



Programme Area: Smart Systems and Heat

Project: EnergyPath

Title: Policy Drivers, Enablers and Barriers

Abstract:

This report has identified a range of policy barriers: in particular with regard to how national planning policy and guidance is expressed. As a result, it is clear that accelerating deployment of local area energy planning activity faces a number of challenges.

Based upon the feedback from consultations with a number of Local Authorities, some support the principle of LAEP however, the ability to implement is further constrained by a lack of financial and staffing resources locally. There are examples where LAEP activity has been undertaken and outputs included within Development Plans but funding constraints or lack of local political support has restricted implementation and priorities.

Context:

Energy consultancy Baringa Partners were appointed to design and develop a software modelling tool to be used in the planning of cost-effective local energy systems. This software is called EnergyPath and will evolve to include a number of additional packages to inform planning, consumer insights and business metrics. Element Energy, Hitachi and University College London have worked with Baringa to develop the software with input from a range of local authorities, Western Power Distribution and Ramboll. EnergyPath will complement ETI's national strategic energy system tool ESME which links heat, power, transport and the infrastructure that connects them. EnergyPath is a registered trade mark of the Energy Technologies Institute LLP.

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Local Area Energy Planning D6: Policy Drivers, Enablers and Barriers

FINAL REPORT

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Executive Summary

Background and Objectives

Jones Lang LaSalle (JLL) has been commissioned by Energy Systems Catapult (ESC) to assist with the delivery of the Energy Technologies Institutes' (ETI) Smart Systems and Heat Phase 1 Programme: specifically Work Package 3 (WP3) entitled 'Planning Guidance'.

The Brief is to “*deliver a Planning Guide for Local Authorities, and other key stakeholders including Network Operators, to support Local Area Energy Planning (LAEP). It is to inform stakeholders how to position, plan and prepare for undertaking LAEP including the preparation and use of a Local Area Energy Strategy to undertake demonstration and deployment projects*”.

As part of the Smart Systems and Heat Phase 1 Programme this report has been written with the objective of supporting the progression of Local Area Energy Planning in the UK. Local Area Energy Planning is seen by the Energy Technologies Institute (ETI) and the Energy Systems Catapult (ESC) as central to achieving national greenhouse gas emission reduction targets and the decarbonisation of heat. More effective local area planning supported by objective, technology agnostic evidence can support transition in a way that enables local communities to realise the benefits and understand the costs of decarbonisation. This document supports this objective by addressing 'policy drivers, enablers and barriers'.

Overall the commission is to assist the demonstration of how Local Authorities can play an important role in delivering decarbonisation locally to help ensure that national carbon targets and Local ambitions can be achieved. In short, the approach taken has sought to identify whether there are gaps or shortcomings in current UK policy and practice which may be acting as barriers to delivering successful local area energy planning and in light of these, to set out positive policy and resourcing interventions.

This Report therefore sets out the existing policy framework within which local area energy planning currently functions at a local and national level and considers if there are barriers to delivering the scale of change required. It also identifies potential positive enabling mechanisms for the delivery of LAEP.

Statute & Legislation

Key legislative provisions for England and the UK include the Planning & Compulsory Purchase Act 2004 and the Energy Acts 2008 and 2011. In Wales the relatively recent Environment Act 2016, the Well-being of Future Generations (Wales) Act 2015 and the Planning (Wales) Act 2015 provide an integrated foundation for dealing with emission reduction targets and actions that are intended to lead to the move to a low carbon society. In Scotland key provisions include the Climate Change (Scotland) Act 2009 and the emerging new Climate Change Bill (2017). We have highlighted the proposed changes to the Housing Act 2001 which are intended to place a statutory duty on Local Authorities to prepare Local Heat and Energy Efficiency Strategies.

Climate Change and Energy Policy at the National Level

The UK Clean Growth Strategy and the UK Industrial Strategy, both published in 2017 clearly indicate the importance with which Central Government views the ongoing and future role of Local Government in driving forward the pathway to clean growth.

