

Power Shift

Research into Local Authority powers relating to climate action

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

April 2021



Quantum **UK:100**

Contents:

1 Introduction

1.1 Methodology

8

9

1.2 Report Structure

9

2 National Context

2.1 Climate Actions to Deliver Zero Carbon by 2050

10

2.2 COVID-19 Response: Build Back Greener

11

2.3 Local Authority Background

12

2.4 Local Authority Structure and Responsibilities

15

3 Overarching Powers

3.1 General Power of Competence (GPoC)

18

3.2 Spending

18

3.3 Borrowing and Investing Powers

20

3.4 Procurement Powers

22

3.5 Overarching Powers Summary

24

4 Transport

4.1 Overview

27

4.1.1 Local Authority Transport Structures

28

4.1.2 Urban and Rural Areas

30

4.1.3 Transport After COVID-19

31

4.2 Electric Vehicle (EV) Infrastructure

31

4.3 Walking and Cycling

32

4.4 Parking

33

4.5 Clean Air Zones (CAZ)

37

4.6 Speed Limits

39

4.7 Buses

41

4.8 Rail/Rapid Transit

42

4.9 Taxis and Private Hire Vehicles (PHV)

44

4.10 Freight

45

4.11 Congestion Charging

46

4.12 Vehicle Standards

48

4.13 Local Authority Fleet Procurement

49

4.14 Link to the Planning System

50

4.15 Transport Summary

51

4.15.1 Key Barriers

52

4.15.2 Powers Asks

53

4.15.3 Key Considerations for Transport Powers

54

5 Buildings

5.1 New Buildings

56

5.1.1 Local Planning Authority Powers related to energy in the design of new developments

59

5.1.2 Council owned homes

60

5.1.3 Barriers to higher standards in New Buildings

62

5.2 Existing Buildings

63

5.2.1 Minimum Energy Efficiency Standard (MEES)

68

5.2.2 Energy Performance Certificates (EPC)

72

5.2.3 Addressing energy efficiency through Health and Landlord Legislation

73

5.2.4 External funding for energy efficiency measures

75

5.2.5 Home Energy Conservation Act (HECA)

77

5.2.6 Able to pay households

78

5.2.7 Major alterations requiring planning permission

79

5.2.8 Compliance with Standards for Building Measures

80

5.2.9 Own Estate

81

5.3 Building Conclusions

82

5.3.1 New Buildings

82

5.3.2 Existing Buildings

82

5.3.3 Key Considerations for Buildings Powers

82

6 Energy Infrastructure

86

6.1 Local Area Energy Plans (LAEP)

88

6.2 District heating

91

6.2.1 District heating and Planning

92

6.2.2 Local Authority as a Developer

94

6.2.3 Highways Authorities role in enabling Heat and Electricity Networks

97

6.3 Renewable Energy in Planning

98

6.3.1 Planning Powers for large scale Renewable Energy

98

6.3.2 Planning Powers for Electricity Storage

101

6.3.3 Microgeneration

101

6.3.4 Microgeneration on new buildings

102

6.3.5 Planning for other energy sources

102

6.4 Local Authority Investment in Renewable Energy

103

6.5 Energy Infrastructure Conclusions

104

6.5.1 Key Considerations for Energy Infrastructure Powers

105

7 Waste

108

7.1 Waste collection and disposal

109

7.1.1 Waste Collection Authorities

110

7.1.2 Waste Disposal Authorities

110

7.1.3 Waste Planning Authorities

111

7.2 Waste minimisation

111

7.3 Recycling and food waste

113

7.4 Commercial Waste

114

7.5 Key Considerations for Waste

115

8 Conclusions and Recommendations

116

Power Shift: Executive Summary



The UK has shown leadership on climate change: the first Climate Change Act; the first country to write Net Zero into law; the world's biggest share of offshore wind, with a power sector that has all but phased out coal. The government has recently published its Ten Point Plan for a Green Industrial Revolution, and new strategies on transport, buildings, energy and infrastructure. Yet the Climate Change Committee (CCC) has warned that these steps *"do not yet measure up to meet the size of the Net Zero challenge."* Local authorities should be the cornerstone of delivery of Net Zero in local communities. **This report is the most comprehensive examination of the duties, powers and policies available to local authorities and combined authorities in England – and the gaps – ever undertaken. It draws on previous expert reports, including those produced for government, combined with a series of interviews with local authorities and other stakeholder organisations.**

The ambition to build back better from COVID-19 echoes through public, politics, business and civil society. Matched with the right policy programme, this ambition can take the UK's leadership to the next level – the foundation for the UK's economic recovery, and the cornerstone of UK international leadership ahead of COP26.

Commitment to Net Zero flows through local government. Region-by-region, local authorities have made striking commitments, forged innovative partnerships, and signalled clear intent through the widespread declaration of climate emergencies (300 and counting). Major economic centres including London and Greater Manchester have clear, science-based Net Zero deadlines. Innovative initiatives have delivered tangible results, from Nottingham City Council's workplace parking levy supporting new public transport routes and infrastructure and Brighton and Hove City Council's car free housing development policy, to Exeter City Living's Passivhaus developments and Bristol City Council's City LEAP to finance city-wide decarbonisation.

These stories are worth celebrating – they are celebrated in this report – but in catching the eye they divert us from the reality facing local leaders: the absence of a coherent national strategy or framework to enable and resource ambitious local action on climate change; insufficient powers to drive the big changes; and, where powers do exist, insufficient capacity to use them decisively.

We call our members' successes 'innovative' because they have to be. Without a fair, consistent, cross-cutting policy, political and financial framework for local government to work towards Net Zero – in other words, without the necessary powers and resources – our members, and the communities they serve, rely on creative approaches that will, by definition, remain exceptional.

The conclusion is clear: the UK government has yet to provide local leaders with the powers and resources to really deliver, amounting to a system that is currently structurally incapable of delivering Net Zero.

Power Shift lays out the problems facing local and combined authorities in delivering Net Zero, including:

- **Strategy:** The absence of a clear national and local climate action plan and the disconnect between departmental priorities at a national and local level holds everyone back
- **Funding and resources:** Achieving Net Zero needs to be built into all spending decisions, but is essential that additional resources are available to rebuild capacity to enable this shift, and to expand the effective use of local government powers and competencies. New funding streams must be equally accessible over the long term to all local authorities to ensure a levelled up and just transition
- **Policy:** National policy mechanisms can actively work against local authorities making effective use of their potential to cut emissions, including overriding national policy priorities that lock-in carbon emissions, funding models that hinder low carbon choices, power gaps in place-based systems and entrenched or siloed decision-making that pitches low carbon options against other priorities.

Power Shift sets out the thematic areas where a fresh approach to powers and resources can deliver the biggest wins, including:

- **Transport:** Providing strategically defined local areas with London-style transport powers
- **Buildings:** A long term framework of support to enable local and combined authorities to catalyse the transformation of the entire existing building stock to zero carbon through locally-appropriate measures and to deliver genuinely zero carbon new buildings
- **Energy Infrastructure:** Powers to develop a balanced local Net Zero energy system which combines a mix of large-scale power generation with local decentralised energy systems
- **Waste:** Alongside initiatives for Extended Producer Responsibility (EPR) and Deposit Return Schemes (DRS), piloting powers to reduce residual waste from both domestic and commercial settings.

CCC and the National Audit Office (NAO) both agree that **national government cannot achieve Net Zero without local government**. Given that over half the emissions cuts require decisions made at the local level, the CCC found that the Sixth Carbon Budget can only be achieved if Government, regional agencies and local authorities work seamlessly together. The NAO's Achieving Net Zero report recognises that *"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."*

Empowering local government will help the whole country go further, faster.

The Government has promised a bold new vision for a 'green industrial revolution'. The task now is to empower local government to drive the cross-cutting changes needed to achieve Net Zero and unleash the social and economic potential of every community.

Achieving this power shift will underpin the flagship national commitment, enabling the UK to become the world's first leading economy to actually deliver Net Zero as well as legislate for it. Failure to shift power will prevent the UK from being able to deliver Net Zero.

It is a stark and obvious choice, and no government has ever had a better opportunity to make the right one.

The Power Shift report identifies areas where there are gaps in powers and resources needed to support and enable the essential ambitious local action to reach Net Zero nationally. Closing these gaps would amount to the UK's first truly supportive policy framework and infrastructure to enable local delivery of Net Zero. Incorporating this report's findings into the Net Zero Strategy would be a key step in the right direction.

Key conclusions of the report are:



1. Supporting Framework

The Government should engage with local authorities to ensure that a Net Zero Delivery Framework is included in its Net Zero Strategy. The framework should align and clarify national, sub-national, regional and local delivery roles and areas for collaboration. It should provide clear outcomes and direction to reduce uncertainty, provide additional powers where needed, identify public and private investment and enable flexible delivery at the faster pace of ambitious areas. A separate UK100 project is underway to start to develop such a framework for consideration.



2. Overarching Duty

Within a supporting Net Zero Framework, there should be a requirement that local authorities set out targets and plans for area-wide carbon reductions, and align all spending and policies with the wider plan for Net Zero in a local area, enabling political support to deliver meaningful actions that respond to the needs of all local communities.



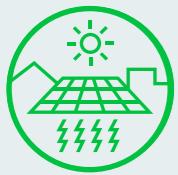
3. Transport

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, is critical to enabling the coordination and delivery of transport networks that are appropriate for local areas.



4. Buildings

Establishing a long term framework that supports all local authorities to decarbonise new and existing buildings in a manner that suits the nature of buildings in their area is essential. This should enable the delivery of zero carbon new buildings and retrofit and will significantly contribute to UK Net Zero targets. The system for assessing, monitoring and enforcing the energy and carbon performance of buildings requires a radical overhaul to make it fit for purpose, and planning policy must prioritise the aims of the Climate Change Act.



5. Energy Infrastructure

A national framework for local area energy planning (LAEP) should be put in place giving a greater role, more powers and competencies to local and regional authorities to develop a balanced Net Zero energy system which combines a mix of large scale power generation with local decentralised energy systems, as part of a wider priority focus of reaching Net Zero. This must include a clear remit to base planning decisions on the legally binding Climate Change Act.



6. Waste

Local authorities have duties around waste collection and disposal but very little control of how much is generated in the first place, or how well it is segregated at source. Alongside new initiatives such as EPR and DRS, local authorities need powers to reduce residual and commercial waste, as locally appropriate, across all waste streams to meet Net Zero.

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**.



1. Introduction:



COVID-19 has presented local authorities with a brutal challenge. Their Members, staff and services have been stretched to the limit during 2020-21 and they have endeavoured to serve hard-hit communities and businesses. The Institute of Fiscal Studies estimates that the additional demand on services and income losses combined will total £10.3 billion due to the COVID-19 pandemic, most of which has been reimbursed by government.¹ However, this follows on from a period of real terms cuts in spending power of 28.6%² between 2010-11 and 2017-18. Despite these pressures, local authorities indicate that delivering on their climate commitments remains a priority, and calls for a resilient, green recovery are almost universal. They are best placed as leaders in their communities to juggle the demands of COVID-19, support community resilience and lead what must be a decade of delivery on the other big challenge to our society: Climate Change.

Over 300 UK Local Authorities have declared a Climate Emergency and as a result have formally announced their intent to act with utmost urgency. However, advocacy from local authorities consistently highlights the need for more local authority powers to enable action to be taken forward with ambition, scale and pace. We wanted to understand whether there really is a shortage of powers at local level, and how the powers they have are affected by national policy and regulation.

This research report investigates the extent of English local authority powers, from district to combined authority and city region, 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. 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, green space and the circular economy, but those areas are outside the scope of this report.

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.

¹ <https://www.ifs.org.uk/publications/15371>

² <https://www.nao.org.uk/wp-content/uploads/2019/01/Local-authority-governance-Summary.pdf>

1.1 Methodology

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), Association 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)
- LGA Inform Plus, Powers and Duties³
- 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:

- Interviews with 30 people in a range of local authority roles: planning, infrastructure, housing, environment, climate change, transport, waste, finance and legal to:
 - Gain their insights into which powers are being used to reduce emissions and how, and understand which/ why powers aren't being used
 - Confirm and unpick barriers and blocks to wider use
 - Understand how much local authorities share and use learning from each other
- Interviews or email correspondence with other relevant organisations including ADEPT, CSE, London Councils, ESC and The Planning Inspectorate
- Workshops, in partnership with UK100 and Green Alliance, with members of UK100, representing each different type of local authority to test findings.

The research was primarily carried out from March-July 2020 during the first COVID-19 lockdown, so all discussions were held by phone or online meetings. The report was delayed by COVID-19 related issues and revised in March 2021. The significant policy and funding changes introduced by central government during the crisis and post-Brexit have been referenced where relevant, as examples of how changing powers and practices can impact carbon emissions.

1.2 Report Structure

This report synthesises the findings. It includes:

- A brief overview of the national context (Chapter 2)
- An overview of the local authority context and summary of areas where they can have most impact on emissions (Chapter 3)
- Overarching Powers (Chapter 4)
- Transport (Chapter 5)
- Buildings (Chapter 6)
- Energy Infrastructure (Chapter 7)
- Waste (Chapter 8)
- Conclusions and Recommendations (Chapter 9)

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.

³ <https://powersandduties.esd.org.uk/>

2. National Context:



2.1 Climate Actions to Deliver Zero Carbon by 2050

CCC and a wide range of other actors have defined in broad terms the critical urgent areas for action to reduce emissions. Their June 2020 Progress Report to Parliament states 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.

The key remaining elements of the net-zero policy package must be put in place in the coming months, early enough to demonstrate the UK's credentials ahead of COP26

- Surface transport (24% of 2019 emissions): ambitions must be delivered and extended
- Industry (21% of 2019 emissions): policy needs to be more strategic and move faster
- Buildings (18% of 2019 emissions): policy needs a step change in ambition and delivery this year
- Energy supply (the power sector accounted for 12% of 2019 emissions): policy must reach beyond renewable power
- Agriculture (9% of 2019 emissions) and land (removals of 2%): policy must drive transformational changes
- International aviation and shipping should be formally included in UK climate targets when the Sixth Carbon Budget is set, and net-zero plans should be developed
- Smaller sources of emissions must also be tackled and plans developed for engineered emissions removals (Waste, F-gases and Greenhouse gas removals).

The CCC also reports that “*UK emissions were 44% below 1990 levels in 2018, largely due to progress reducing emissions in electricity generation, waste and in the industrial sector. The first (2008-12) and the second carbon budget (2013-17) have been met and the UK is on track to meet the third (2018-22) carbon budget, but is not on track to meet the fourth, which covers the period 2023-27 or the fifth, which covers (2028-32).*”

Local authorities were highlighted as having 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, LAEP plans, waste reduction, water consumption reduction and climate adaptation. The report also noted that gaps remain that prevent or hamper delivery, including resources, the lack of a consistent delivery framework, and national policies, especially in planning.

2.2 COVID-19 Response: Build Back Greener

The COVID-19 pandemic has demonstrated that in the face of a global crisis, governments can respond rapidly and decisively, and allocate previously unimagined amounts of money to dealing with the crisis. Climate change is just such an emergency, although not perceived to be as urgent or visible to many in power.

Organisations across the UK are calling for the government to “build back greener”, including leading businesses, banks, the Confederation of British Industry (CBI) and Local Authority Leaders. The main opportunities highlighted include:

- Sustainable transport systems with space and facilities to encourage walking, cycling and public transport
- Reduction in the need for the daily commute and business travel 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 LAEP planning
- 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
- Increasing local development capital in the form of a Net Zero Development Bank, which would mobilise private investment, enabling finance to flow strategically to place-based clean energy projects.

Local authorities have demonstrated how vital they are to resilience at a local level. Their local knowledge has enabled targeted responses, such as providing support to businesses and communities during the COVID-19 pandemic. They have been very adaptable, moving staff into different roles and using their granular knowledge of community assets to enable and support voluntary and community schemes helping the most vulnerable people. They are also leading on setting up the supporting infrastructure to enable the expansion of better, greener, sustainable jobs.



2.3 Local Authority Background

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 emission 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. Many authorities have embedded climate change actions within service areas and have successfully continued to deliver ambitious schemes, while others have pulled back to focus on delivering their statutory duties in the face of reductions in funding and rising demands on services.

The removal of the climate change-related national indicators had several effects; primarily it removed any requirement for local authorities to tackle carbon emissions, in the absence of any duty to report on it. The obligation to report on emissions reductions had meant that senior leaders and Elected Members' were obliged to develop action plans to tackle climate change. Their loss also removed any evidence that government departments could use to support climate action in local authorities: they became invisible in terms of their role in cutting national emissions.

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 Bill⁴ 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'.*"

Statistics on climate change or environmental officer numbers are not available, but anecdotal evidence of local authorities known to the researchers showed that some staff in these roles were moved to different teams, given additional responsibilities or when they left, they were not replaced. In 2019 and 2020, no doubt driven by climate emergency declarations, there has been a marked resurgence in recruitment for local authority climate emergency officers or similar roles.

⁴ <https://publications.parliament.uk/pa/cm201011/cmpublic/energy/writev/m15.htm>

After 2015, further policy and political focus changes 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, 2016 zero carbon homes policy and onshore wind planning 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.

