Reduce the high costs of connecting EV charging networks to the grid and include every local, city and regional authority in designing and shaping the charging infrastructure across its area for public, freight, and bus networks.

Buildings Powers

The energy performance of existing buildings is one of the most difficult carbon challenges we face. Current policies limit local authorities' ability to make any significant contribution to reducing emissions. Meanwhile, new buildings continue to be built that do not meet Net Zero standards and will require expensive retrofit in the near future. Local authorities have a critical role in determining the energy performance of new buildings through the planning system, and can have an important role in coordinating retrofit programmes that meet local needs and buildings, and engaging building owners and the construction industry in successful implementation.

1. Significantly increase funding for energy performance improvements to all buildings, which is non-competitive, with funding over longer timeframes, and bring forward targets to achieve higher standards across all building types and tenures. Provide support for local authorities to have the capacity to work alongside partners to develop and deliver large scale area-wide retrofit programmes.
2. Require local authorities to enforce and report on MEES, with the scope and processes involved significantly revised so that it is a useable tool to manage carbon improvements across the existing building stock. Increase resources, capacity and skills development for local authorities to enable this: across planning policy and building control, housing, environmental health, trading standards and Elected Members.
3. Embed a requirement for local planning authorities to prioritise The Climate Change Act in Planning Policy over developer viability and remove competition between climate mitigation and adaptation criteria and other "planning contributions." Ensure all Planning Inspectors fully understand the priority placed on climate change and apply it in their inspection decisions.

Energy Infrastructure Powers

Local authorities need a recognised role in planning the most suitable energy infrastructure for their areas. Local Area Energy Planning in particular is under-valued and under-resourced. While local authorities have the power to develop these, they have no formal place in the energy system and there is no formal role for local authorities in energy system governance.

1. Put in place a national framework for LAEPs, giving a strategic role and more powers to local and regional authorities to develop a balanced energy system which combines a mix of large scale power generation, local decentralised energy systems and demand management, as part of a wider priority focus of reaching Net Zero.
2. Provide funding and resources for LAEPs to be developed and then implemented, including a central single source for the data which can be easily accessed and which will reduce the cost of LAEPs. Build significant capacity within local authorities and partnerships (that include communities) to deliver across local authority boundaries.
3. Require all planning decisions to be compatible with meeting our Net Zero target. This must include giving local authorities the power to refuse consent for fossil fuel extraction or development of carbon-based energy infrastructure if it is not aligned with the Net Zero target, without the expectation of their decision being overturned on appeal by the Inspectorate.

Waste Powers

Direct emissions from waste are relatively small, but by addressing waste as a by-product of the manufacturing and supply system of products and food, it is possible to also have a significant impact on emissions across the board, both nationally and internationally. Local authorities are currently involved in only one part of the circular economy system through their waste function, but have the potential to have much wider influence.

1. Provide powers to reduce residual waste from both domestic and commercial settings. This includes the power to enforce recycling separation (e.g. avoidance of putting food into residual waste) and the power to intervene in the commercial waste market in line with Net Zero ambitions, including zoning and franchising for commercial waste and recycling collection.
2. Provide clarity, support and funding for local authorities to meet the new requirements on waste collection in the Environment Act 2021. Government needs to invest more in increasing the capacity of the UK's recycling infrastructure and conduct a mapping exercise to determine where infrastructure is needed and coordinate with councils to deliver that.
3. Fast track policies on producer responsibility and circular economy to reduce waste at source.

This report provides a comprehensive assessment of the powers local authorities have to address climate change, and areas where further powers and policy change is needed. However local delivery of Net Zero will only happen if these powers are supported by adequate resources and capacity building, and underpinned by a structure of national policies that recognise the essential role of local authorities in achieving our climate change target.

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