The Clean Growth Strategy sets out the UK Government's view that in order to meet the 4th and 5th carbon budgets (covering the periods 2023 – 2027 and 2028-2032) “*we will need to drive a significant acceleration in the pace of decarbonisation and in this strategy, we have set out stretching domestic policies that keep us on track to meet our carbon budgets*”.

It sets out a comprehensive set of policies and proposals that aim to accelerate the pace of clean growth i.e. to deliver increased economic growth and decreased emissions and states “*in order to meet these objectives the UK will need to nurture low carbon technologies, processes and systems that are as cheap as possible*”.

The Strategy refers to ‘Leading in the Public Sector’ and states that the Government wants “*the public sector to be a leader in reducing carbon emissions....*”.

It adds that to meet the UK’s 2050 target, emissions from buildings and activities of the public sector will need to be near zero. It further adds “*as with homes and commercial property, this means improving energy efficiency and energy management, and decarbonising the heating and cooling of buildings as far as possible*”.

The Government’s pathway to 2032 sees emissions from the public sector falling by around 50% compared to 2017 levels.

Other key points in terms of ‘local leadership’ set out in the Strategy include *inter alia*:-

- Partnerships across public, private and community sector organisations are recognised as being able to unlock powerful integrated local energy solutions.
- The Government is committed to supporting local leadership and has already given additional powers and responsibilities through the Cities and Local Government Devolution Act 2016.
- In 2017 in England, funding was provided to 13 Local Enterprise Partnerships (LEPs) to develop local energy strategies and support is to be given to the remaining 25 LEPs to produce further strategies.
- The Government is to launch a new Local Energy Programme to support local areas in England to play a greater role in decarbonisation – this is aimed at increasing local capacity and capability across England and to provide on the ground practical support and expertise to unlock local energy opportunities.
- The approach will be to support delivery of the Industrial Strategy and smart systems, working with local areas to demonstrate that deep decarbonisation can be achieved through local system change in a way that keeps costs down and which maximises economic benefit.
- Innovation at the local level is seen as being vital.

Policy Limitations

This report has identified a range of policy barriers: in particular with regard to how national planning policy and guidance is expressed. As a result, it is clear that accelerating deployment of local area energy planning activity faces a number of challenges.

Based upon the feedback from consultations with a number of Local Authorities, some support the principle of LAEP however, the ability to implement is further constrained by a lack of financial and staffing resources locally. There are examples where LAEP activity has been undertaken and outputs included within Development Plans but funding constraints or lack of local political support has restricted implementation and priorities.

From a policy perspective, there are potential enabling policy mechanisms and potentially legislative actions which could be pursued to improve this situation.

Potential Enabling Policy Mechanisms

Overall conclusions are presented in relation to possible enabling policy mechanisms which could lead to stronger supporting action and wider deployment of LAEP to support the decarbonisation of heat.

In summary, our recommendations include the following:

- Recommendation 1: Re-prioritise Climate Change and introduce the role of Local Area Energy Planning in the existing Local Plan system, to be delivered by Local Government.
- Recommendation 2: Provide emphasis in national policy on the Legal Requirements on Climate Change Action and Decarbonisation with reference to existing Legislation.
- Recommendation 3: Consider the introduction of new Legislative Requirements in relation to the duty of Local Authorities to coordinate and produce Local Area Energy Strategies OR strengthen policy and sufficiently support and enable Local Authorities in the delivery of LAEP.
- Recommendation 4: Provide Further Clarity in National Policy and address Viability.
- Recommendation 5: Encourage LAEP over the Long Term and address Skills and Resourcing.
- Recommendation 6: Expand and amend the Planning Guidance in the PPG.
- Recommendation 7: Provide clear Policy and Guidance on Retrofit.
- Recommendation 8: Strengthen requirements and Guidance in relation to Development Management Policy.