There has been a marked contrast between city-regions 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. Some local authorities persisted with achievements such as the establishment of Bristol Energy, Greater Manchester's Green Summit and carbon neutrality target, Leeds Climate Commission, Warrington's investment in solar photovoltaics (PV) at scale, zero carbon building standards in London, clean air zones (CAZ) and Cornwall's push on local and renewable energy. 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 etc. Salix, Re:Fit and Energy Saving Trust support on fleet was continued during this time, with a focus on efficiency and cost savings, as well as carbon savings.

Fully funded, comprehensive, up to date information and support services to local authorities, such as the Energy Saving Trust, LGA'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. However, 2019-20 has seen a resurgence in support as climate emergency declarations signalled that climate change was back as a priority. This is being provided by organisations such as the LGA, APSE, CSE, Regen, RTPI, the Tyndall Centre, PCAN, ADEPT, Ashden, Friends of the Earth and UK100.

Now climate change is firmly back on the political agenda for local authorities with increasingly vocal demonstrations from both young and older constituents demanding action. A majority of local authorities have declared a climate emergency with more taking steps to do so. At a time when they are reeling from cuts in funding, and handling increasing demand related to COVID-19, Brexit and climate-related impacts such as flooding, local authorities are seeking to embed the short and long term challenges of integrating the complex issue of deep carbon cuts into their service delivery, own estate and into partnership and policies across their local area.

In the past year national bodies have refocused their attention on climate change at the local level. The NAO report, Achieving Net Zero,⁵ published in December 2020 calls for greater coordination between government departments and for cross-cutting Net Zero objectives to be embedded and prioritised in budgets and project appraisals. It recognises that "*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*". But it finds that the Government has not clearly set out the roles of public bodies outside Government, including local authorities in delivering Net Zero. It recommends that the local authority perspective should be incorporated into forthcoming sector strategies and the Net Zero Strategy. It also recommends that local authorities have the skills and capacity to mobilise action.

The CCC's report Local Authorities and the Sixth Carbon Budget, December 2020,⁶ outlines the powers and levers local authorities have to deliver emissions cuts. It states 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.*" Given that over half the emissions cuts require decisions made at the

⁵ <https://www.nao.org.uk/report/achieving-net-zero/>

⁶ <https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/>

local level, it found that the Sixth Carbon Budget can only be achieved if Government, regional agencies and local authorities work seamlessly together. A series of recommendations for both local authorities and Government are provided, including a framework for delivery, with flexibility, finance and coherent policy and powers at the local level.

These reports echo the findings of the analysis in this report, concluding that the depth of emissions cuts cannot be delivered by local authorities single-handedly. And that effective powers, policies, funding and regulation along with a clear pathway to Net Zero is needed.

2.4 Local Authority Structure and Responsibilities

Different types of local authority in England have different functions and responsibilities. Even the newly created Combined Authorities have negotiated different deals creating variations in what they can do. 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 controls of Highways England) while District Councils have responsibility for parking and spatial planning. 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 are the Greater London Authority and 10 Combined Authorities, eight of which have elected mayors; and a range of devolution deals which assign a range of powers including for some, statutory spatial strategies, Mayoral Development Corporations and transport authorities. The two-tier system can act as a barrier to coherent action on carbon reductions and the absence of an overarching framework for climate change exacerbates a fragmented and disparate approach.

The responsibilities of different types of local authorities are shown in the following table. Combined Authorities and city regions (metro mayors) do not all have the same powers, so are not included in this table. 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.



	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 key sectors in which local authorities have powers to take action that contributes to reaching 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 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.

The following table 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.

Emission Sector		Level of influence and impact on emissions											
		Sub sector	Administration and Government	Advice and Benefits	Business and Employment	Community Safety	Education and Learning	Environmental Protection	Health and Social Care	Housing	Leisure and Culture	Licences, Permits and Permissions	Planning and Building Control
Buildings	Strategic												
	New build												
	Owner occupied												
	Private Rented Sector												
	Social housing												
	New non-domestic												
	Existing non-domestic												
Transport	Strategic Plans												
	Walking and Cycling												
	Parking												
	Speed Limits												
	Buses												
	Taxis and Private Hire Vehicles (PHV)												
	Rail/rapid transit												
	Freight												
	Congestion charging												
	Clean Air Zones (CAZ)												
	EV charge points												
	Vehicle Standards												
Energy	Strategy												
	Local Area Energy Plans (LAEP)												
	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 and estate												
	Fleet												
	Employee travel												
	Procurement and commissioning												

2.5 Local Authority Duties and Powers

What local authorities can and can't 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.

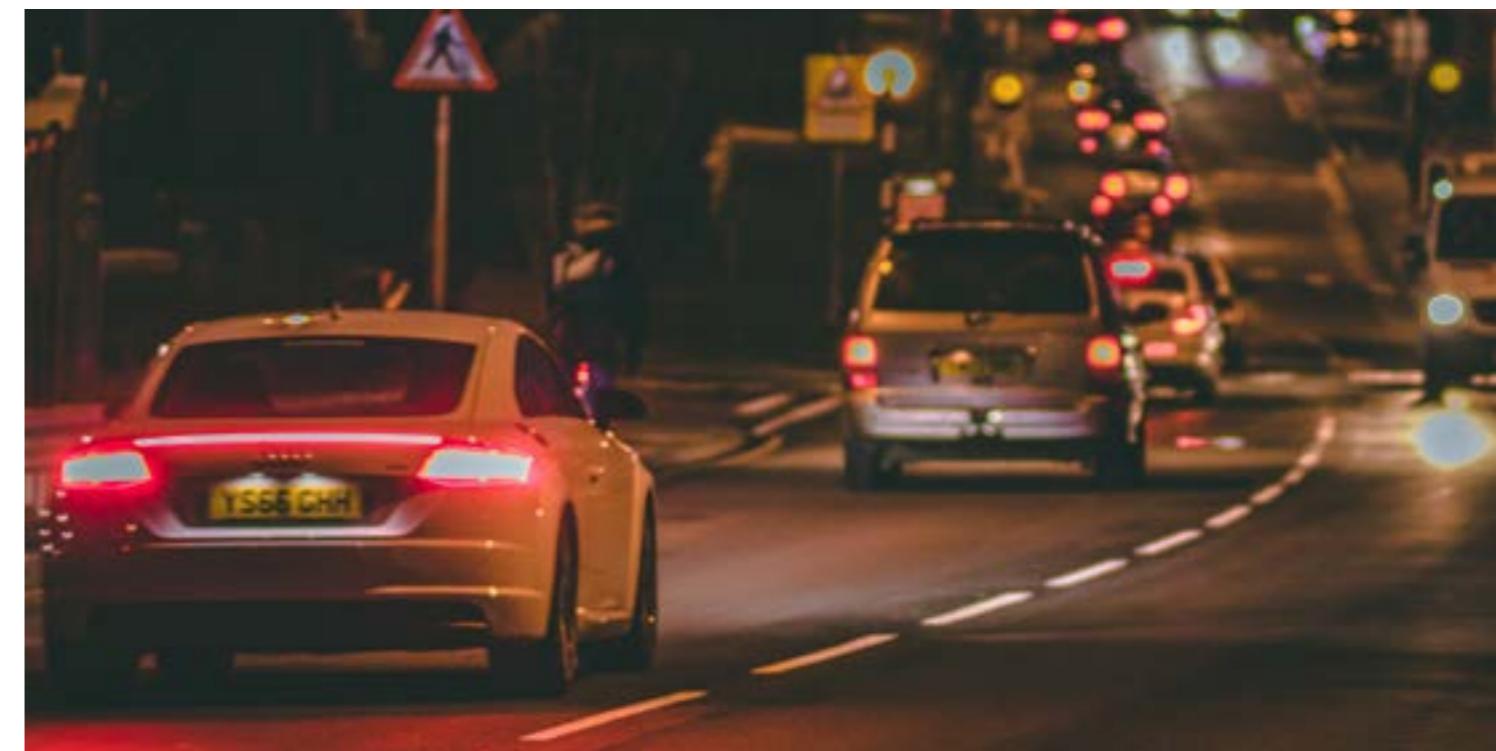
Duties are a legal obligation on a council, the things they have to do or ensure. Powers are provided for in legislation as things they can do, but don't have to do. Policies help things to get done, are to be complied with and must comply with the legislation. They operate together as an 'ecosystem'. 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.

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 a power over a partial element, such as local roads, while power over other elements rests elsewhere, for example, with Highways England.

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 powers, political will, public 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 has become clear that what is most needed is an overall supporting ecosystem to enable "power" to act, as well as some key additional "powers."



3. Overarching Powers:



There are a number of 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 2011⁷

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, (which was repealed in England but which remains in force in Wales) and **allows local authorities to do anything an individual may do**, unless prohibited. Its intention was 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" town and parish councils. It is actively used to support a whole range of local authority activities.

The LGA's paper⁸ 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.

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 (see below). These are used to deliver carbon savings and drive a revenue stream in light of funding cuts.

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 or 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.

⁷ <https://www.legislation.gov.uk/ukpga/2011/20/section/1/enacted>

⁸ <https://www.local.gov.uk/sites/default/files/documents/general-power-competence--0ac.pdf>

3.2 Spending

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

Local authorities have seen a real terms reduction in spending power (government grant and council tax) of 28.6% between 2010-11 and 2017-18. Demand in key service areas has also increased, including a 15.1% increase in the number of looked after children from 2010-11 to 2017-18.⁹

Local authorities have three main sources of revenue (breakdown shown for 2018/19¹⁰):

- Government grants – money from central government for local services, 31%
- Council tax – a property tax levied on residential properties, 52%
- Business rates – a property tax levied on business premises, 17%.

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 NAO has been concerned about local authorities spending their reserves. Among single tier and County Councils, 61.8% overspent on their service budgets in 2017-18¹¹.

To add to an already challenging financial context, the COVID-19 pandemic has hit local authorities hard. The Institute of Fiscal Studies estimates show that at least £2 billion may be needed to cover additional demand and income losses faced by councils due to the COVID-19 pandemic.

Local authorities operate their finances in a regulated environment with different roles including:

- Elected council members¹²
- Within a framework of legal duties, including Best Value Duty to secure economy, efficiency and effectiveness
- Are legally responsible for maintaining a system of internal control including arrangements for the management of risk, an effective internal audit and preparing annual accounts
- Audit committees provide financial oversight by elected members
- Overview and scrutiny functions provide member challenge of the executive
- Local standards regimes govern the ethical behaviour of elected members.

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 webinar¹³ 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.

Many local authorities interviewed cite the Treasury Green Book as an obstacle since it does not readily enable carbon savings to compete with gross value added (GVA) or economic benefits when building a business case. An article for The Institute for Civil Engineers¹⁴ explores the issues with the Green Book's reliance on the Department for Business, Energy and Industrial Strategy (BEIS) guidance on carbon pricing, and calls for a carbon price consistent with x to be used. *"It needs to consistently drive the right behaviour by decision-makers and be clear enough to eliminate the kind of ambiguities or multiple interpretations that can result in legal challenges."* It states that *"infrastructure decision-makers will need to ensure that strategic business cases better consider the holistic fit of a project or investment to the Net Zero target"*. Although this relates to national infrastructure, adjusting the Green Book guidance to enable reasonable decisions on investment to be made for local authorities using it is important. One user of the approach stated: *"The Council will not be out of pocket just for saving carbon, however important it thinks climate change is."*

Some local authorities have developed their own methods of financial appraisal which enables them to increase the importance of carbon impacts. Councils also have a power under the Localism Act 2011 amended Part 1 of the Local Government Finance Act 1992¹⁵ to hold a referendum to raise council tax if the increase is more than 3%, however, this is a rarely used power.

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 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 Wheel,¹⁶ based on the Doughnut Economics¹⁷ model has been used in cabinet decisions since September 2019, and it is set to be used for other Council decisions.

Warwickshire County Council was set to hold a referendum in May 2020 on a council tax rise of £1 a week as a Green Levy to provide £30m over 10 years to invest in making council owned buildings and vehicles energy efficient, reducing traffic congestion, and improving air quality. The referendum was postponed due to COVID-19.

⁹ 9 Ibid. footnote 2

¹⁰ <https://www.instituteforgovernment.org.uk/explainers/local-government-funding-england>

¹¹ Ibid. footnote 1

¹² Ibid. footnote 1

¹³ ADEPT Climate Change webinar 30 July 2020

¹⁴ <https://www.ice.org.uk/news-and-insight/the-infrastructure-blog/july-2020/embedding-carbon-into-uk-infrastructure-decisions>

¹⁵ <https://www.legislation.gov.uk/ukpga/2011/20/schedule/5/enacted>

¹⁶ <https://www.cornwall.gov.uk/environment/climate-emergency/what-is-cornwall-doing/>

¹⁷ <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 like Warwickshire, where the impact of a £1 a week rise on a Council Tax band property of D, amounting to £52 a year, 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. It could also imply that tackling climate change is an expensive addition and make it unpopular.

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. 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.

With less money, there is less power. So even though local authorities have formal spending powers, they wield less ability to drive down emissions through their spending. This is particularly the case when lower carbon technologies may carry higher capital costs than more carbon intensive ones, even if revenue costs (running costs and maintenance costs) are lower over the lifetime.

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, some new funding streams post-Brexit and post-COVID will be routed through local authorities, such as the Levelling Up Fund. There is no indication yet whether this will incorporate a requirement to match funding against Net Zero, or whether the Shared Prosperity Fund will be similarly routed through local authorities. The competitive UK Community Renewal Fund offers support for pilot programmes in 100 places, and does require these to demonstrate how they contribute to Net Zero and wider environmental objectives.

For local authorities, when funds are available that could support climate change actions, these are often competitive, announced with short notice, and need to be spent in a short length of time. The competitive element undermines potential co-operation and learning between local authorities.

3.3 Borrowing and Investing Powers

Under the Local Government Act 2003 s.1,¹⁸ **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. Since 2004, under the prudential regime, major local authorities are responsible for their own financial decision-making. 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

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

to "have regard" to the Prudential Code, published by the Chartered Institute of Public Finance and Accountancy, but have discretion to decide how to fulfil this statutory requirement. Minor local authorities such as town and parish councils in England need approval from the Ministry for Housing, Communities and Local Government (MHCLG) in advance of borrowing.

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. This may lead local authorities to borrow from other sources, such as municipal bonds. The government has now changed the lending terms of the PWLB¹⁹ with a view to limiting local authorities' ability to borrow for the purposes of investment in housing, infrastructure, and public services and not for 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 new bond has been developed by Abundance for West Berkshire Council and Warrington Borough Council to finance solar schemes on council assets.

Warrington Borough Council has used powers to invest under s.12 of the Local Government Act 2003. It has been able to justify out-of-area investments under its invest-to-save scheme with an extension of £600m in 2019/20. Warrington's investments include commercial property, housing association loans and its solar farm investments. These investments are made to generate revenue for economic development in the borough. A distinction was made by the council between borrowing ahead of need and borrowing to invest.

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, following a pilot scheme to increase the retention rate, government has confirmed that, in 2021/22, local authorities in Greater Manchester, Cornwall, West of England, West Midlands and Greater London will be able to retain a greater proportion of business rates in return for forgoing other funding streams.²⁰

Section 137 (1) of the Local Government Act 1972²¹ 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.

19 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

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

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

3.4 Procurement Powers

Under **s.1 of the Local Government (Contracts) Act 1997**²² local authorities have procurement powers to enter into 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 represents 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	Scope 3²³
<ul style="list-style-type: none">● Fuel combustion● Company vehicles● Fugitive emissions	<p>Indirect emissions from:</p> <ul style="list-style-type: none">● The generation of purchased electricity, steam, heating and cooling● Purchased electricity, heat and steam	<p>All other indirect emissions in the value chain:</p> <ul style="list-style-type: none">● 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

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

Under the **Public Contracts Regulations 2015 (Procurement)**²⁴ 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 Model²⁵ 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, but local authorities have long been able, 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 68²⁶** **Life-cycle costing, which covers the cost of acquisition, use (energy & other resources), maintenance costs, and end of life costs**, such as collection and recycling costs. It also covers costs imputed 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.

Public Services (Social Value) Act 2012²⁷

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 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.

22 <https://ghgprotocol.org/standards/scope-3-standard>

23 Ibid. footnote 22

24 <https://www.legislation.gov.uk/uksi/2015/102/contents/made>

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

26 <https://www.legislation.gov.uk/uksi/2015/102/regulation/68/made>

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

In response to its Climate Emergency declaration and carbon neutrality target of 2038, **Manchester City Council** has been quick to include a carbon indicator to 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.

Barriers

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.

3.5 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.

Within a supporting Net Zero Framework, establish a requirement that local authorities set out targets and plans for area-wide carbon reductions, and align all spending and policies with the wider plan for Net Zero in a local area will enable political support to deliver meaningful actions that respond to the needs of all local communities.

4. Transport:

4.1 Overview

Surface transport has emerged as the largest-emitting sector in the UK since 2015,²⁸ accounting for 24% of UK emissions and is not on track to meet Net Zero requirements. Following three consecutive years of growth between 2014 and 2016, emissions were stable in 2017 and fell by 2% in 2018 to 115 MtCO₂e. Emissions from all major modes of transport decreased in 2018, with the largest reduction of 0.9 MtCO₂e (-1.3%) from cars. Emissions from road transport in the UK have increased by 6% from 1990 to 2017.²⁹

Demand for car travel has increased by 6% in the last decade, but this has 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 the last two years, with the average new car sold in 2018 and 2017 being less carbon efficient than the previous year.