The findings we have set out will help inform various aspects of planning guidance with regard to local area energy planning and can also be used to inform any future policy and supporting mechanisms at a national level.

1 Introduction

1.1 Background and Scope

- 1.1.1 Jones Lang LaSalle (JLL) has been commissioned by Energy Systems Catapult (ESC) to assist with the delivery of the Energy Technologies Institutes' (ETI) Smart Systems and Heat (SSH) Phase 1 Programme: specifically Work Package 2 of the Programme which is looking at development of local area energy strategies to support planning and implementation of future low carbon solutions and networks within different local areas.
- 1.1.2 This report forms a deliverable of the Bidders Pack project within Work Package 2 of the SSH Phase 1 Programme, related to 'Planning Guidance'. This project collectively aims to support local areas in local area energy planning. The Brief is to "*deliver a Planning Guide for Local Authorities (and other key stakeholders including Network Operators to support Local Area Energy Planning (LAEP). It is to inform stakeholders how to position, plan and prepare for undertaking LAEP including the preparation and use of a Local Area Energy Strategy to undertake demonstration and deployment projects*".
- 1.1.3 As part of the SSH Phase 1 Programme this report has been written with the objective of supporting the progression of Local Area Energy Planning in the UK. Local Area Energy Planning is seen by the ETI and the ESC as central to achieving national greenhouse gas emission reduction targets. More effective local area planning supported by objective, technology agnostic evidence can support transition in a way that enables local communities to realise the benefits and understand the costs of decarbonisation. This document supports this objective by addressing 'policy drivers, enablers and barriers'.
- 1.1.4 There are two further report deliverables related to 'Planning Guidance' and these are titled as follows:-
- D7: 'Local Energy Planning – Best Practice and Opportunities';
 - D8: 'Step by Step Guide to Local Area Energy Planning'.
- 1.1.5 The guidance overall will make the case for completing Local Area Energy Strategies in the context of national, regional and local planning policy and other related policy drivers and considerations supporting a low carbon energy transformation. A first step therefore is to identify planning policy barriers and positive enabling considerations in relation to local area energy planning with reference to existing and new homes and buildings.
- 1.1.6 The approach recognises the wide remit that Local Authorities and other stakeholders have with regard to energy planning, such as for example in relation to transportation matters, however the focus is in relation to buildings / urban form and the wider built environment.
- 1.1.7 Overall, the purpose of the suite of Reports is to provide supporting evidence and information with regard to how to carry out LAEP (drawing on the information and the considerable work undertaken so far by ESC, and informed by a number of case study examples). The approach seeks to identify specific issues and considerations in the overall process of LAEP, focused on the development planning and development management function of Local Authorities.
- 1.1.8 A key part of the approach is to identify the potential benefits at a local and national level of the activity from a planning perspective and wider Local Authority function, including local socio-economic considerations. As part of this, it is recognized that it is important to identify any necessary critical policy changes and enabling mechanisms that could be made by Central Government and potentially other stakeholders in the local energy planning sector.
- 1.1.9 Overall the commission is to assist the demonstration of how Local Authorities can play an important role in delivering decarbonisation locally to help ensure that national carbon targets and Local Authority ambitions are can be achieved. In short, the approach taken has sought to identify whether there are gaps or shortcomings in UK policy and practice which may be acting as barriers to delivering successful local area energy planning and in light of these, to set out positive policy and resourcing interventions.

1.1.10 This Report therefore sets out the existing policy framework at a local and national level and considers if there are barriers to delivering the scale of change required. It also identifies potential positive enabling mechanisms for the delivery of LAEP.