Actions needed:

- 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
- 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 has 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 and DfT models still use a 'predict and provide' approach to road building rather than trying to manage demand. The March 2020 budget promised £27 billion for road building compared with £4.2 billion for integrated transport and £1 billion on active travel.

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.

The COVID-19 pandemic has demonstrated the possibilities and impacts of reducing private travel and provides a brief opportunity to make real change through increased powers for local authorities.

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	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 (TROs) and Experimental TROs – restricting traffic in defined areas - to encourage walking and cycling, and parking
Road Traffic Regulation Act 1984	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
Traffic Management Act 2004	Enforcing moving traffic violations
Transport Act 1985	Deregulation of buses
Bus Services Act 2017	Potential to re-regulate buses
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 provision

²⁸ Ibid. footnote 6

²⁹ <https://www.ons.gov.uk/economy/environmentalaccounts/articles/roadtransportandairemissions/2019-09-16>

4.1.1 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. 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.

The North of England and the Midlands also have regional strategic transport bodies in the form of Transport for the North 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. How well the Combined and Regional Authorities work with the constituent authorities varies. The first pan-regional transport body, Transport for the North, is still seeking funding commitments from central government for its strategy and has not sought to become involved with local transport decision-making.

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. Highways England is responsible for motorways and major roads. Traffic Commissioners, appointed by the Secretary of State, are responsible for bus licencing.

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.

4.1.2 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. Recent research for the Countryside Climate Network³⁰ has 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. Meanwhile, retroactively creating active travel infrastructure in rural areas is complex – mainly because of the funding processes.

4.1.3 Transport After COVID-19

One result of the COVID-19 pandemic is that the transport context has changed rapidly due to radically different travel patterns and demand. 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.

Active Travel

On 12 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. In Scotland, Transport Scotland has launched the 'Spaces for People' £30 million fund, managed by Sustrans, aimed at creating safe walking and cycling routes for key workers and essential journeys.

Under The Traffic Orders Procedure (Coronavirus) (Amendment) (England) Regulations 2020, the DfT enabled emergency powers to enable rapid implementation of schemes, including fast-tracking the TRO process through using experimental TROs.³¹ This regulation was in place until 30th April 2021. Even after the expiry of this regulation the ability to implement Experimental TROs was retained, although the ability to implement TROs "for purposes connected to coronavirus" ceased.

³⁰ Rural Net Zero: The role of Rural Local Authorities in reaching Net Zero, March 2021

³¹ <https://www.legislation.gov.uk/ukssi/2020/536/regulation/2/made>

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 accident.

Bus, Tram and Rail

Social distancing requirements and lockdowns reduced use of public transport by over 90% at times during 2020/21. During this time, the government has continued to pay the Bus Service Operators' Grant (BSOG) and encouraged local authorities to continue to charge concessionary fares at pre-COVID levels to maintain services while there was little or no demand. The COVID-19 Bus Services Support Grant was put in place to support operators to increase services to pre-COVID levels.

Light rail and tram operators will receive £193 million support until June 2021.

Other rail operators had their franchises suspended but have been paid compensation for lost revenues. In September 2020 the DfT announced that rail franchising will end and post-COVID the government will reform the rail operating system.³²

London Congestion Charge

The London Congestion Charge was increased in an effort to reduce any shift to private cars during the pandemic. The increase was temporary but continues into 2021. The cost of the Congestion Charge increased to £15 from £11.50 and its operating hours to 7:00 to 22:00 (previously 07:00 to 18:00). It also operates seven days a week instead of five. In addition, it removed the residents' discount to 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.

4.2 Electric Vehicle (EV) Infrastructure

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 Gap³³ 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 ten key areas included in the government's Ten Point Plan for a Green Industrial Revolution.³⁴ 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 £1.3bn investment in charging infrastructure, including on-street charge points. However in the 2021 budget the subsidy available for new EVs was reduced to £2500 from £3000.

Under the Road Traffic Regulation Act 1984 local authorities have the power, by means of a [TRO](#), to assign street space to EV charging.

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

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

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

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.

For homes without a driveway, the lack of access to local and affordable charging is a barrier to EV uptake. The On-Street Residential Chargepoint Scheme³⁵ provides local authorities with up to 75% of the cost of installing on-street residential charging facilities, with funding of £20 million in 2020/21 and a further £20 million allocated for 2021/22. 140 local authorities have so far accessed this funding to install 4,000 charge points. There are still only 0.3 public charge points per 1000 population across the UK, with the highest level only 3.6 per 1,000 people (City of London) and 90% of local authorities having less than 0.5 per 1000 people.³⁶

Energy Saving Trust offers support and advice to local authorities for EV chargepoint planning and installation.³⁷

Barriers

Limited expertise as this is a new industry. There is some risk of 'getting it wrong' and authorities are concerned about potential future ramifications.

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.

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. 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 bays.³⁸ 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 to reduce potential anti-social behaviour.

4.3 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 can also attract central government investment by creating a Local Cycling and Walking

35 <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>

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

37 <https://energysavingtrust.org.uk/service/developing-an-electric-vehicle-charging-infrastructure/>

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

Infrastructure Plan (LCWIP). Central government funding is available to support LCWIPs, but 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 government.³⁹

"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

Under the Highways Act 1980⁴⁰ 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.⁴¹ 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.

Related legislation:

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 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.

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

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

41 <https://www.legislation.gov.uk/ukssi/1996/2489/contents/made>

Barriers

The government's new vision for cycling and walking (Gear Change, July 2020)⁴² aims to address some of the barriers highlighted by local authorities, including increased funding (£2bn over five years), increasing staff capacity, design guidance to plan safe, continuous, physically separate cycling routes, and new funding assessment mechanisms. The details of these proposals are yet to be published.

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.

"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.

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

Obstructions

Obstruction 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 2020,⁴³ proposing to address these issues by reforming the TRO process, introducing civil enforcement, or banning pavement parking outright. As yet no decision on this has been made.

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 2016.⁴⁴ Under Part 6 of the Traffic Management Act 2004, local authorities should have powers to enforce moving traffic violations, however this part of the Act was never activated through secondary legislation so only applies in London. The DfT has indicated that it might be in a position to enact this part of the legislation in mid-2021.⁴⁵

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 officers to find time to work together across departments: this kind of 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.

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.

Manchester Bee Network

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 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.

External Funding:

The National Cycle Network (NCN) is funded by central government, so schemes that form part of that are assessed differently. Many rural cycle routes such as the Kendal – Windermere cycle track are part of the NCN.

4.4 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**⁴⁶ local authorities have the power to set charges on designated parking places at whatever level they wish, with no statutory requirement for consultation.

The Road Traffic Regulation Act 1984 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. A TRO is the instrument a local authority can use under the Act to vary parking restrictions (and also other rules specific to roads such as speed limits, weight limits, one-way streets and banned turns or complete prohibition of driving).

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.

TROs can be used by local authorities to replace individual on-street parking spaces with a facility designed to support walking or cycling: for example, a “parklet” or a communal cycle hangar. Replacing a parking space in this way can also need planning permission depending on the type of facility installed.

Local authorities are able to use TROs to repurpose parking towards lower carbon modes – bike hangars, car club parking spaces and EV charging. In some local authorities this has been combined to create dedicated parking spaces for electric car club vehicles (e.g. Oxford and Bristol City Councils).

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

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

45 Ibid. footnote 42

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

They need to ensure streets are accessible for those with mobility issues, so ensuring that street furniture (like bike stands) is built out into the street rather than on the footway is essential (see Equalities Act 2010). However they are sometimes reluctant to make use of their powers to do so.

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 NPPF advocates caution in specifying standards.

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.⁴⁷

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 partner). 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.⁴⁸

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.⁴⁹

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 Development Policy HO7 Car Free Housing states that planning permission will be granted for car free housing in locations with good access to public transport and local services. This is achieved through s.106 planning obligations where developers and the council willingly enter into legal agreements to amend the relevant TRO for the area. The requirement is maintained through covenants upon homes within Controlled Parking Zones which allows the council to not grant parking permits for residents living in those homes at any future date. The council is also investigating the impact of making the city centre entirely car-free.

Car clubs for car free developments have been used as a tool to enable people living in them 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). **Norwich City Council** has used parking policy and TROs to grow a healthy car club network.

47 <https://www.carfreehousing.org/whatis.html>

48 https://www.oxford.gov.uk/info/20185/electric_vehicles/1288/oxpops - whole street electric vehicle charging trial

49 <https://news.merton.gov.uk/2019/12/16/new-parking-charges-for-a-new-decade-set-to-reduce-pollution-in-merton/>

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. Car club research indicates that car owners drive more than car club members as ownership provides 'easy access' to vehicles. Good provision of public transport is essential to support these travel patterns, however.

Nottingham City Council introduced a workplace parking levy in 2012, and currently charges companies with more than 11 parking spaces an annual fee of £424 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. As yet it has not been replicated elsewhere in the UK.⁵⁰

Barriers

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. This ensures that any debate about parking is emotive in the extreme.

Resident 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.

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.

Loss of revenue: There are tensions between the desire to remove parking in order to deter vehicle use and losing the income it generates. Private car parks are also outside council control, which can affect key locations such as rail stations.

4.5 Clean Air Zones (CAZ)

Whilst air quality is not directly the same as decarbonisation, where cleaning the air demands the reduction of internal combustion engine vehicles there is 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 in co-benefits and assessing for unintended negative impacts needs to be taken in all transport decisions.

Part IV of the Environment Act 1995⁵¹ requires local authorities to review air quality in their area and designate AQMAs if improvements are necessary. The effectiveness of AQMAs depended on the area.

50 The article below by Nottingham City Council's former leader outlines how to sell the WPL scheme:

https://www.publicfinance.co.uk/opinion/2020/04/introducing-workplace-parking-levy-requires-getting-politics-right?utm_source=Adestra&utm_medium=email&utm_term=

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

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 the strategy's 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.

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. 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 Clean Air Zone there is also a particular focus on measures to accelerate the transition to a low emission economy*”.⁵² 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 PHV licensing and vehicle standards.⁵³ Some authorities are wary of charging mechanisms and the impact that might have on local businesses.

Sixty local authorities were considering CAZs in September 2019. Implementation of these has been slowed by the requirement to consult stakeholders imposed by the Clean Air Zone Framework, which has now paused due to the COVID-19 outbreak.

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.

Bristol City Council is proposing to implement a smaller CAZ-D Clean Air Zone 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. A full business case was submitted to central government in February 2021 for final stage approval.

Barriers

Local authorities do not have powers to enforce CAZ on the Highways England 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 Highways England, the local authority has no power to make changes or create a CAZ. Highways England has Air Quality money which they are struggling to spend. To make the case to allocate money to a scheme, they have to 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 really difficult.

⁵² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/863730/clean-air-zone-framework-feb2020.pdf

⁵³ Ibid. footnote 52

Charging: There is some reluctance to use charging mechanisms available due to the potential impact on local businesses and political fallout for the authority.

Smoothing traffic flow 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 2004⁵⁴ 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.⁵⁵

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.⁵⁶

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 review⁵⁷ 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 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.⁵⁸ The extent to which this happens in practice is unclear, although there is now widespread use of partnership-based solutions such as Community Speedwatch.

Barriers

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.⁵⁹

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

⁵⁴ <https://www.legislation.gov.uk/ukpga/2004/18/section/16>

⁵⁵ <https://www.theguardian.com/environment/2016/dec/01/nice-proposes-smooth-driving-measures-to-cut-pollution-and-save-lives>

⁵⁶ <https://www.gov.uk/government/publications/setting-local-speed-limits>

⁵⁷ <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>

⁵⁸ http://www.20splenty.org/how_las_can_enforce

⁵⁹ <https://www.20ssenseless.org>

does seem to improve user perception of a road, particularly for walkers and cyclists.⁶⁰ It is not clear whether this results in a shift away from car use.

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).

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.

4.7 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. A 2015 report by the Equality Trust found that households in the lowest income quintile use buses three times as much as the highest.⁶¹ 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.

The National Bus Strategy for England⁶² published in March 2021, finally seeks to address the role of buses in the context of Net Zero. The £3bn investment in bus services outside London will include increasing local transport authority capacity and skills, and investment in more comprehensive services, cross-ticketing and zero emission vehicles, although the basis of this funding is discretionary and questions remain as to how it will be allocated.

The Transport Act 1985⁶³ 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 2017⁶⁴ 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 also have powers to directly franchise services. The National Bus Strategy for England expects all local transport authorities to commit to establishing Enhanced Partnerships, or continue to establish franchises where this work has already started, and to publish a Bus Service Improvement Plan by October 2021. Only local transport authorities and bus operators that meet these criteria will be able to access further funding under the COVID-19 Bus Services Support Grant or future discretionary grant funding.

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

61 <https://www.equalitytrust.org.uk/sites/default/files/resource/attachments/Taken%20for%20a%20Ride.pdf>

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

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

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

The Bus Services Act 2017 requires bus operators to provide much more detailed and real time data on their services. This will enable bus timetables and fares to be found online (and in apps) which should improve the experience of passengers. The Bus Services Act 2017 also prevents local transport authorities from setting up new local authority owned bus companies, although they are able to purchase existing operators. The Bus Strategy for England recommends that this be reviewed.

Outside London and Northern Ireland, no authorities have 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 are able to reinvest their profits – for example, in 2019 Lothian Buses paid a dividend of £7.7 million to its shareholding councils.⁶⁵

Barriers

Bus Deregulation: The net effect of deregulation is that 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 newly-published National Bus Strategy for England acknowledges these failings of the deregulated bus system and aims to reintroduce 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

Bus Refranchising: Refranchising is a complex process with the potential for drawn out and expensive litigation. Greater Manchester has refranchised bus services in spite of a judicial review application from the incumbent operators.⁶⁶ The new National Bus Strategy for England now supports franchising where this process has already begun, or the DfT considers the local transport authority has the capacity to manage the process.

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.

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

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

Population sparsity: Many rural areas are transport deserts⁶⁷ 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 (DRT) services and investigate ways to run these more efficiently.

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. These will provide 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.⁶⁸

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.

Funding mechanisms: The financially precarious nature of bus operations is recognised in legislation through the award of the BSOG.⁶⁹ 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 proposes to reform the BSOG to move away from subsidising fuel costs to contributing to miles covered, with an uplift for rural areas.

4.8 Rail/Rapid Transit

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.

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.

Large scale rapid transit networks have to 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.)

Barriers

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 will be required with each owner or operator.

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

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

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

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 licenses 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.

Inter-mode connectivity is also hampered by difficulties in carrying bikes on trains. Carriage of bikes is specified within rail franchises at national level, and competes (badly) with space for passengers.

The Gear Change report⁷⁰ 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.

4.9 Private Hire Vehicles (PHV)

Under the Local Government Act 1976 local authorities have the power within their licencing 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.⁷¹ 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 2019⁷² requires all local licensing authorities in England and Wales to provide a set of data on every relevant vehicle (taxi and private hire) in its authority. The impact of this has not yet been assessed. Currently no local authority has demanded trip data from any PHV or app.

Cambridge City Council is using licensing requirements to gradually upgrade the taxi and PHV fleet and manage a switch towards EVs. New licenses are only issued to vehicles under four years old and meeting Euro 5 standard or higher and, from April 2020 will only be issued to zero or ultra-low emission vehicles. Licenses 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 Hackney Carriage owners incentives totalling more than £3,000 if they purchase an ultra-low emission vehicle.

70 Ibid. footnote 42

71 https://www.local.gov.uk/sites/default/files/documents/10.9%20Councillor%20Handbook%20-%20Taxi%20and%20PHV%20Licensing_November_2017.pdf

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

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

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.

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 licenses from boroughs with lower standards.

Resources in licencing: 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.

Competition: The Competitions and Markets Authority has raised issues with some local authorities that their licencing practices may contravene the competitiveness of the sector.⁷³ Competition on price does not always lead to reduced carbon emissions and may conflict with other local authority goals.

4.10 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.

The vast majority of freight transport in the UK is road-based and has a disproportionate environmental impact in urban areas. In 2018, HGVs were responsible for 4% of transport sector GHG emissions⁷⁴ while comprising 1.3% of registered vehicles.⁷⁵ 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.⁷⁶

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 2018 vans accounted for 15% of transport GHG emissions.⁷⁷

Local authorities have the ability to restrict vehicles in certain areas via a TRO.⁷⁸ 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.

⁷³ <https://www.gov.uk/government/publications/private-hire-and-hackney-carriage-licensing-open-letter-to-local-authorities/regulation-of-taxis-and-private-hire-vehicles-understanding-the-impact-on-competition>

⁷⁴ <https://www.theccc.org.uk/publication/reducing-uk-emissions-2018-progress-report-to-parliament/>

⁷⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882196/vehicle-licensing-statistics-2019.pdf

⁷⁶ <https://bettertransport.org.uk/sites/default/files/pdfs/26.11.17%20Fatal%20HGV%20collision%20rates%20ten%20year%20tables.pdf>

⁷⁷ Ibid. footnote 74

⁷⁸ 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 Logistics⁷⁹ is seeking solutions to reduce the impact of increasing delivery traffic. The new cycling and walking vision includes proposals to increase last mile deliveries by e-cargo bikes, which will require suitable cycling infrastructure. In September 2018 the government announced a grant scheme to support the purchase of e-cargo bikes: as a result of this and other support packages there are a growing number of cargo bike delivery services in urban areas.