1.2 Approach

1.2.1 The approach followed for the preparation of this Report on policy matters builds upon previous work undertaken by JLL for both the Energy Technologies Institute (ETI) and ESC in relation to the Smart System and Heat Programme in 2014. The JLL scope then, covered policy and consenting procedures in relation to low carbon infrastructure. The work also builds upon the more recent policy advice provided by JLL to the ETI in relation to the emerging Spatial Development Framework for Greater Manchester in 2016. Given the scope of some previous JLL Reports have covered policy matters – these are referenced and the detail from those reports is not repeated¹. This has allowed the focus in this Report to be on key and more recent policy documents.

1.2.2 The approach has involved a literature review and close consultation with representatives of the three pilot Local Authorities building on work using the EnergyPath networks (EPN) modelling framework to produce Local Area Energy Strategies in Newcastle, Bridgend and Bury in Greater Manchester in conjunction with local gas and electricity network operators as well as the Welsh Government and Greater Manchester Combined Authority.

1.2.3 Another important aspect of the approach has been a review of the available information from other Work Packages in relation to energy modelling and use cases for LAEP. JLL has also executed a questionnaire to 40 Local Authorities in England and Wales to establish further information in relation to current practice and opinion in relation to LAEP and in particular on policy matters to inform the findings of this Report.

1.3 Structure of Report

- **Chapter 2** provides a brief summary of statute and legislation relevant to Local Area Energy Planning covering England, Wales and Scotland.
- **Chapter 3** provides a summary of energy policy and also examines specific provisions in England, Wales and Scotland.
- **Chapter 4** addresses national planning policy and guidance and sets out the relevant summary positions for England, Wales and Scotland.
- **Chapter 5** examines policy limitations and barriers – giving specific consideration to aspects of the current planning system in the UK that act as potential barriers to the wider deployment and scaling up of local area energy planning activity.
- **Chapter 6** sets out possible enabling policy mechanisms which could lead to stronger supporting action for the undertaking of Local Area Energy Planning.
- **Chapter 7** sets out our overall conclusions.

¹ These Reports are available on the ETI website – www.eti.co.uk/referencelibrary

2 Statute and Legislation

2.1 Introduction

2.1.1 This Chapter outlines the key statute and legislation relevant to LAEP, covering England, Wales and Scotland.

2.2 International Obligations

2.2.1 The Paris Agreement (12 December 2015) sets out (page 2) that it “*emphasises with serious concern*” the need to hold the increase in global average temperature to “*well below 2oC*” above pre-industrial levels and to pursue “*efforts to limit the temperature increase to 1.5C*”. *In order to achieve this long term temperature target, the text states “parties aim to reach global peaking of greenhouse gas emissions as soon as possible”*. The document also includes a ratcheting mechanism on climate action, with countries having to communicate nationally determined contributions to reducing global emissions. The first global “stocktake” is to take place in 2023 and will follow every five years thereafter.

2.2.2 It is clear that moving to a low carbon economy is now a globally shared goal and will require absolute emission reduction targets. For the first time, some 195 countries, including the world’s largest emitters have now committed to act together to address climate change and to be held equally accountable. Countries will also be legally obliged to make new post-2030 commitments to reduce emissions every five years.

2.3 EU Level and Brexit

2.3.1 In January 2008 the European Commission (EC) published a ‘20-20-20’ targets package. This included proposals for:

- A reduction in the EU’s greenhouse gas emissions of at least 20% below 1990 levels;
- Increasing the proportion of final EU energy consumption from renewable sources to 20%; and
- A 20% reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency.

2.3.2 These targets are to be achieved by 2020, as set out in the EU Renewable Energy Directive (March 2009). The 20% is split between Member States. For the UK, the EC’s obligations include 16% reduction in UK greenhouse gas emissions by 2020 and for 15% of all energy consumed in the UK to come from renewable sources by 2020.

2.3.3 The position as of the end of 2016 (the last full year for which figures are available) renewable energy only accounted for approximately 8.9% of energy consumption in the UK. Although this is short of the 15% target, figures from 2015 show a 38% reduction from 1990 figures².

2.3.4 With regard to Brexit, the UK Government has stated that the UK is scheduled to depart from the European Union (EU) at 11pm on Friday 29th March 2019. The UK Prime Minister Theresa May has announced that the UK would, after leaving the EU, repeal the European Communities Act of 1972 and incorporate all existing EU law into UK domestic law.

2.3.5 The UK Government White Paper entitled ‘Legislating for the United Kingdom’s withdrawal from the European Union’ (March 2017) has set out that the proposed Great Repeal Bill will amongst other matters:

“convert EU Law as it stands at the moment of exit into UK law before we leave the EU. ...It also ensures that it will be up to the UK Parliament (and, where appropriate, the devolved legislatures) to amend, repeal or improve any piece of EU Law (once it has been brought into UK Law) at the appropriate time once we have left the EU”.

² UK Greenhouse Gas Emissions, Final Figures, Statistical Release: National Statistics, BEIS (February 2017).

- 2.3.6 As noted above, the UK's renewable energy target of 15% by 2020 is derived from the EU Renewable Energy Directive 2009/28/EC which imposes a minimum requirement for the share of renewable energy in gross UK energy final consumption to be 15% in 2020. 'The Promotion of the Use of Energy from Renewable Sources Regulations' 2011/243 transposes this target into UK domestic law by imposing a duty directly on the Secretary of State to ensure that this target is achieved (regulation 3). This duty extends not only to England & Wales but also Scotland and Northern Ireland (regulation 1). It is important to note that these targets are minima, not ceilings.
- 2.3.7 However, notwithstanding what is set out in the White Paper as noted above, once the UK exits from the EU, the UK would still be bound by international decarbonisation and emission obligations such as those set out in the Paris Agreement.
- 2.3.8 Furthermore, there remains the position of the UK Government's climate change policy and associated emission reduction targets as set out in primary legislation such as the Climate Change Act 2008 (see below) which enshrines a carbon target in law of 80% reduction from 1990 levels by 2050 amongst other matters.
- 2.3.9 Moreover, UK energy and climate change policy has very recently been updated with the publication of the 'UK Clean Growth Strategy' (October 2017) and the 'UK Industrial Strategy' (November 2017) – both of which are examined in terms of their relevant provisions in Chapter 3 below.
- 2.3.10 The Clean Growth Strategy makes reference to the UK's obligations under the 2015 Paris Agreement and states that the shift to 'clean growth' will be at the forefront of UK policy and economic decisions in the coming decades. The various policies and actions set out in the Strategy are also rooted within UK legislation in particular the Climate Change Act 2008.
- 2.3.11 The Clean Growth Strategy addresses the implications of 'leaving the EU' (page 44) in the context of the challenges the UK Government faces to delivering clean growth. It sets out that:
- "whatever our future relationship with the EU, the UK's commitment and leadership role in tackling climate change remains undimmed and working closely with the EU on this global challenge will remain important. Leaving the EU will not change our statutory commitments to reduce our emissions according to our Climate Change Act – indeed these targets are more ambitious and challenging than those set by EU legislation. There is also no need to change our domestic targets under the Act as a result of leaving the EU, as these targets are rooted in climate science. The UK remains strongly committed to the Paris Agreement and whatever the form our future partnership with the EU we will satisfy our International obligations under the Agreement"*.
- 2.3.12 The UK Industrial Strategy also makes it clear that a key objective is to maximise potential of the UK in terms of the development and use of low carbon technologies and systems all of which will assist in attaining long term decarbonisation.
- 2.3.13 In terms of the devolved administrations, an important consideration is to recognise that the renewable energy, electricity and carbon and other emission reduction targets such as those set by the Scottish Government and as expressed in the recently published Scottish Energy Strategy, is that they are rooted in Scottish primary legislation and Scottish derived policy. Similarly, in Wales, there are statutory provisions, in particular the Environment (Wales) Act which deals with climate change and emission reduction targets.