Barriers

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.⁸⁰

Timescale: TROs require community consultation and can take several months to a year to implement. An alternative which is less commonplace is to issue an Experimental TRO and consult on the work once in situ, formalising it if the results are positive. The benefits of this are that it allows authorities to trial schemes and collect real data rather than arguing about potential outcomes. During the response to the COVID-19 pandemic it was recommended that emergency active travel measures were taken using Experimental TROs. It is likely that their use will increase as authorities gain experience in using the process. Some schemes, particularly Low Traffic Zones, however, have been brought in swiftly to implement available funding and without sufficient community engagement have been very unpopular in some local areas.⁸¹

⁷⁹ Ibid. footnote 73

⁸⁰ https://www.researchgate.net/publication/271840841_Urban_Freight_Consolidation_Centers_Case_Study_in_the_UK_Retail_Sector

⁸¹ <https://www.rac.co.uk/drive/news/motoring-news/overturned-planters-and-oil-slicked-roads-low-traffic-neighbourhood/>

4.11 Congestion Charging

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).

London is the only current example of congestion charging in the UK. Other schemes in Manchester and Edinburgh were rejected by public vote. Congestion charging is being revisited through the introduction of CAZs which allow the potential for charging.

Barriers

The votes in Manchester and Edinburgh were controversial and exposed fractures along party lines and also 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.⁸² 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 are developing 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.

⁸² https://www.racfoundation.org/wp-content/uploads/2017/11/acceptability_of_road_pricing-walker-2011.pdf

4.12 Vehicle Standards

Local government does not have the power to set emissions standards for vehicles, but these standards can be used within CAZ frameworks and also 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.

This is an important function when new SUVs have higher emissions and are being purchased in sufficient numbers (around 37% of new vehicle purchases) that they are increasing the carbon footprint of the fleet and negating the impact of increasing sales of electric and other ultra-low emission vehicles.

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 constructed 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 are able to use vehicle standards to improve the overall emissions performance of vehicles in their areas, through other funding mechanisms.

Coventry City Council has 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.

The Mayor of London has introduced a number of vehicle scrappage schemes.⁸³ 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.

Barriers

In smaller authorities there is the sense that there are too few people working across too broad an area to make an impact using vehicle standards. For instance, in Calderdale the EV charging infrastructure role is being delivered by staff within the environmental services waste team.

⁸³ <https://tfl.gov.uk/modes/driving/scrappage-schemes>

4.13 Local Authority Fleet Procurement

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 many areas fleets are still overwhelmingly made up of diesel vehicles.⁸⁴ 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.

Leeds City Council has the largest local authority fleet of 330 EVs, including 50 electric cars and vans to be distributed to local businesses for two months as part of a EV Trials Scheme to encourage wider uptake. The Council also offers an “try-before-you-buy” e-cargo bike loan scheme.

Nottingham City Council⁸⁵ is also offering 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 EVs 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.

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.⁸⁶

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.

⁸⁴ <https://www.transport-network.co.uk/Vast-majority-of-council-vehicles-run-on-diesel-despite-pollution-concerns/16344>

⁸⁵ <https://www.transportnottingham.com/leading-by-example/>

⁸⁶ <https://governmentbusiness.co.uk/features/how-public-sector-can-tackle-grey-fleet>

Barriers

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

4.14 Link to the Planning System

The legal requirements for local authorities are to set planning policies in the Local Plan, within the NPPF 2019.

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

- Community Infrastructure 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.

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. In addition, some areas are covenanted as car free with the car club vehicle the only option for residents.

Barriers

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.

An underlying assumption that car use will be the main mode of travel. A review⁸⁷ 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.

⁸⁷ <https://www.transportfornewhomes.org.uk/wp-content/uploads/2020/06/garden-village-visions.pdf>

Lack of detailed travel design input throughout the development process. A 2019 KPMG report⁸⁸ 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.*”

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.

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.

4.15 Transport Summary

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

Recent strategies and announcements from the DfT appear to be starting to address some of these issues, but as yet there are no detailed proposals setting out how these ideas will work in practice. Until this detail is available and new funding and support mechanisms are tested, the barriers and conclusions set out below remain valid.

4.15.1 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. Devolution deals in other areas could help them to follow a similar approach. Several areas are outside local authority control and they have little power to influence decisions or funding:

- Major roads under the remit of **Highways England**, 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 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.

⁸⁸ https://greenerjourneys.com/wp-content/uploads/2019/02/20190213_KPMG-Sustainable-Transport-and-New-Housing-Report-for-TKH_FINAL....pdf

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

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.

Political will

There remains a vocal lobby that views any attempt to get people out of their cars as restricting freedom. This was evidenced by the response in some areas to pop-up cycle lanes installed during COVID-19. Parking is seen as an emotive issue and political risk. Providing free parking is equated with “*free*” travel. It is popular as an idea (for instance free NHS staff parking during the pandemic response) yet its practical implementation creates congestion.

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.

4.15.2 Transport Conclusions

Recent announcements are 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, is key to enabling the coordination and delivery of integrated Net Zero transport networks that are appropriate for local areas.

4.15.3 Key Considerations for Transport Powers

That strategically defined local areas have 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 WebTAG and investment is not concentrated in already economically rich areas.

To support this, local authorities will need enabling powers including:

- Power to access transport funding using alternative justifications (for instance on the strategic case and without using WebTAG)
- Incorporation of the oversight of buses into the local transport authority role
- Power to require bus and rail operators to collaborate within a framework on area-wide transport plans, including cross-ticketing, setting this type of collaboration outside of the Competition and Markets Authority requirements
- Power to require Highways England to contribute to emissions reductions schemes outside of the strategic road network where areas are affected by emissions from major highways.

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
- Allocate more funding to active travel
- Revise the role of Traffic Commissioners
- 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 and emission targets into Highways England's remit
- 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.



5. Buildings:



CO₂ emissions caused by energy use in housing account for around 33% of the UK total.⁸⁹ Between 2008 and 2018, domestic CO₂ emissions fell by 35%, primarily due to decarbonisation of the electricity supply network, with gas and solid fuel emissions falling 15%, due mainly to retrofit programmes that have now ended.⁹⁰

There has been very little focus on emissions from non-domestic buildings and very little data exists on their CO₂ contribution, although the UK government estimated this at 12% in 2016.⁹¹

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. 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.

⁸⁹ <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2018>

⁹⁰ Note that the CCC reports only heating emissions under buildings, with emissions related to electricity use accounted for separately. Ibid. footnote 6.

⁹¹ <https://www.gov.uk/government/consultations/heat-in-buildings-the-future-of-heat-non-domestic-buildings>

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	GPoC Set up own housing development organisations Barrier: abolished regional spatial strategies and introduced Neighbourhood Plans with consequent extra demands on each Local Planning Authority (LPA)
Neighbourhood Planning Act 2017	Barrier: Centralising power allowing the Secretary of State to rule that a 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: GPC	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

Relevant Legislation	Power enabled
The Limits on Indebtedness (Revocation) Determination 2018	Removed cap on council borrowing for house building
Housing and Planning Act 2016	Barriers: 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 for rented properties (MEES)
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 2013	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	Limits 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	Barrier: Planning permissions not required for conversion of offices to dwellings

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 buildings.

New Buildings	Number / Scale	Local authority power or control
Housing	478,000 homes completed in 2016-19 ⁹²	Power to require marginal improvement over national standards Power to build homes to own standards
Non-domestic buildings	£43,000m investment in 2019 ⁹³	Power to require improvement over national standards
Existing Homes	Number ⁹⁴	Local authority power or control
Owner occupier	15,581,489 (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	4,724,514 (19%)	As above plus properties with an EPC lower than E through MEES
Rented from Registered Provider	2,478,680 (10%)	As above plus homes not meeting the Decent Homes Standard
Rented from Local Authority	1,587,165 (7%)	Full power, subject to funding and capacity constraints
Non-Domestic Premises	Premises	Local authority power or control
Owner occupied	1,061,000 (58%)	Some control over building improvements or refurbishments through Building Control Regulation of polluting businesses
Rented	769,000 (42%)	As above plus properties with an EPC lower than E through MEES

5.1 New Buildings

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.

92 Since 2016 Zero Carbon Homes standard was to have been implemented, before being cancelled

93 Approximately equal to the investment in housing in 2019

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

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

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), over the last 10 years it has become progressively more difficult to demand better standards. This is becoming known as “the lost decade” for carbon reduction policy. Government policy has moved towards “build to any standard” and a “bonfire of red tape” in which planning authorities and the imposition of requirements, such as low carbon or affordable homes, are seen to be the major barriers to development.

5.1.1 Local Planning Authority powers related to energy in the design of new developments

Under the **Planning and Energy Act 2008**,⁹⁵ 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 2015**⁹⁶ (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, so 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.

The proposed Future Homes Standard⁹⁷ (FHS) envisages carbon reductions of 75-80% on the current (2013) building regulations for homes by 2025 with an interim revision of the building regulations in 2021 reducing CO₂ emissions by 31%. Full details will not be available until 2023, but the new standard is expected to include measures to address the performance gap between design and as-built emissions, and to set standards that mean no further retrofit will be needed to reach zero carbon. Responses from leading bodies such as Chartered Institution of Building Services Engineers, RTPI and UKGBC uniformly declared the original FHS proposals to be insufficiently ambitious, unlikely to enable the UK to meet its zero carbon timeline, and in some aspects a backwards step. Proposals to remove the Fabric Energy Efficiency Standards (FEES) and remove LPAs' ability to require higher standards have been dropped, but there remains no mention of the impact of housing's embodied carbon.

In 2008 the government proposed to deliver zero carbon homes by 2016 and zero carbon non-domestic buildings by 2019, through the Code for Sustainable Homes and BREEAM standards. These plans were withdrawn in 2015. Whilst these were not perfect, had they been retained we would not now be in the position of having to wait a further 10+ years. Even with the revised FHS, many developments built between now and 2030 will still need to be expensively retrofitted to become zero carbon.

A subsequent consultation on non-domestic buildings, the Future Buildings Standard, has since been published.⁹⁸ This includes proposals to increase standards of energy efficiency and ventilation in new buildings in 2021, a high-level vision for 2025 standards and changes to the methodology for assessing non-domestic buildings.

The August 2020 Planning White Paper⁹⁹ aims to streamline the entire planning system, although there is little specific detail on how this will happen. It is proposing a highly centralised system for a consolidated sustainable development test set by the Secretary of State. The proposals include:

“Proposal 15: We intend to amend the National Planning Policy Framework to ensure that it targets those areas where a reformed planning system can most effectively play a role in mitigating and adapting to climate change and maximising environmental benefits.”

“Proposal 18: To complement our planning reforms, we will facilitate ambitious improvements in the energy efficiency standards for buildings to help deliver our world-leading commitment to net-zero by 2050.”

However, the latter references the not-entirely-ambitious FHS and it is unclear how much control or input ambitious local authorities will be able to have requiring high standards. The Planning White Paper states that the consultation response will “clarify the role that they can play in setting energy efficiency standards for new build developments.”

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.

⁹⁷ <https://www.gov.uk/government/consultations/the-future-homes-standard-changes-to-part-l-and-part-f-of-the-building-regulations-for-new-dwellings>

⁹⁸ <https://www.gov.uk/government/consultations/the-future-buildings-standard>

⁹⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/958420/MHCLG-Planning-Consultation.pdf

⁹⁵ <https://www.legislation.gov.uk/ukpga/2008/21/section/1>

⁹⁶ <https://www.gov.uk/government/speeches/planning-update-march-2015>

Planning Policy Examples making use of the Planning and Energy Act

Reading Borough Council (2019): All major housing developments to be zero carbon, and other housing to achieve a 19% reduction on CO₂ emissions specified in 2013 Building Regulations.

Milton Keynes (2019 but Supplementary Planning Document in place since 2014): all residential development over 11 homes or non-residential over 1000m² to achieve a 19% reduction on CO₂ emissions specified in 2013 Building Regulations, and provide on-site renewable energy generation, or connection to a renewable or low carbon community energy scheme, that contributes to a further 20% reduction in the residual carbon emissions, and contribute to the Council's carbon offset fund for residual CO₂.

Cambridge City Council (2018): All residential developments to achieve a 44% reduction on CO₂ emissions specified in 2010 Building Regulations (equivalent to 19% on 2013) until overruled by the Planning and Energy Act amendments, and non-residential to achieve BREEAM Excellent from 2016.

Ipswich Borough Council (2017): All residential developments to achieve a 19% reduction on CO₂ emissions specified in 2013 Building Regulations and developments of 10 or more homes or 1000m² non-residential shall provide at least 15% of their energy requirements from decentralised and renewable or low carbon sources.

Brighton and Hove Council (2016): All residential developments to achieve a 19% reduction on CO₂ emissions specified in 2013 Building Regulations and non-residential to achieve BREEAM Excellent (major developments) or Very Good (minor developments).

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.

London Borough of Merton (2011): Residential developments to meet Code for Sustainable Homes Level 4 and non-residential over 500m² to meet BREEAM Very Good. Major developments to reduce carbon emission by 20% through on-site renewables.

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, as the government has shown no ambition to set zero carbon standards, and with the FHS proposals remaining a long way away from this, LPAs need the ability to demand higher standards to meet Net Zero carbon ambitions for both housing and non-residential buildings.

5.1.2 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 2018¹⁰⁰ has increased the rate at which councils are building new homes. An RTPI study in 2019¹⁰¹ found that the number of local authorities with a housing company increased from 57% in 2017 to 78% in 2019.

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 150 council homes to Passivhaus standard. It is also completing the first council owned Passivhaus standard leisure centre and is constructing a care home to the same standard. To support this the Housing Development Team are Passivhaus Certified. In 2019 the cost premium was down to 8% above standard construction.¹⁰²

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, with 150 starting in autumn 2020. Around 50% are expected to be market sale/rent. They can now deliver Passivhaus homes on sites of 100+ units at no additional cost.

Norwich City Council started building 105 new homes to Passivhaus standard in 2017 all of which are for 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 is looking for contractors with the skills to build over 2,500 low/zero carbon homes in the next 10 years. This follows a pilot of eight "zero-carbon"¹⁰³ homes using prefabrication to achieve high standards of energy efficiency along with triple glazing, air source heat pumps and solar PV. The Housing Company is also modelling costs and benefits to assess Passivhaus standards. The Council has been working with the Low Carbon Hub to investigate partial community funding and community sharing of the generation from the PV systems.

5.1.3 Barriers to Higher Standards in New Buildings

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.

The Viability Test. Viability is enshrined in Planning Law. This sets out that the development must be able to cover the value of the site, all development costs plus a developer return of 15-20%, 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. Prioritising the requirement

¹⁰⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/751989/Limits_on_Indebtedness_Determination_2018.pdf

¹⁰¹ <https://www.rtpi.org.uk/media/4440/tableoflocalauthorityhousingprovision2019.pdf>

¹⁰² https://www.passivhaustrust.org.uk/UserFiles/File/research%20papers/Costs/2019.10_Passivhaus%20Construction%20Costs.pdf

¹⁰³ Regulated emissions only i.e. only those directly influenced by the building fabric

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.

NPPF Paragraph 57 states “Where up-to-date policies have set out the contributions expected from development, planning applications that comply with them should be assumed to be viable”. The legal judgment in case brought by Islington Council in 2018¹⁰⁴ 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.

Stockport Council has commissioned evidence to quantify the average costs of selected low carbon energy technologies and meeting Passivhaus standards for different building types to support its Local Plan. The evidence will also provide expected energy bill savings for residents of new homes, which can feed into the determination of the value of the development.

Developers may be required therefore to take these into account when determining the land value of a scheme and may be assumed to have included these costs in their own viability assessment.

Potential for the Local Plan to be found unsound or downgraded at inspection. At Inspection a plan can be found unsound or carbon targets can be watered down. The threat of this, and an assessment of the associated risks and costs, often leads planning policy makers to play safe and stick with the minimum standards required.

Reading Borough Council is one of the few to introduce a “zero carbon homes” policy. Policy H5 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.”

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 2010 would now be wrong by a factor of ten.

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.

FHS: Whilst the government response to the proposed FHS has mitigated some of the concerns raised by respondents, there is as yet no detail to the 2025 proposals which gives confidence that future homes will actually be zero carbon.

Building Regulations Loopholes: A development is assessed against the building regulations in force at the time of the planning application. As long as the first building on site is delivered within the required timeframe (three years) all homes on the site can then be built to the same standards. For large developments built in phases, this means that new homes are still being built to pre-2010 standards,

104 Parkhurst Road Ltd vs Secretary of State for Communities And Local Government & Anor [2018] EWHC 991 (Admin)

rendering the updated standards meaningless. In 2019, over 14,000 new homes (6%) achieved an EPC rating of D-G.¹⁰⁵ The transitional arrangements set out in the FHS will change this approach in the 2021 Building Standards revision, such that each individual home must meet the Building Standards in force a maximum of one year prior to construction.¹⁰⁶

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.

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.

Developer Power: It is very clear that there is an imbalance of power between developers and local authorities. Developers maintain large land banks, which they can choose to develop or not, putting in jeopardy the requirement for LPAs to deliver housing. The planning system is typically portrayed by politicians and the construction sector as the main barrier to development, as if removing their limited powers would magically deliver buildings. In giving evidence to BEIS, 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.”