2.4 UK & England Energy & Climate Change Legislation

- 2.4.1 The Town Planning system in England is underpinned by a wide range of inter-linked primary and secondary legislation, much of which has been significantly amended since enactment.
- 2.4.2 The principal Act is the Town & Country Planning Act 1990 while a number of subsequent Acts provide additional legislation and guidance, in addition to Acts relating to Energy and Climate Change, as referenced below:
- Planning (Listed Buildings and Conservation Areas) Act 1990;
 - Planning (Hazardous Substances) Act 1990;
 - Planning (Consequential Provisions) Act 1990;

- Environmental Protection Act 1990;
- Planning and Compensation Act 1991;
- Environment Act 1995;
- Countryside and Rights of Way Act 2000;
- Planning and Compulsory Purchase Act 2004;
- Energy Act 2008;
- Planning Act 2008;
- Planning and Energy Act 2008;
- Climate Change Act 2008;
- Local Democracy, Economic Development and Construction Act 2009;
- Localism Act 2011;
- Growth and Infrastructure Act 2013;
- Enterprise and Regulatory Reform Act 2013;
- Infrastructure Act 2015;
- Deregulation Act 2015;
- Housing and Planning Act 2016;
- Neighbourhood Planning Act 2017.

2.4.3 In addition to the range of legislation referenced above, a wide range of secondary legislation forms integral elements of the planning system, such as The Town and Country Planning (Development Management Procedure) (England) Order 2015, The Town and Country Planning (General Permitted Development) (England) Order 2015 and the Community Infrastructure Levy Regulations 2010.

Town & Country Planning Act 1990

2.4.4 Section 55 of the Town and Country Planning Act 1990 defines “development,” as the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land.

2.4.5 There are certain circumstances where express planning permission would not be required, and these would include the following:

- Where the works are being undertaken by a Statutory Undertaker and falls within Permitted Development Rights under the Town and Country (General Permitted Development) Order 2015;
- The works are included within a wider scheme which has planning permission;
- The works are covered by a Local Development Order (LDO);
- The works are classified as *de minimis*.

2.4.6 The majority of works relating to energy infrastructure require planning permission although there are a number of permitted development rights such as micro-generation wind turbines, roof-mounted solar, biomass boilers, underground district heating pipework (statutory undertaker only) and equipment relating to ground and air source heat pumps.

Planning & Compulsory Purchase Act 2004

2.4.7 The Planning and Compulsory Purchase Act 2004 gained Royal Assent on 13th May 2004. Although substantially altered by subsequent legislation, the Act made significant changes to the planning system including the introduction of the Local Development Framework approach to Development Plan preparation.

2.4.8 Section 19 (1A) includes a specific requirement for Local Planning Authorities (LPAs) to include policies relating to climate change in Development Plan Documents:

“Development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority’s area contribute to the mitigation of, and adaptation to, climate change”

Climate Change Act 2008

2.4.8.1 The Climate Change Act enshrined a carbon target in law of 80% reduction from 1990 levels by 2050. In addition, the Act set a medium-term target of a 34% reduction on 1990s levels by 2020. In order to meet these aims, the Act outlines the need to prepare five-year carbon budgets. The first three budgets were set in 2009 and cover 2008-12, 2013-17 and 2018-22. The fourth budget was set in 2011 for the period 2023-27 and the fifth budget for the period 2028-2032 was approved in 2016. The budgets allow for carbon off-setting.

2.4.8.2 The 2008 Act created the Committee on Climate Change (CCC) whose advice the Government must consider when preparing carbon budgets. In June 2017, the CCC provided a Progress Report to Parliament which advised that significantly more effective policies were required in order to achieve the committed carbon budgets. As part of its response, the Government published the Clean Growth Strategy in October 2017 (see below).

The Energy Act 2008

2.4.9 The Energy Act 2008 gained Royal Assent on 26th November 2008. The Act introduced the provisions which allow for Feed in Tariffs and the Renewable Heat Incentive.

The Planning Act 2008

2.4.10 The Planning Act 2008 gained Royal Assent on 26th November 2008. The Act deals with larger infrastructure projects and established the Infrastructure Planning Committee and the provision of National Policy Statements.

2.4.11 Although the Act is concerned with larger projects, the threshold for energy generation projects to be decided by the Infrastructure Planning Committee was set at over 50 Mega Watts (MW) below which development is to be decided upon locally.

The Planning and Energy Act 2008

2.4.12 The Planning and Energy Act 2008 received Royal Assent on 13 November 2008 – it should not be confused with the Planning Act and Energy Acts referred to above. The Act enshrines the 'Merton rule' in law - it is set out within the Act as follows:

“(1) A local planning authority in England may in their development plan documents, and a local planning authority in Wales may in their local development plan, 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.”

2.4.13 The 2008 Act therefore gives LPAs in England and Wales the power (not a duty) to include, in their Development Plan documents, policies that impose reasonable requirements regarding the proportion of on-site and near-site renewable energy and other low carbon energy that is to be used in developments. The Act does not specify the proportion of renewable or low carbon energy to be required.

2.4.14 The requirements and policies that Local Authorities have the power to impose under the Act must be 'reasonable'. No specific guidance as to what may be reasonable is given in the Act, although section 1(5) states that policies implemented under the Act must not be inconsistent with relevant national policies.

The Energy Act 2011

2.4.15 The Energy Act 2011 sought to achieve three key aims; tackling barriers to investment in energy efficiency, enhancing energy security and enabling investment in low carbon energy supplies. The provisions were subdivided into a number of themes:

- The Green Deal – to create a financial framework to incentivise and support a range of improvements to residential and non-residential properties and requires the Secretary of State to make endeavours to improve residential energy efficiency;
- Measures to ensure the improvement of energy performance in the private rented sector;
- Additional measures to improve energy efficiency;
- Measures to improve energy security including various measures to improve the energy market, infrastructure and operating companies (covering amending smart meter powers in the Energy Act 2008 to allow Government to direct the approach to roll-out of smart meters until 2018: amendments to the Energy Performance of Buildings (Certifications and Inspections) (England & Wales) Regulations, to enable removal of unnecessary restrictions on access to data: and to establish powers for the Secretary of State to require energy companies to provide information on the cheapest tariff on energy bills; and
- Measures to enable low carbon technologies.

The Localism Act 2011

2.4.16 The Act gained Royal Assent on 15th November 2011. The Act enacts a number of key pledges made in the 2010 Conservative Party manifesto, focusing on the reorganisation of Local Authority powers, seeking to deliver greater decision making powers to local residents, away from national and local Government.

2.4.17 Part 6, Chapter 1 abolished Regional Spatial Strategies and replaced these formal plans with a requirement for LPAs to cooperate and consult with neighbouring authorities known as the 'Duty to Cooperate'.

2.4.18 Part 6, Chapter 3 provides further support for what is termed 'Neighbourhood Planning' and includes the need for such plans to undergo inspection and be adopted following a local referendum.

The Housing and Planning Act 2016

2.4.19 The Housing and Planning Act gained Royal Assent on 12th May 2016. The Act has limited impact on the deployment of smart energy systems however a number of provisions relating to the scope for intervention by the Secretary of State in plan making are included.

2.5 Wales: Energy & Climate Change Legislation

The Planning and Energy Act 2008

2.5.1 The Act came into force in November 2008. The Act enables Welsh LPAs to set their own requirements within their Local Development Plans (LDPs) for the levels of energy generation from local renewable sources or low carbon energy and for energy efficiency standards.