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 FEES set at the design stage. A 2016 study¹⁰⁷ 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.

105 <https://www.gov.uk/government/collections/energy-performance-of-buildings-certificates>

106 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/956094/Government_response_to_Future_Homes_Standard_consultation.pdf

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

This has been recognised in part in the FHS, which proposes more detailed guidance and a mandatory standard compliance report.

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.

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 is developing a pipeline of new inspectors through accredited training and career pathways and is rolling out ISO Quality Standards across the country to be ready to expand and improve the system.

Lancaster City Council, in its 2020-21 budget, decided to bring the building control function back in-house (where previously it had only one BCO) on the basis that: *"The building regulations are at the forefront of the energy efficiency of buildings (both new build and retrofitting existing buildings), which are critical to addressing the climate emergency."*

Planning is seen as a block to development rather than an enabler: The Prime Minister's "Build, build, build..." statement on 30th June 2020¹⁰⁸ clearly demonstrates this thinking:

"New regulations will give greater freedom for buildings and land in our town centres to change use without planning permission and create new homes from the regeneration of vacant and redundant buildings.

- *A wider range of commercial buildings will be allowed to change to residential use without the need for a planning application*
- *Builders will no longer need a normal planning application to demolish and rebuild vacant and redundant residential and commercial buildings if they are rebuilt as homes.*

Also announced today, the government will launch a planning Policy Paper in July setting out our plan for comprehensive reform of England's seven-decade old planning system, to introduce a new approach that works better for our modern economy and society."

Avoidance of planning permission: In 2013 the Government amended the GDPO 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

108 <https://www.gov.uk/government/news/pm-build-build-build>

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.

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.

Planning White Paper: The government launched a Planning White Paper in August 2020,¹⁰⁹ aimed at a complete overhaul of the planning system. This proposes the introduction of a standards based system, rather than the current negotiation. It refers to the FHS and envisages three development 'zones' and greater use of pattern books to incorporate local designs. However it appears to prioritise aesthetics and does not incorporate compliance with Net Zero as an absolute requirement, rather a possible future ambition. Local authorities have expressed concern that it prioritises speed of housing delivery over the local democratic process of plan-making. As yet the government has only published its response to the first part of the consultation, on assessing housing need.

Right to Buy Scheme: councils have only been able to retain 30% of the receipts to invest in new homes and must spend this within three years or lose it to central government, plus interest at 4%. In practice this has led to a replacement rate of under 20%. Finding the 70% contribution is a major barrier to council investment. In 2018 government consulted¹¹⁰ on increasing the proportion retained to 50% and time to spend to five years. The government response was finally published in March 2021,¹¹¹ and will extend the time to spend receipts to five years but has only increased the proportion of receipts that could be retained to 40%. 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.

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.

109 Ibid. footnote 99

110 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733469/Right_to_Buy_consultation.pdf

111 <https://www.gov.uk/government/consultations/use-of-receipts-from-right-to-buy-sales/outcome/use-of-receipts-from-right-to-buy-sales-government-response-to-the-consultation>

5.2 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.

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 recommended¹¹² “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.”

The UK’s Clean Growth Strategy¹¹³ sets 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. It also aims to “tackle performance and compliance issues to ensure that new buildings and measures retrofitted in existing buildings perform as they should.”

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 or raising the energy performance standard for rented properties will increase this.

However, 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.

5.2.1 Minimum Energy Efficiency Standard (MEES)

Approximately 5% of private rented and 1% of social rented homes in England have an EPC of F or G, equivalent to under 280,000 homes.¹¹⁴ Over three million privately-rented homes have an EPC of D or below.¹¹⁵ Additionally, an estimated 13% of leased non-domestic buildings (42,000) were rated F or G since 2009 (i.e. potentially remaining valid).¹¹⁶ It is not possible to identify exactly which buildings are rented or if some with low ratings assessed in earlier years have since been improved.

There is a significant body of evidence on MEES and EPCs that has been provided to government on numerous occasions by a range of expert organisations. This has been reported back to us by several interviewees.

Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015¹¹⁷

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.

The government is consulting¹¹⁸ on raising the requirement for homes in the private rented sector to a minimum EER of C for all new tenancies by 2025 and all tenancies by 2028 and increasing the cap to £10,000. The consultation also considers a more stretching target of achieving an EER of C and an Environmental Impact Rating of C with a cost cap of £15,000. A further proposal is to provide support for local authority enforcement, set up a property compliance database and require letting agents to only advertise compliant properties, with maximum fines of £30,000. The consultation period was extended due to COVID and no response has yet been published.

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. 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.

In the Energy White Paper (EWP)¹¹⁹ the government confirmed that it would be increasing the EER rating for non-domestic buildings to B by 2030 and is now consulting on the implementation and enforcement

¹¹⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/898344/Energy_Report.pdf

¹¹⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/946175/prs-consultation-2020.pdf

¹¹⁶ <https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates#epcs-for-non-domestic-properties>

¹¹⁷ <https://www.legislation.gov.uk/uksi/2015/962/regulation/36/made>

¹¹⁸ <https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes>

¹¹⁹ [https://www.gov.uk/government/publications/energy-white-paper-powering-our-netzero-future](https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future)

¹¹² <https://publications.parliament.uk/pa/cm201919/cmselect/cmbeis/124/12402.htm>

¹¹³ 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

of that requirement.¹²⁰ These proposals include an interim target EER of C by 2027 and mechanisms to improve the capacity of local authorities to aid compliance.

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 Committee on Fuel Poverty's 2018 annual report¹²¹ recommended a new "*Clean Growth Challenge Fund*" of £1 billion by 2021 and a further £1.8 billion between 2022 and 2025 to meet the 2020 and 2025 EPC targets respectively."

.....

Barriers

Inconsistency and poor 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. For traditional and rural properties, the recommendations frequently include external wall insulation which is 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 C.¹²² 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 EPCs¹²³ found that that 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.

There is no mechanism to assess progress as there is no requirement to register a property as tenanted with the local authority, and no central register of tenanted properties' EPCs, so local authorities have no baseline to measure progress against. The two consultations on future changes to MEES for domestic and non-domestic buildings set out proposals to address this point.

Lack of capacity and resources for enforcement: 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 2019.¹²⁴ 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 issued.¹²⁵ The CSE MEES study found that officers reported MEES legislation to be complicated, and that they had to take legal advice to develop internal processes and agree interpretations of the regulations. For non-domestic buildings a 2016 report¹²⁶ noted that only 48% of sales and 39% of rentals even had an EPC despite it being a legal requirement. 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.

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

121 <https://www.gov.uk/government/publications/committee-on-fuel-poverty-annual-report-2018>

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

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

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

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

126 <https://www.raponline.org/knowledge-center/buildings-fifth-carbon-budget/>

A 2019 report commissioned by BEIS on behalf of the Committee on Fuel Poverty found significant barriers to both understanding of the scale of the issue and the ability to enforce the standard:¹²⁷

- A complete lack of confidence in the quality (and hence validity) of EPC ratings and exemption certifications
- Difficulties in identifying private rented properties with an EPC of F or G or without an EPC
- Difficulties in identifying and contacting the landlords of properties or working with letting agents
- Lack of resources to carry out any of the enforcement actions needed.

A local authority officer interviewed for this study commented that: "*MEES is hardly worth the paper it's written on.*"

The recent consultation proposes giving local authorities powers to inspect rental properties without relying on the HHSRS (see below), with increased enforcement funded through increasing the maximum penalty for non-compliance.

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 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. The recent consultation proposes increasing this cap to £30,000.

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 University¹²⁸ 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.

Some local authorities are using landlord licencing schemes to ensure properties have an EPC. The CSE has been conducting a study¹²⁹ with several councils on MEES and is trialling a toolkit.

.....

127 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/825485/enforcing-enhancementenergy-efficiency-regulations-English-private-rented-sector.pdf

128 <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/energy-inefficiency-evidence-review.pdf>

129 <https://www.cse.org.uk/projects/view/1360>

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. While that in itself acts as a barrier to investment, for some landlords, an inability to access capital for improvements will also cause problems. This will become a bigger problem if the EER requirement is raised to C and the cap increased to £30,000. In many areas of the country, where rental house prices are less than £100,000, landlords will not be willing or able to invest £30,000, as they do not expect to see a proportionate increase in value. The current MEES consultation references landlords' ability to access the Green Homes Grant, but that scheme has significant flaws, is frequently unsuitable for traditional properties and has failed to deliver.¹³⁰ The very prescriptive definitions of primary and secondary measures, and particularly the limited timescale, meant that the grant was not suitable for many homes that are already tenanted, due to the high level of disruption caused by having to install them over the winter period, and during lockdowns.

Split responsibilities on enforcement: MEES enforcement typically falls under the remit of Housing or Environment officers, although monitoring of compliance with EPC legislation sits with Trading Standards. These roles are split across the two-tiers of District and County Councils. 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. Between the introduction of EPCs in 2008 and 2016, EPCs were only lodged for approximately 47% of all privately rented properties in 2016.¹³¹

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.

5.2.2 Energy Performance Certificates (EPC)

The EPC system was introduced under the Energy Performance of Buildings (England and Wales) Regulations 2012,¹³² which require a building to provide a valid EPC on sale or rental. The provision of this information was designed to make buyers aware of the likely energy running costs, and what measures could be taken to reduce these. Evidence from 2013 showed that EPCs had some positive influence on market value. However, EPCs can last for 10 years and there is no minimum standard.

Failure to have an EPC on sale or rental of a property (including non-domestic buildings) is the responsibility of the owner, but the agent must not sell or let a property without one. Non-compliance is theoretically dealt with (if at all) by Trading Standards.

In 2020 the **Scottish Government** consulted on whether to require a MEES of EPC "C" or above for all homes from 2024,¹³³ at the point at which they are sold and potentially at the point of major renovation. This has fed into the Scottish Heat in Buildings Strategy,¹³⁴ which includes a commitment to reform the EPC methodology to make it fit for purpose. The proposed requirement of an EPC of C will be delayed until 2028.

¹³⁰ https://publications.parliament.uk/pa/cm5801/cmselect/cmenvaud/346/34606.htm#_idTextAnchor023

¹³¹ Enforcing the Enhancement of Energy Efficiency Regulations in the English Private Rented Sector, RSM, 2019 noted that: data inconsistencies and exemptions would account for some non-registrations. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/825485/enforcing-enhancement-energy-efficiency-regulations-English-private-rented-sector.pdf

¹³² <https://www.legislation.gov.uk/uksi/2012/3118/contents/made>

¹³³ <https://consult.gov.scot/housing-and-social-justice/energy-efficient-scotland-owner-occupier-proposals/>

¹³⁴ <https://www.gov.scot/publications/heat-buildings-strategy-achieving-net-zero-emissions-scotlands-buildings-consultation/pages/10/>

The draft **London Plan** sets out the "Be Seen" requirement¹³⁵ to monitor and report on in-use energy performance of new non-domestic buildings or groups of five or more dwellings to address the performance gap, and has recently consulted on the draft guidance.

Barriers

EPC compliance is a very low (or-non-existent) priority for Trading Standards.

EPC calculation methodology is unsuitable for many properties, particularly traditional buildings, provides recommended solutions that are inappropriate for many building types and does not factor in low carbon electric heating (see detail in MEES section above). The Energy Performance Certificate for Buildings Action Plan¹³⁶ published in September 2020 aims to address some of these issues, but the Environmental Audit Committee¹³⁷ has noted that the measures proposed are "not enough to achieve what is needed to support the decarbonisation of homes."

5.2.3 Addressing Energy Efficiency through Health and Landlord Legislation

For the most energy inefficient homes, there are a number of other pieces of legislation that give powers to local authorities to take action.

Housing Health and Safety Rating System (HHSRS)

Local authorities have powers, under the Housing Act 2004,¹³⁸ 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 report¹³⁹ 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

¹³⁵ <https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/london-plan-guidance-and-spgs/be-seen-energy-monitoring-guidance>

¹³⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/922660/EPC_Action_Plan.pdf

¹³⁷ <https://publications.parliament.uk/pa/cm5801/cmselect/cmenvaud/346/34607.htm>

¹³⁸ <https://www.legislation.gov.uk/ukpga/2004/34/contents>

¹³⁹ https://files.bregroup.com/bretrust/The-Housing-Stock-of-the-United-Kingdom_Report_BRE-Trust.pdf

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 local authorities for to enforce. This has not yet been enacted but MHCLG is now carrying out a two year review of the HHSRS assessment system and standards, which closed at the end of March 2021.

Homes (Fitness for Human Habitation) Act 2018¹⁴⁰

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 tenants:¹⁴¹

- Banning orders
- Rogue landlord database
- Financial penalties as an alternative to prosecution
- Rent repayment orders
- HHSRS
- Decent Homes Standard.

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:

- 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.

Barriers

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 result of the 2021 review.

140 <http://www.legislation.gov.uk/ukpga/2018/34/enacted>

141 <https://www.gov.uk/government/publications/homes-fitness-for-human-habitation-act-2018/guide-for-local-authorities-homes-fitness-for-human-habitation-act-2018>

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 2017¹⁴² 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”.¹⁴³

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 Advice¹⁴⁴ 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.

5.2.4 External funding for energy efficiency measures

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.

The Electricity and Gas (Energy Company Obligation) Order 2018:¹⁴⁵ The ECO covers energy measures for low income households, where these are not the responsibility of the landlord. Under the LA-Flex component of the scheme, up to 25% of the programme can be directed to households that the local authority has identified as living in, or at risk of fuel poverty or vulnerable to the effect of cold homes. Until recently it was the main plank of the government’s strategy for addressing carbon emissions in private sector housing, even though its focus was on fuel poverty. The cost of ECO is recovered through consumer’s electricity bills so falls disproportionately on lower income households. The 2021 Fuel Poverty Strategy,¹⁴⁶ announced an increase in ECO funding from £640m per year to £1 billion per year from 2022-26. 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):¹⁴⁷ This scheme was announced in July 2020 and offered £500 million for local authorities to install energy efficiency measures and low carbon heating 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 originally had to be installed by 31 March 2021, but this deadline was extended to 30th June, with a second round of bidding (Phase 1B) for projects to be completed by end September 2021. The very short notice funding announcement and extremely limited spending window (which coincides with a winter that was also spent dealing with COVID-19) made it very difficult for local authorities to respond to this measure unless they had schemes readily available. Phase 1 allocated £200m million across 136 projects to upgrade around 25,000 homes. One of the main target markets to benefit from this measure has been park homes. A further £300 million to upgrade 30,000 homes by end of December 2021, has been allocated to the five regional Local Energy Hubs.

142 <https://www.cieh.org/media/1166/hhsrs-11-years-on.pdf>

143 <https://publications.parliament.uk/pa/cm201516/cmhsrd/cm151016/debtext/151016-0002.htm#1510163400003>

144 <https://www.citizensadvice.org.uk/about-us/how-citizens-advice-works/media/press-releases/185-million-households-wait-longer-than-they-should-for-a-repair-in-their-home-to-be-carried-out/>

145 <https://www.legislation.gov.uk/ukdsi/2018/9780111171769/contents>

146 <https://www.gov.uk/government/publications/sustainable-warmth-protecting-vulnerable-households-in-england>

147 <https://www.gov.uk/government/publications/green-homes-grant-local-authority-delivery-successful-local-authorities>

Home Upgrade Grant: The government has announced funding of £150m from 2022 to support energy measures for low income households in off-gas grid homes, although there is as yet no detail on the implementation of this scheme.

Social Housing Decarbonisation Fund: This is expected to invest £3.8 billion over 10 years. The first **Demonstrator** scheme has awarded £62m to 17 local authorities for projects to be completed by December 2021. These projects aim to demonstrate whole house retrofit at scale, although almost half of these projects involve less than 100 homes. £60m has been committed to the next stage of the scheme in 2021/22. The Environmental Audit Committee has called on the government to bring forward the remainder of the scheme funding far more quickly to properly deliver at scale.¹⁴⁸

In June 2020 the BEIS Whole House Retrofit Competition¹⁴⁹ awarded £770m to three local authority projects which aim 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
- **Nottingham City Council:** 172 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.

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 2000:¹⁵⁰ Requires the Secretary of State to produce a Fuel Poverty Strategy. The 2014 Fuel Poverty Strategy set a target to improve as many fuel poor homes as is reasonably practicable to a minimum energy efficiency rating of Band C, by the end of 2030. It enables initiatives to be delivered by local authorities in partnership with other agencies such as Health.

The Warm Homes Oldham¹⁵¹ service is funded by a £50,000 grant from **Oldham Council** and a £125,000 grant from NHS Oldham CCG. 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.

Warm Front offered support to all households in fuel poverty and was a key tool for local authorities. Unfortunately the scheme closed in 2013 and replacement measures outlined above have not yet adequately filled the gap.

¹⁴⁸ Ibid. footnote 130

¹⁴⁹ <https://www.gov.uk/government/publications/whole-house-retrofit-competition-successful-bids>

¹⁵⁰ <https://www.legislation.gov.uk/ukpga/2000/31/contents>

¹⁵¹ Oldham Council HECA Report 2019

Central Heating Fund 2015:¹⁵² Enabled under Local Government Act 2003 under a £25 million capital funding programme designed to support local authorities, in conjunction with their local partners, to deliver first time central heating systems in fuel poor households who do not use mains gas as their primary heating fuel. In reality this helps health and energy bills but is not aligned with low carbon targets (currently oil boilers can be installed), and its value was questioned in the 2019 consultation on the future of the Fuel Poverty Strategy.

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 2002.¹⁵³

Under the **Housing Grants, Construction and Regeneration Act 1996**¹⁵⁴ 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.

Barriers

Most councils run or contract into the main energy efficiency programmes, which typically support measures in a few hundred homes per year.

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.

Pilot programmes, demonstration projects and competitions 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.

5.2.5 Home Energy Conservation Act (HECA)

The Home Energy Conservation Act 1995¹⁵⁵ 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 (2019) sets out seven themes to report against, but all are optional.

¹⁵² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/417631/Central_Heating_Fund_LA_guidance.pdf

¹⁵³ <https://www.legislation.gov.uk/ukesi/2002/1860/contents/made>

¹⁵⁴ <https://www.legislation.gov.uk/ukpga/1996/53/contents>

¹⁵⁵ <https://www.legislation.gov.uk/ukpga/1995/10/contents>

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 doesn't appear to be happening and collated data is not available to get an overview of the sector, or to identify good practice.

Barriers

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, have increased the number of HECA returns to 219. The revised guidance for 2021 includes reporting on MEES and the GHG LAD scheme.¹⁵⁶

In practice, local authority funding cuts have hollowed out their ability to take any significant action on HECA, and have very limited resources to deal with anything more than fuel poverty issues. They have no real power to influence owner-occupiers.

The BEIS Strategy Committee 2019 Report¹⁵⁷ 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.*”

5.2.6 Able To Pay Households

At the start of this research there were no government schemes for retrofit for the able to pay. While this is not directly the responsibility of the local authority, those that have declared a Climate Emergency 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 Deal was supposed to support this market but failed to deliver. Earlier programmes such as EEC/CESP/CERT allowed measures to be installed in a wider range of households: particularly loft

¹⁵⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957937/heca-2021-guidance-for-local-authorities.pdf

¹⁵⁷ Ibid. footnote 124

and cavity walls insulation, low energy lighting and new boilers. However, some of these measures were installed almost 20 years ago to standards in place at the time, so many homes insulated then are still not very efficient and will require upgrades.

In July 2020, the Chancellor announced the **Green Homes Grant** scheme of £1.5 billion to make up to 600,000 homes more energy efficient. This provides a grant of two-thirds of the cost of contractor-installed measures, up to a maximum of £5,000, for homeowners and landlords, or the full cost of up to £10,000 for low-income households. Installers must be registered with Trust Mark or accredited by the Microgeneration Certification Scheme. The funding was to be spent by 31 March 2021.

By February 2021, only 6% of the budget had been allocated and the government announced that the funding would not be rolled forward, even though the scheme is set to continue until 2022. Huge problems with the operation of the scheme were being reported, including failure to pay installers. The Environmental Audit Committee¹⁵⁸ commented that the scheme was “*rushed in conception and poorly implemented. In its haste to create a scheme to deliver economic stimulus, the Government failed to consult industry adequately on its delivery, set a timescale which was overly short term and has presided over scheme administration which appears nothing short of disastrous.*”

The intention to address domestic emissions as part of the green recovery is very welcome. However, the funding is limited to specific measures that are not suitable for many homes (e.g. renewable heating measures that will require space for a hot water tank). The split between primary and secondary measures also means that homes requiring only the latter are not covered. However, the most important problem reported is that the short term nature of the scheme does not encourage installers to sign up, or help to grow the capacity of the sector.

5.2.7 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.

Numerous studies¹⁵⁹ have noted that this is an important market for energy efficiency upgrades, and a 2017 BEIS Call for Evidence¹⁶⁰ noted that “*in 2016 homeowners in the UK spent around £18 billion on repair, maintenance and improvement to their homes.*”

Parts L 1B and 2B 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. The Future Buildings Standard consultation¹⁶¹ is proposing to tighten these standards for existing buildings from 2021.

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.

¹⁵⁸ <https://publications.parliament.uk/pa/cm5801/cmselect/cmenvaud/346/34608.htm>

¹⁵⁹ 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

¹⁶⁰ 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

¹⁶¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/956037/Future_Buildings_Standard_consultation_document.pdf

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.

Barriers

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.

Difficulties in identifying the measures needed and insufficient independent advice on the most suitable ones for the home.

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.

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.

5.2.8 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):¹⁶² Set MEES 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.

¹⁶² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718569/Boiler_Plus_Factsheet_v3.pdf

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: When replacing or repairing more than 25% of a roof, the roof 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.

Installation of wood or multi-fuel stoves burners: While the installation of such heating is generally not subject to building regulations, under the 2019 Clean Air Strategy,¹⁶³ fuel and stoves will be regulated by 2020 and local authorities will be given more powers to take action in areas of high pollution. This is expected to be enacted under the Environment Bill during 2021, following delays due to COVID.

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-authorised fuel in that area. Offences may be dealt with by EHOs.

Barriers

No means of identifying non-compliant installations, unless the consumer identifies the issue and complains.

Lack of resources to deal with all except the most significant problems.

5.2.9 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 funding through bonds – see the Finance Chapter.

The Public Sector Decarbonisation Fund (PSDF)¹⁶⁴ was launched in Autumn 2020 to decarbonise public sector buildings. It runs until 30th September 2021. Phase 1 has allocated £932 million to 317 public sector organisations. Phase 2 opened in April 2021 with a budget of £75 million. The **Low Carbon Skills Fund** ran alongside the PSDF providing £32 million to support public sector organisations to help develop and deliver their decarbonisation projects and develop a heat decarbonisation plan. However, as these schemes were competitive with a short window for applications and project delivery, it is noticeable that the majority of recipients are the larger and more urban authorities or those already strongly active on climate change. The time and effort required to bid for competitive funding acts against best value – the authorities most in need of support are those least likely to bid due to lack of capacity.

¹⁶³ <https://www.gov.uk/government/publications/clean-air-strategy-2019>

¹⁶⁴ <https://www.gov.uk/government/publications/public-sector-decarbonisation-scheme-psds>

5.3 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.

5.3.1 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, 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 FHS and proposed Future Buildings Standard will start to make progress in delivering zero carbon buildings, but the Planning White Paper 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.

5.3.2 Existing Buildings

The energy performance of existing buildings is one of the most difficult carbon challenges we face. Current policies limit local authority 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.

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 slight indications of change coming out from the government now, but insufficient detail to identify whether these announcements and 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.

5.3.3 Key Considerations for Buildings Powers

Provide LPAs with the power 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.” Allow local authorities to retain 100% of receipts from Right to Buy linked to a requirement to build new social housing to zero carbon standards.

To support this, local authorities will need enabling powers and support including:

- In the absence of Net Zero national standards, a framework to support local planning authorities to set strong local standards on energy and CO₂ emissions as well as adaptation criteria, and to insist on delivering to these standards
- Strategic Planning role for larger areas not covered by Combined Authorities to share resources and evidence
- Power to require developers to submit in-use energy and carbon data from new developments
- Increase resources for local authorities to build skills and capacity in policy, development control, building control and delivery of new zero carbon social housing.

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

- Embed a requirement to meet The Climate Change Act in Planning Policy such that it is prioritised over developer viability
- Revise the maximum permitted local authority uplift on Building Regulations in the Planning and Energy Act 2008
- Revoke the WMS of 25th March 2015
- Rapidly introduce zero carbon building standards – for all buildings and faster than proposed in the FHS and Future Buildings Standard
- Revise building regulations such that all buildings meet the standard in place at the start of construction rather than the time the planning application is submitted
- Require developers to prove “in operation” energy and carbon performance
- Update the base data for the five year housing supply requirement
- Revise the Right to Buy legislation
- Support the construction sector to increase skills to deliver zero carbon buildings.

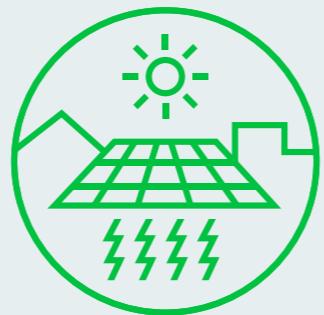
Require local authorities to enforce and report on MEES, with the scope and processes involved significantly revised so that it is a useable tool to manage carbon improvements across the existing building stock.

Key supporting policy, frameworks and resources from national government to underpin this include:

- Introducing MEES standards for all buildings sold, along the same standards and timelines as for rented properties
- Requiring all properties that have carried out major renovation, refurbishment or change of use to have a new EPC issued on completion
- Expansion of the 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
- A major training programme for the construction sector to enable it to install appropriate measures without harming the building fabric
- Revise the EPC system to be more accurate and to better reflect in-use energy performance, including a reflection of the technical limitations of energy measures in traditional and historic buildings
- Setting up a long term and flexible funding scheme for landlords and private householders to enable them to meet the EPC requirements
- Removal of the cost exemptions for MEES on all but the hardest to treat properties e.g. traditional and historical buildings
- A national database of EPCs for tenanted properties: with a requirement to supply information back to local authorities
- Mandatory landlord licencing
- Increased resources, capacity and skills development for local authorities: planning policy and building control, housing, environmental health, trading standards and Elected Members.



6. 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.

Action is needed across the energy system to:

- 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.

The government published its **Energy White Paper** (EWP)¹⁶⁵ in December 2020. This sets out measures to reduce emissions from the power industry and buildings by 230MtCO₂e by 2032 and enable savings in transport. The technology ambitions include:

- 40GW of offshore wind by 2030
- At least one power generation Carbon Capture, Utilisation and Storage (CCUS) project operational by 2030
- At least one large scale nuclear project at Final Investment Decision stage by 2024
- Installing 600,000 heat pumps per year by 2028
- £1 billion innovation funding to support technologies such as advanced modular reactors, floating offshore wind, hydrogen, bioenergy, energy storage and flexibility, GHG removal.

In addition, the EWP sets out measures to protect consumers through changes to the regulatory system as well as the buildings-related measures covered in Chapter 5, to support industrial decarbonisation and to transform the oil and gas sector.

The EWP recognises that local authorities have a role in the delivery of low carbon buildings and heat networks, as well as through their statutory powers:

“Local Authorities are key to delivering these systems by combining energy into their wider statutory work on housing, transport, waste and planning, making delivery more cost-effective and preparing for a Net Zero future.”

However, it is disappointing that this is the only mention of local authorities, and their potential wider role in whole area energy planning, renewable energy supply or supporting industry to decarbonise or develop low carbon sector skills is ignored. It is disappointing also that local authorities are only mentioned in the Ten Point Plan in relation to active travel.

Further detail is expected in future strategies due in 2021, such as the Heat and Buildings Strategy, the Industrial Decarbonisation Strategy and the Hydrogen Strategy. These should address the energy system changes and provide much needed information on how the EWP ambitions will be delivered.

A critical issue in the UK's decarbonisation plan is that of grid capacity. The Office of Gas and Electricity Markets (**Ofgem**) is the regulator for the electricity and gas networks and manages requirements for improvements through the price control mechanism. In the methodology for the next price control period from 2023-28 (RIIO-ED2), Ofgem has announced¹⁶⁶ that it will reduce shareholder returns in order to *“boost investment in local electricity grids needed to support the growth in electric cars, small scale renewables, storage and cleaner forms of heating.”*

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
NPPF 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 <i>they can prove it is not viable/feasible</i>
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, (s. 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
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 1893.¹⁶⁷ 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 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 is 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 have to be shared fairly between customers (socialisation of costs) and not leave more vulnerable customers or geographies behind.

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.¹⁶⁸

6.1 Local Area Energy Plans (LAEP)

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. LAEP is supported in the Clean Growth Strategy, but has not been specifically mentioned in more recent strategies.

The Scottish Government has recognised that local areas need to have appropriate plans to manage the transition to decarbonised heat. Local Heat and Energy Efficiency Strategies (LHEES), introduced in

2017, are being piloted in local authorities and aim to reduce GHGs to Net Zero; deliver on eradicating fuel poverty and respond to local authorities adopting stretch targets for carbon reduction.

The process will undertake an assessment of different pathways towards decarbonising Scotland's building stock; identify the most suitable solutions for local areas; and identify where fuel poverty is most prevalent. Each area's LHEES will differ in terms of timing of infrastructure upgrades, local policies and priorities and decisions over the gas grid. In terms of governance, the LHEES delivery plans will share roles and responsibilities between the local authorities and Scottish Government. They will also build on Scotland's existing Home Energy Efficiency Programmes and Area Based Schemes.

Energy Systems Catapult and CSE¹⁶⁹ have developed a methodology for Ofgem for LAEPs which should provide a foundation for local leaders and decision-makers to take action. The Final Review Draft of Local Area Energy Planning: The Method, as referenced in Ofgem's RIIO-ED2 Sector Specific Methodology Consultation Document was published on 30 July 2020. The methodology is intended to provide not just some maps and graphs which will not lead to anything, but should ensure the following outcomes are achieved:

- The use of robust technical evidence produced using analytical techniques which consider the whole energy system and make consistent use of available data, and whose strengths and weaknesses are well understood
- A comprehensive assessment of wider non-technical factors which need to be understood and addressed to secure change
- A well designed and involving social process which engages appropriate stakeholders effectively, uses the technical evidence appropriately, and manages vested interests effectively, thus ensuring the resulting plan can be seen as an informed and legitimate representation of local intent in relation to energy system decarbonisation
- A credible and sustained approach to governance and delivery.

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. LPAs should be included in the process. A LAEP should identify key areas for building energy efficiency measures, where heat is needed for industrial purposes and where waste heat is available to be used, and opportunities for local energy generation. The outputs should identify the local area's heat requirements, and aid planning for the right investment in the distribution system in anticipation of locally appropriate decarbonisation, while ensuring justice for consumers. This means mapping and zoning local areas to identify the most appropriate method for heat decarbonisation for example:

- Areas for district heating schemes
- Areas for individual heat pumps with energy efficiency works prior to installation
- Areas with less certainty such as in hard to treat homes where a heat pump may be used with gas boiler for peak demand; heat pump and hydrogen possible areas; or where a decision is to be taken at a later date
- Areas where Energy from Waste (EfW) facilities may be built (noting that these should be aligned to any future carbon capture and storage (CCS) infrastructure).

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 decision¹⁷⁰ LAEPs are not to be made mandatory, but that they will be helpful to provide evidence to support investment proposals.

167 <https://carbon.coop/2019/12/power-in-the-city-a-walk-through-manchesters-electric-past/>

168 <https://projects.exeter.ac.uk/igov/getting-energy-governance-right-lessons-from-igov/>

169 <https://www.cse.org.uk/downloads/file/LAEP-method-final-review-draft-30-July-2020.pdf>

170 https://www.ofgem.gov.uk/system/files/docs/2020/12/ed2_ssmd_overview.pdf

A note about costs for customers: Electricity is seen as one of the key ways to decarbonise heat. Customers pay around 10p more per unit for electricity than for gas; climate change levies are made on electricity bills not on gas bills. For people using gas as their heating fuel, a straight switch from a gas boiler to a form of electric heating (e.g. heat pump or direct heating) without first investing in energy efficiency improvements to the home will see much higher bills. This is why home energy efficiency ideally has to be installed prior to that switch. This is less so for high temperature district heat networks. The relative costs of gas and electricity will need to change to drive the decarbonisation of heat, and to reflect their relative carbon intensity as the grid continues to decarbonise.

Energy Plans and Heat Maps have been commissioned over the years by local authorities and some Local Enterprise Partnerships have developed energy strategies. 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.

Stockport Metropolitan Borough Council commissioned an Energy and Carbon Evidence Study to inform its Local Plan. Recommendations include identifying heat network opportunity areas, which can be done with Greater Manchester Combined Authority, and a LAEP.

Plymouth City Council has a City-Wide District Energy Strategy 2017 which informs regeneration, development and planning policy. The Council is developing heat networks (see District Heating below).

The New London Plan strongly supports heat networks and provides a London Heat Map to help identify opportunity areas; these have been put into planning policy.

Heat studies have also been carried out with Heat Networks Delivery Unit (HNDU) funding. (See s.6.2 below).

Barriers

Energy Systems Catapult ran pilot projects¹⁷¹ 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.*”

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.*”

Since the revision of the NPPF in 2019 (i.e. after the pilots were carried out), there now appears to be a formal ‘place’ for the adoption of local energy strategies.

171 <https://es.catapult.org.uk/reports/local-area-energy-planning-insights-from-three-pilot-local-areas/>

The NPPF revised version 2019¹⁷² 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.

Another likely barrier is that of 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. The fact the whole planning system is now under review, could be an opportunity or a threat. The 2020 Planning White Paper contains no mention of local energy strategies.

6.2 District Heating

District heating provides 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. District heating networks have been installed in many major cities: e.g. Sheffield, Southampton, London and Oldham and at smaller scales across over 12,000 schemes in blocks of flats and estates.

However, in the transition to Net Zero, district heating schemes could become a source of locked-in carbon, as most are based on gas combined heat and power (CHP) or gas boilers. Carbon emissions from gas CHP systems are only lower than gas boilers and grid electricity where the grid electricity is carbon intensive. As the carbon intensity of the electricity grid is decreasing, the carbon savings associated with district heating based on gas are disappearing. However, investment in the network could allow low carbon heat to be supplied if the heat is generated from low or zero carbon sources. Such sources include geothermal, mine water, water, ground and air and can be extracted using heat pumps. So rather than installing individual heat pumps on buildings, low carbon district heating schemes use larger heat pumps or modular pumps to feed heat into the system. Other sources may be biogas, biomass and waste heat from industrial processes or EfW facilities.

District heating or district energy schemes may also include the ability to provide cooling to buildings.

Brooke Street 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.

Bunhill Heat and Power Network:¹⁷³ 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

172 <https://www.gov.uk/guidance/climate-change#how-can-the-challenges-of-climate-change-be-addressed-through-the-local-plan>

173 <https://www.energyadvice.islington.gov.uk/bunhill-heat-and-power/bunhill-heat-and-power-network/>

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.

Glasgow Housing Association (GHA) has installed industrial scale 700kW air source heat pump low carbon district heating for 350 homes in multi-storey blocks.

In practice, local authorities with ambitions to deliver heat decarbonisation are likely to play a strategic and leadership role to drive forward delivery of district heating networks. They can apply for HNDU funding to investigate the opportunities for district heating, and conduct feasibility studies and can then apply for further investment through the Heat Network Investment Project (HNIP) and seek other finance. The formal powers they have to enable and deliver district heating networks are:

- Planning powers
- Investment powers and miscellaneous powers (used to establish and operate district heating schemes).

The **HNIP**¹⁷⁴ is investing in up to £320 million in heat network projects. The scheme will end in 2022. The Energy White Paper commits £122 million to a Heat Network Transformation Programme. As part of this the government has recently consulted on the design of a **Green Heat Network Fund**¹⁷⁵ as the successor to HNIP.

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.

¹⁷⁴ <https://www.gov.uk/government/collections/heat-networks-investment-project-hnip-overview-and-how-to-apply>

¹⁷⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/939475/green-heat-network-fund-consultation-proposals-for-scheme-design.pdf

The **New London Plan**¹⁷⁶ 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 NO_x 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 2014–2034, 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."*

Barriers

Planning inconsistency: The CSE/Town and Country Planning Association interim Local Plan review¹⁷⁷ 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.

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. Local Plans that do not identify sites suitable for district heating, or that do not require energy planning to be undertaken at the master planning stage are unlikely to get developers to incorporate district heating at an early design stage.

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 wet heating distribution system. While not mandating specific technology solutions, the performance standard required by the FHS be set *"at a level which means that new homes will not be built with fossil fuel heating, such as a natural gas boiler."*¹⁷⁸ This means that the viability argument will no longer support gas boilers, but depending on the standards set, may be used to push for direct electric heating rather than heat networks.

¹⁷⁶ https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf

¹⁷⁷ <https://www.cse.org.uk/news/view/2484>

¹⁷⁸ Ibid. footnote 106

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.

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.

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 has issued District Heating Guidance,¹⁷⁹ 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: allowing permission that meets the criteria of the Local Development Order 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 1985¹⁸⁰
- 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.

.....

¹⁷⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/717804/Procurement_and_State_Aid_guidance.pdf

¹⁸⁰ Ibid. footnote 179

Bristol City Leap aims to attract up to £1 billion 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. The city believes that delivering on many fronts at once will help develop the energy system faster and address problems and challenges effectively. It issued a Prospectus¹⁸¹ outlining the opportunities and sought expressions of interest from a range of partners, and has recently shortlisted three consortia as potential partners. Meanwhile, progress is taking place as heat networks continue to be installed in locations where Bristol has identified a Heat Priority Area,¹⁸² including linking up the EfW facility in Avonmouth to a heat network into South Gloucestershire. It will be interesting to see what this ambitious local authority achieves, and which powers it uses.

Plymouth City Council is installing Plymouth’s Heat Network – a new network of underground pipes that will deliver affordable, low carbon heat and energy across the city. The Heat Network will eventually 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.

Manchester City Council has used its buildings as the anchor for the Civic Quarter Heat Network serving six buildings initially, including the refurbished Town Hall, City Art Gallery, Convention Centre and Bridgewater Hall. The council’s capital programme includes an £26 million capital budget for the completion of this project including a £2.6 million HNIP grant. Three wholly owned Special Purpose Vehicles have been set up to deliver and operate the scheme.¹⁸³ Work has started and the scheme should be completed in 2021. The scheme has been designed to allow expansion to other buildings in the area. It will reduce CO₂ emissions, improve air quality and generate a revenue stream and repay its capital once operational.

In 2017 **Swaffham Prior** Community Land Trust and **Cambridgeshire County Council**¹⁸⁴ began a project to provide community heating network to this rural village and to replace oil boilers. £2.146 million has been provided by HNIP and the council may also invest up to £5 million in the scheme. Planning permission has been approved and work is due to commence in 2021. The scheme will use boreholes, air source heat pumps and solar PV to provide heat through a district heating network. Back up will be provided by LPG boilers. Of the 300 households, over 160 have signed up so far.

Barriers

The lack of an overall national strategy: Local authorities are conducting studies and developing strategies that may not align with future national strategy or policy. Additionally Local Economic Partnership energy strategies have been developed separately, which can cause confusion as they can be very general and are not specific to energy requirements at a more local scale. Renewable energy studies can also add to this mix of evidence. 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.

The CSE works with local authorities and says “*Planning a local heat network is a drawn-developers and the time and effort needed to make on-going design tweaks, which invariably require repeat analysis.*”¹⁸⁵

¹⁸¹ https://www.energyservicebristol.co.uk/wp-content/pdf/City_Leap_Prospectus%204-5-18.pdf

¹⁸² <http://www.energyservicebristol.co.uk/business/heat-networks/>

¹⁸³ <https://democracy.manchester.gov.uk/documents/s2242/CQHN%20update.pdf>

¹⁸⁴ https://heatingswaffhamprior.co.uk/wp-content/uploads/2020/06/Public-Consultation_web.pdf

¹⁸⁵ <https://www.cse.org.uk/news/view/2483>

The indications from the recent FHS and EWP are that heat networks will form a key plank of the forthcoming Heat and Buildings Strategy, which should provide a consistent strategy to underpin future local authority decisions on heat networks.

Time and resource and funding intensive: “*It’s a feat of endurance.*” From the time taken to apply for funding in a competitive round, to the time and resource required to appoint and manage consultants, processing the findings and options, then further developing technical, legal and economic investment cases and working on planning guidance, the time and resources required are significant and may not even lead to pipes in the ground. Islington Borough Council’s 2003 borough wide heat map 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 2019.

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 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.

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.

Operating in an unregulated market: Local authorities may be wary of the heat market, as the previous legislation (Heat Network (Metering and Billing) Regulations 2014)¹⁸⁶ focused on the requirement to meter heat but offered little consumer protection. This has been tightened in 2020¹⁸⁷ but not yet expanded to include consumer protection. The Heat Trust operates a Code of Practice to protect consumers and the government has announced that a Heat Network Market Framework is expected in 2022.

Funding and subsidies and tax: Funding for studies has been forthcoming from the HNDU and investment via the HNIP, but meanwhile the Renewable Heat Incentive closed at the end of March 2021. This alters 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. State Aid may be an issue for local authorities setting up energy companies.

Gas price: The low gas price makes installing new district heating schemes, and indeed, individual heat pump schemes challenging.

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. A Local Waste Authority has said that building a business case for a new EfW facility that could provide heat to a local network is very hard because the local authority cannot make buildings join to that network. A mix of powers and incentives are likely to be needed to make this shift. It is easier to extend an existing district heating network, as regeneration or new developments are planned, than to build an entire new system and retrofit it to existing buildings.

¹⁸⁶ <https://www.legislation.gov.uk/uksi/2014/3120/contents>

¹⁸⁷ <https://www.legislation.gov.uk/uksi/2020/1221/contents/made>

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. For example, *Bristol City Council want additional powers to: “Ensure that new developments contribute positively to wider city efforts to decarbonise by requiring that all new build developments both achieve Net Zero standards and do so in ways which align with the city’s wider approaches to decarbonising heat (e.g. heat networks and heat pumps rather than resistive electric heating)…”*

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.

Stranded assets: As the UK’s Heat Strategy develops, there is a risk that new heat networks do not deliver the customer numbers required, as other technologies are installed in preference, such as heat pumps or hydrogen. The FHS guidance recommends that new homes are designed for low temperature heat distribution systems (under 55°C), while most 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, if funding were available, for local authorities which have identified areas 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 2012**¹⁸⁸ **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.**

Under the Code of Practice, Highways Authorities 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.

¹⁸⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/43578/street-works-code-of-practice.pdf

Barriers

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.

There is a risk of slowing or complicating other works and contractors.

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.

6.3 Renewable Energy in Planning

LPAs 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 had the power to determine applications for on-shore wind over 50MW, when the Infrastructure Planning (On-shore Wind Generating Stations) Order¹⁸⁹ 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.

Data for 2018 shows that Cornwall has the highest number of renewable generating sites in the UK,¹⁹⁰ at 17,974, of which 17,545 are solar PV totalling 588MW and 426 onshore wind sites, while the greatest generating capacity installed is in the Highlands for onshore wind and Wiltshire for solar PV. Shropshire has the highest number of anaerobic digestion facilities (19MW capacity across 35 sites), reflecting its rural nature, and this is strongly supported in the Local Economic Partnership's Energy Strategy.¹⁹¹

Cornwall Council's Local Plan¹⁹² is worded positively for renewable energy before moving onto policy to protect landscape character and environment. It also has a policy to safeguard existing renewable energy installations.

¹⁸⁹ <https://www.legislation.gov.uk/uksi/2016/306/contents/made>

¹⁹⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/834141/Regional_Renewables_2018.pdf

¹⁹¹ <https://www.marcheslep.org.uk/marches-lep-energy-plan/>

¹⁹² <https://www.cornwall.gov.uk/media/22936789/adopted-local-plan-strategic-policies-2016.pdf>

Cornwall Local Plan Policy 14: Renewable and low carbon energy

1. To increase use and production of renewable and low carbon energy generation development proposals will be supported that:
 - a. maximise the use of the available resource by deploying installations with the greatest energy output practicable taking into account the provisions of this Plan,
 - b. make use, or offer genuine potential for use, of any waste heat produced.

Cornwall Local Plan Policy 15: Safeguarding renewable energy

New development, where appropriate, should show that it does not significantly harm the performance of any existing facility and the potential for optimisation of strategic renewable energy installations, or the availability of their resource (where the operation is dependent on uninterrupted flow of energy to the installation).

Barriers

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..."

Interim research shared in July 2020 by the CSE¹⁹³ 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.

The EWP sets out plans for new renewable generation, including onshore, but as yet national planning policy has not been amended to enable this. The Planning White Paper does not specifically address the issue of stand-alone on-shore generation.

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 Energy, 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).

¹⁹³ Ibid. footnote 177

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.

Lack of government support/policy changes: A WMS in June 2015¹⁹⁴ 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.”

This effectively banned any on-shore wind developments in England, as previous guidance had advised against identifying areas suitable for wind in local plans, so very few had that included. In 2016, the Infrastructure Planning (On-shore Wind Generating Stations) Order¹⁹⁵ returned decisions on on-shore wind over 50MW to the LPA.

Only five planning applications for on-shore wind energy submitted after that date have been approved in England, with a total capacity of 7.55MW, of which only one (Bristol) is operational. In contrast, in Scotland, 26 developments totalling 80MW were approved in the same period.¹⁹⁶

Planning applications since 2016 have been dominated by solar PV and recently battery storage.

Technology	Number of applications	Capacity (MW)
Housing	245	1951
Battery	208	5457
EfW Incineration	22	587
Anaerobic digestion	20	62
Advanced conversion technologies	17	259
Biomass (dedicated)	12	84
Small hydro	9	3
Landfill gas	1	1

There is concern about emissions from the growing numbers of 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.

¹⁹⁴ <https://www.parliament.uk/documents/commons-vote-office/June%202015/18%20June/1-DCLG-Planning.pdf>

¹⁹⁵ Ibid. footnote 189

¹⁹⁶ <https://www.gov.uk/government/publications/renewable-energy-planning-database-monthly-extract>

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.

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 2008. Initially these were the responsibility of the National Infrastructure Commission, but the Localism Act 2011 transferred the power to the Secretary of State.

6.3.2 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,¹⁹⁷ so local authorities will have responsibility for larger electricity storage developments. Storage is critical to maximising the use of renewable energy generated and to flatten peaks in demand.

6.3.3 Microgeneration

Microgeneration is typically permitted development under the Town and Country Planning (General Permitted Development) (England) Order 2015,¹⁹⁸ 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.

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.

¹⁹⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/839384/proposals-regarding-planning-system-electricity-storage-follow-up-consultation-govt-response.pdf

¹⁹⁸ <https://www.legislation.gov.uk/uksi/2015/596/schedule/2/part/14/made>

6.3.4 Microgeneration on New Buildings

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.

The barriers have been covered in the Buildings chapter.

6.3.5 Planning for Other Energy 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 produce plans for minerals and waste, this includes extraction of fossil fuels such as coal and hydraulic fracturing or “fracking” for shale gas and oil and they determine planning applications.

A joint WMS on 17 May 2018 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. It is not yet clear whether local authorities will retain planning decisions if the government reverts to supporting the technology.

Lancashire County Council had refused planning consent for fracking at Preston 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 have been dropped. Greater Manchester authorities also announced a presumption against fracking in their planning policies in 2019.

The NPPF 2019 revision states that:

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).

In a controversial decision in October 2019, **Cumbria County Council** gave planning consent¹⁹⁹ for a new coal mine in the west of the county. This was approved by Councillors again in October 2020. Campaigners sought a judicial review of the decision and Green Alliance has issued a report refuting the claims it is a ‘carbon neutral’ coal mine. Regardless of the impact of its emissions, the message given by such permission stands to undermine other climate change messages from the authority. In early 2021 the council announced that it was reconsidering its decision. The Secretary of State for Housing, Communities and Local Government originally decided not to call this decision in, but following pressure particularly from the CCC, that it is inconsistent with the UK policy on carbon reduction, has now done so.²⁰⁰

Surrey County Council gave permission in 2019 for four new oil wells near Gatwick, and 20 years of production. A judicial challenge to this decision argued that the council failed to consider the direct and indirect GHG of the project in relation to the government’s Net Zero target, but the case was dismissed in December 2020.²⁰¹ A separate application for exploratory oil drilling was rejected in 2020.

A more recent planning issue is applications for Gas Peaking Plant or Electricity Peaking Stations. Peaking stations, also called peak-lapping 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 2020 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.

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 section 12 of the same Act.

199 <https://councilportal.cumbria.gov.uk/mgAi.aspx?ID=54074>

200 <https://www.gov.uk/government/publications/decision-to-call-in-west-cumbria-coal-mine>

201 <https://drillordrop.com/2020/12/21/breaking-surrey-campaigner-loses-legal-fight-over-climate-effects-of-20-years-of-oil-production-at-horse-hill/>

Large scale renewable energy investments

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 emissions.

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 Solutions, with the Science Museum Group, to install a 61MW 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 plus battery storage scheme at Westampnett, on the former landfill site in 2018; this adds to the council's 5MW scheme at Tangmere.

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.²⁰² 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.

Barriers

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.

Funding: The barriers are further outlined in chapters 3 and 4.

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 authority powers to influence local energy infrastructure have increased in recent years, and the leading authorities have made use of existing 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 low carbon heat. There are indications in the EWP that the important role of local authorities will be recognised in the Heat and Buildings Strategy, but this will need to also recognise and deal with the significant capacity constraints identified here.

The way that electricity is managed and delivered together with inconsistent policy and regulation is also hampering local efforts to take ambitious action on Net Zero. Local authorities need to be seen as key stakeholders in the development of grid infrastructure plans, both by the network operators and Ofgem.

6.5.1 Key Considerations for Energy Infrastructure Powers

A national framework for LAEP should be put in place giving a greater role and more powers to local and regional authorities to develop a balanced energy system which combines a mix of large scale power generation with local decentralised energy systems, as part of a wider priority focus of reaching Net Zero. This must include a clear remit to base planning decisions on the legally binding Climate Change Act.

To support this, local authorities will need enabling powers including:

- Powers or regulation to coordinate the delivery of Net Zero heat zones
- Planning powers or a regulation code to insist on certain types of technologies (and ban others) in new and existing buildings in the Net Zero heat zones
- Powers to require buildings to connect to district heating schemes in identified district heating zones and to require existing developments to connect
- Power to override the constraints on on-shore wind (withdraw 2015 Ministerial Statement)
- Power to refuse consent for fossil fuel extraction or development of carbon-based energy infrastructure if it is not aligned with the national carbon target.

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

- Funding and resources for LAEP to be developed and then implemented, including significant capacity building within local authorities and partnerships to deliver across local authority boundaries; this should not be competitive between local authorities as that impedes cooperation and learning
- 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
- Infrastructure funding for investment in anticipation of need, which may not provide a revenue stream until a future date, to enable heating pipes or grid reinforcement in heat zones so that when Street Works are being undertaken, pipes or reinforcement can be funded while excavation is underway
- 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
- See also supporting policy for Planning and Building Regulations in the Buildings chapter.

202 <https://www.solar-trade.org.uk/wp-content/uploads/2018/04/local-authority-solar-guide-WEB.pdf>



7. Waste:



Emissions from waste represent 4% of total 2019 UK GHG. Total emissions from waste increased by 1% from 2017 to 20.7MtCO₂e in 2018, and were 69% below 1990 levels. 70% of emissions from the waste sector in 2018 were methane from the decomposition of biodegradable waste in landfill. More local authority waste is now incinerated in EfW plants than recycled or composted in England.²⁰³

The CCC states that no biodegradable waste should go to landfill by 2025 and recycling rates must increase from around 45% in England to 65% by 2025 and 70% by 2030.

Local authorities in England spend £3.6 billion a year on waste collection, minimisation, recycling and disposal.

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 a sharing economy.

Although emissions from waste are a much smaller proportion of a local area's emissions, compared to emissions from buildings and transport, and fall within Scope 3 GHG reporting (indirect emissions), it is important that local authorities act to reduce their waste emissions. In order to reach Net Zero reductions need to be achieved across all emissions sectors. Local authorities of all tiers have a direct responsibility for waste collection and/or disposal, so they have a critical role in tackling the issues.

203 Ibid. footnote 6

Key Powers

Relevant Legislation	Power enabled
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.45	Duty to collect household 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

Under the Waste and Emissions Trading Act 2003, regulations 2013, 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. Both Waste Collection Authorities and 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, incineration, landfill, etc.) and does include some data on quality of materials collected as it includes data on rejections from processing facilities.

In October 2020 Defra reported to the Waste Data Flow User Group for England²⁰⁴ that it and other countries should explore the development of a carbon metric, like SEPA, measuring the whole life carbon impact of waste. The Resources and Waste Strategy Monitoring Progress²⁰⁵ report 2020 states that this metric is being developed by WRAP and will be released to local authorities to measure their treatment of waste in carbon terms.

7.1 Waste Collection and Disposal

The Environment Bill, progressing through Parliament during 2021 will include powers on EPR, making producers responsible for the full costs of the disposal of materials. It will also introduce consistent and frequent recycling collections, including food waste across England, improve labelling and may introduce DRS.

204 https://www.wastedataflow.org/Documents/Usergroup/England_UG_Minutes_080920.pdf

205 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907029/resources-and-waste-strategy-monitoring-progress.pdf

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.45.²⁰⁶ They can also collect commercial waste, if requested, for which they can charge a fee.

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.

Joint Waste Solutions has been set up by four local district councils which are members of Surrey Environment Partnership: Elmbridge Borough Council, Mole Valley District Council, Surrey Heath Borough Council and Woking Borough Council. This was set up to help align waste and recycling across the four boroughs. They have jointly procured a single waste, recycling and street cleaning contract, saving £2.5 million a year. They are trialling recycling schemes for flats with communal recycling containers, textile and electrical appliance recycling. Joint Waste Solutions also promotes recycling, reuse and waste minimisation through communications campaigns including clothes recycling and social media ideas for upcycling and eliminating plastics. In 2017/18 benchmarking²⁰⁷ by WRAP this partnership was performing well.

7.1.2 Waste Disposal Authorities

Under the Environmental Protection Act 1990 Waste Disposal Authorities are:

- County Councils
- London – 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 10 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.

Local authorities fund waste collection and disposal from council tax. In Joint Waste Disposal Authorities across a number of 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.

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 own both collection and disposal assets such as processing centres and EfW facilities. Some have set up local trading companies, Public Private Partnerships or joint ventures.

206 <https://www.legislation.gov.uk/ukpga/1990/43/section/45>

207 <https://laportal.wrap.org.uk/Benchmarks.aspx>

The extent of the power that the Waste Disposal Authority has over what happens to the waste will depend on the type of facilities it invests in or the procurement 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 has to be affordable and sustainable. Waste management companies may themselves find it difficult to meet particular targets as they operate in a volatile global market. The Chinese Government's decision to refuse some low-grade recycling streams had a big impact on the industry, as has the COVID-19 pandemic, which has revealed a lack of sufficient reprocessing facilities in the UK.

The global waste and recycling and materials market is fast-changing and there are risks to local authorities and waste management companies alike. There are several examples of local authorities or waste management companies running into difficulties with contracts or investments in technologies. Customers at both ends of the market need to receive a good service, whether that is the householder getting a good waste and recycling collection service, or the materials processor receiving uncontaminated quality material streams to recycle, or good quality biodegradable waste to process in anaerobic digestion.

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, metal recycling sites, anaerobic digestion 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 waste water treatment sites for populations of more than 500,000, are handled under the Planning Act 2008.

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 (incineration) 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."*

7.2 Waste Minimisation

Local authorities have no specific powers to reduce household waste at source (i.e. before it becomes waste). They have no powers to reduce industrial and commercial 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. Local authorities have a role in encouraging the reduction of waste, but cannot enforce it.

Waste minimisation has 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 and the Waste Electrical and Electronic Equipment (WEEE) regulations introduced in 2007 (and updated in 2019) to 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

Statement²⁰⁸ through the Statutory Instrument: The Waste (Circular Economy) (Amendment) Regulations 2020.²⁰⁹ 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.

During the 2000s, waste minimisation schemes such as the National Industrial Symbiosis Programme (NISP) and similar schemes were supported by government funding for work with industrial sectors and clusters to identify, match and reuse waste materials.

Waste minimisation is also enabled through voluntary agreements such as the Courtauld Agreement 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 website, and include the UK Plastics Pact, Electrical and Electronic Equipment Sustainability Action Plan and Sustainable Clothing Action Plan.

Many Waste Disposal Authorities are positioning waste as Resource Management and are promoting circular economy principles.

The **Kent** Joint Municipal Waste Strategy's 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 2019–24 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 Plan 2020-2025 covers six London boroughs and incorporates UN Sustainable Development Goals on sustainable consumption and production, climate change and partnership.

The Government's March 2021 Build Back Better: Our Plan for Growth restates the commitment to major waste reforms to drive jobs and investment in a circular economy. The Government's 2018 Waste and Resources Strategy outlines the direction of travel for waste and is to be reflected in the Environment Bill which is progressing through parliament.

EPR is a policy outlined in the government's Waste and Recycling Strategy, which will be fundamental to reducing waste at source and providing resources to manage waste. The Government is currently carrying out a consultation on Introducing EPR for Packaging.²¹⁰ 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. 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 is increasing and likely to continue to increase post COVID-19 and could be reduced through a ban on imported water.

208 <https://www.gov.uk/government/publications/circular-economy-package-policy-statement/circular-economy-package-policy-statement>

209 <https://www.legislation.gov.uk/uksi/2020/904/made>

210 <https://consult.defra.gov.uk/extended-producer-responsibility/extended-producer-responsibility-for-packaging/>

In March 2021 the Government launched a consultation²¹¹ on proposals to introduce a DRS for drinks containers in England, Wales and Northern Ireland. This aims 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. However, local authorities may wish to compete to become a Deposit Management Organisation to operate the service.

Local authorities, in 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 are often ERDF funded.

The **Greater Manchester** Growth Hub provides resource and energy efficiency support to local companies and organisations, and since its inception has diverted 1,336,915 tonnes of waste from landfill.

London Waste and Recycling Board (LWARB) created the Advance London programme to support local SMEs. The programme offers tailored support to the SMEs' individual activities and includes exploring 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 SMEs and held a range of brokerage events and training workshops. One in three SMEs engaged in the programme have secured grant, equity or loan funding within 18 months of first receiving advice. The programme also helped to facilitate 20 product-market collaborations which by the end of 2018 had generated five new circular products or services.²¹²

7.3 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.

Household recycling rates in England have risen from around 11% in 2000/01 to about 45% but have plateaued since 2013.²¹³

Duty under **the Environmental Protection Act 1990**²¹⁴ 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.

Barriers

Local authorities have no power to enforce recycling or separating food waste by householders. They have to rely on persuasion, marketing and provision of good collection services.

211 <https://www.gov.uk/government/consultations/introduction-of-a-deposit-return-scheme-in-england-wales-and-northern-ireland>

212 <https://www.ellenmacarthurfoundation.org/case-studies/stimulating-and-scaling-circular-breakthroughs>

213 <https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england/resources-and-waste-strategy-at-a-glance>

214 Ibid. footnote 206

They cannot charge for residual waste to incentivise improved levels of recycling.

Poor quality recycling 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 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.

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. District councils are not rewarded for raising recycling rates because recycling credits accrue to the Waste Disposal Authority.

Greater Manchester Waste Authority cannot collect plastic trays (e.g. of the type used for food packaging) because it cannot make sufficient income to fund the collection. If supermarkets could use a different type of material in packaging that would be possible. Despite talks with retailers, no change has happened.

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.

7.4 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.

Data on commercial waste is of poor quality, so it is difficult for local authorities to understand the commercial waste being produced in order to reduce the emissions associated with it.

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.

The ability to zone 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. Again this is not possible under current regulations.

Extending powers of the local authority to be able to influence or further license commercial waste operators in line with the Net Zero target would be desirable.

7.5 Key Considerations for Waste

Local authorities have duties around waste collection and disposal but very little control of how much is generated in the first place, or how well it is segregated at source. Alongside new initiatives such as EPR and DRS, local authorities need powers to reduce residual and commercial waste, as locally appropriate, across all waste streams, to meet Net Zero.

To support this, local authorities will need enabling powers including:

- Power to pilot charging for residual waste as part of a wider behaviour change campaign
- Power to intervene in the commercial waste market in line with Net Zero ambitions.

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.



8. Conclusions and Recommendations:



Many local authorities have managed to continue to deliver action on climate change over the last ten years, often despite government policy and through a period of hugely reducing budgets. Those that are considered leaders in the field have done this through a combination of local political support, determination, working with local partners such as universities, businesses and community organisations and through the creative use of their powers. Local authorities are well placed to deliver actions in their local areas: in housing and transport in particular, local actions can be better tailored to suit the area than national actions and can secure social and economic benefits for the area. However national policies and programmes are essential to provide the supporting framework for this local action.

It is important to return to the definition of powers: these are things that the authority can do, while duties are things they must do. For smaller authorities in particular, just managing to fulfil their duties takes all their resources and ingenuity.

This research has shown that in most areas, the powers exist for local authorities to take actions. The barriers therefore are not a lack of powers, but a lack of power and resources and a clear framework to support local and national Net Zero delivery.

This report has identified a set of barriers that do hamper action in specific areas. However, there are a few overarching themes that run through all of these.

Government has not taken climate change seriously: 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). Since 2010, successive governments have rolled back previous climate policies. The COVID-19 pandemic has shown that when there is a near term emergency, government can enact and fund policy at speed. This urgency needs to be retained in the pandemic recovery as we rebuild a resilient economy, one that grows the skills and jobs needed to deliver on climate change equitably across the country, with greater and more efficient co-operation between national and local government. The new-found 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.

Government is not taking local authorities' role in Net Zero seriously: Local authorities are critical to delivering change at the local level, yet there is limited mention of this role in many of the recent strategies. There is no clear programme setting out national and local actions and requirements for local authorities to act. A framework for delivery of climate targets with local flexibility is needed to enable coherent and effective action.

Lack of Capacity: the NAO reported in 2018²¹⁵ that “*Government funding for local authorities has fallen by an estimated 49.1% in real terms from 2010-11 to 2017-18. This equates to a 28.6% real-terms reduction in ‘spending power’ (government funding and council tax).*” 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, transport subsidies and housing. Smaller local authorities in particular have lost the skills and knowledge needed to support action on climate change. Alongside this, national programmes that previously provided much-needed independent information and advice have been cut or privatised (Carbon Trust, Energy Saving Trust, Buildings Research Establishment). Even leading authorities, backed by political will, have not been able to make significant contributions to emissions reductions across their areas, with emissions falling largely in line with those nationally, mainly driven by grid decarbonisation.

Funding: As well as reduced resources for local authorities, funding mechanisms actively work against emissions reductions, such as the government’s Green Book that promotes the funding of roads over active travel, or investment in denser cities and towns, rather than rural areas. Despite energy efficiency in buildings being a national infrastructure priority, the government has not used tax receipts to fund it. The only major ongoing funding scheme (ECO and predecessors) has been via a levy on electricity consumer bills, and the amounts available have been reduced in each round of the programme. The Ten Point Plan promises to “*mobilise £12 billion of government investment, and potentially three times as much from the private sector, to create and support up to 250,000 green jobs*” and yet the only mention of local authorities in that plan is in relation to public and active transport. 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. Scotland, with its devolved funding, has proved to be far ahead of England in this regard.

Disconnect between department priorities at national and local level: BEIS has a focus on energy and fuel poverty, while MHCLG itself has a focus on house building in large numbers rather than supporting homes that are energy efficient and energy systems fit for the future, served by sustainable transport. The Treasury is not supporting stable supportive Net Zero aligned funding schemes that could build a strong skilled supply chain of retrofit and energy systems jobs across the country. There is no commonly Net Zero aligned message from across government that reaches local authorities, nor a single common point of guidance and support for local authorities wanting to act. There is a hope that this will change as departments begin to focus on the recovery: aligning policy, clarifying communications and partnership working will help.

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.

²¹⁵ <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/housing-communities-and-local-government-committee/local-government-finance-and-the-2019-spending-review/written/100703.html>

Supporting Framework

The Government should engage with local authorities to ensure that a Net Zero Delivery Framework is included in its Net Zero Strategy. The framework should align and clarify national, sub-national, regional and local delivery roles and areas for collaboration. It should provide clear outcomes and direction to reduce uncertainty, provide additional powers where needed, identify public and private investment and enable flexible delivery at the faster pace of ambitious areas. A separate UK100 project is underway to start to develop such a Framework for consideration.

Overarching Duty

Within a supporting Net Zero Framework, establish a requirement that local authorities set out targets and plans for area-wide carbon reductions, and align all spending and policies with the wider plan for Net Zero in a local area will enable political support to deliver meaningful actions that respond to the needs of all local communities.

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.

Transport

Give 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 WebTAG and investment is not concentrated in already economically rich areas.

To support this, local authorities will need enabling powers including:

- Power to access transport funding using alternative justifications (for instance on the strategic case and without using WebTAG)
- Incorporation of the oversight of buses into the local transport authority role
- Power to require bus and rail operators to collaborate within a framework on area-wide transport plans, including cross-ticketing, setting this type of collaboration outside of the Competition and Markets Authority requirements
- Power to require private companies to co-operate on policies to address transport emissions e.g. consolidation centres for direct delivery
- Power to require Highways England to contribute to emissions reductions schemes outside of the strategic road network where areas are affected by emissions from major highways.

Buildings

Provide LPAs with the power 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.”

Allow local authorities to retain 100% of receipts from Right to Buy linked to a requirement to build new social housing to zero carbon standards.

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.

To support this, local authorities will need enabling powers and support including:

- In the absence of Net Zero national standards, a framework to support LPAs to set strong local standards on energy and CO₂ emissions as well as adaptation criteria, and to insist on delivering to these standards
- Strategic planning role for larger areas not covered by Combined Authorities to share resources and evidence
- Power to require developers to submit in-use energy and carbon data from new developments.
- Increased resources for local authorities to build skills and capacity in policy, development control, building control and delivery of new zero carbon social housing.

Energy Infrastructure

Set up a national framework for LAEP giving a greater role and more powers to local and regional authorities to develop a balanced energy system which combines a mix of large scale power generation with local decentralised energy systems, as part of a wider priority focus of reaching Net Zero. This must include a clear remit to base planning decisions on the legally binding Climate Change Act.

To support this, local authorities will need enabling powers including:

- Powers or regulation to coordinate the delivery of Net Zero heat zones
- Planning powers or a regulation code to insist on certain types of technologies (and ban others) in new and existing buildings in the Net Zero heat zones
- Powers to require buildings to connect to district heating schemes in identified district heating zones and to require existing developments to connect
- Power to override the constraints on on-shore wind (withdraw 2015 Ministerial Statement)
- Power to refuse consent for fossil fuel extraction or development of carbon-based energy infrastructure if it is not aligned with the national carbon target.

Waste

Alongside new initiatives such as EPR and DRS, local authorities need powers to reduce residual and commercial waste, as locally appropriate, across all waste streams, to meet Net Zero.

To support this, local authorities will need enabling powers including:

- Power to charge for residual waste as part of a wider behaviour change campaign
- Power to intervene in the commercial waste market in line with Net Zero ambitions.

The powers and duties proposed above **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**.

A. Appendix: Stakeholders Interviewed

Two roundtable events were held with UK100 and Green Alliance. 30 people in various roles were interviewed. Organisations represented were:

ADEPT (The Association of Directors of Environment, Economy, Planning and Transport)

[Birmingham City Council](#)

[Bristol City Council](#)

[Calderdale Council](#)

[County Councils Network](#)

[Cumbria County Council](#)

[Dover District Council](#)

[Exeter City Council](#)

[Greater London Authority](#)

[Greater Manchester Combined Authority](#)

[Kent County Council](#)

[Lambeth Borough Council](#)

[Lancaster City Council](#)

[London Councils](#)

[Manchester City Council](#)

[Oldham Council](#)

[Oxford City Council](#)

[Plymouth City Council](#)

[South Gloucestershire Council](#)

[Southwark Borough Council](#)

[Stockport Council](#)

[Transport for Greater Manchester](#)

[Warrington Borough Council](#)

UK:100

[Get in touch](#)

To find out more about the work we do
please contact info@uk100.org.