The Environment (Wales) Act 2016

- 2.5.2 The Act received Royal Assent on 21 March 2016. The Act provides the legislation needed to plan and manage Wales' natural resources in a joined-up manner, provides an iterative framework that ensures that managing natural resources sustainably becomes a core consideration in decision-making.
- 2.5.3 Part 2 of the Act deals with climate change and provides the Welsh Ministers with powers to put in place statutory emission reduction targets, including at least an 80% reduction in emissions by 2050 with carbon budgets to support delivery. This is set within the context of existing UK and EU obligations and sets a clear pathway for decarbonisation. Furthermore, interim emission targets are to be set for 2020, 2030 and 2040 and are to be introduced by the end of 2018. These interim targets are aimed at assisting in evaluating progress made towards meeting the overall long term 2050 target.
- 2.5.4 The Act also places a duty on the Welsh Ministers to set 5 yearly carbon budgets, which set limits on the total amount of emissions that can be emitted in Wales. Carbon budgets are set for specified periods, known as budgetary periods the first set for 2016 – 2020 and then every 5 years up until 2050. The carbon budgets need to be consistent with meeting the interim targets guiding them towards the overall 2050 target.

The Well-being of Future Generations (Wales) Act 2015

- 2.5.5 The Act is concerned with improving the environmental, economic, social, and cultural well-being of Wales and requires public bodies to do what they do in a sustainable way. It also establishes Public Services Boards for each Local Authority in Wales, who are tasked within improving the economic, social, environmental and cultural well-being of its area by working to achieve the well-being goals.
- 2.5.6 The seven wellbeing goals together provide a shared vision for public bodies listed in the Act to work towards. The Act makes it clear that the listed public bodies must work to achieve all of the goals. The goals of most relevance to energy and climate change are as follows:-
- A prosperous Wales – an innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficient and proportionately (including acting on climate change);
 - A resilient Wales – a nation which maintains and enhances a bio-diverse natural environment with healthy functioning eco systems that support social, economic and ecological resilience and a capacity to adapt change (for example climate change).

The Planning (Wales) Act 2015

- 2.5.7 The 2015 Act gained Royal Assent on 6 July 2015 – it sets out a series of legislative changes to deliver a reform of the planning system in Wales. The Act contains five key objectives:-
- A modernised framework for the delivery of planning services – the Act introduces powers to allow planning applications to be made directly to Welsh Ministers in limited circumstances.
 - Strengthening the plan led approach – the Act introduces a legal basis for the preparation of a national development framework and strategic development plans.
 - Improved resilience – the Act allows the Welsh Ministers to direct LPAs to work together and for LPAs to be merged.
 - Front loading and improving the development management system – the Act introduces a statutory pre-application procedure for defined categories planning application.
 - Enabling effective enforcement and appeals.
- 2.5.8 There is a degree of overlap amongst the three relatively recent statutory provisions in Wales.

2.6 Scottish Climate Change Legislation

The Climate Change (Scotland) Act 2009

- 2.6.1 The Climate Change (Scotland) Act 2009 is the key legislation in Scotland dealing with climate change and carbon targets. The Act received royal assent on 4th August 2009. Part 1 of the Act creates the statutory framework for greenhouse gas house emission reductions in Scotland by setting an interim 42% reduction target for 2020, with the power of this to be varied based on expert advice, and an 80% reduction target for 2050, against 1990 levels. To help ensure the delivery of these targets, the Act also requires that the Scottish Ministers set annual targets in secondary legislation, for Scottish emissions from 2010 to 2050. Part of the Act places climate change duties on Scottish public bodies.
- 2.6.2 The Scottish Government is in the process of finalising its third Climate Change Plan, setting out proposals and policies to drive emissions down by 66% by 2032. The final plan is expected in early 2018.
- 2.6.3 The Scottish Government has set out proposals for a Climate Change Bill which is to contain more ambitious targets for the reduction of greenhouse gas emissions and ensure that obligations set under the Paris Agreement are met.
- 2.6.4 The Climate Change Plan will sit alongside the Scottish Government's new Energy Strategy which was published in December 2017. Together these documents will provide the Government's national level strategic framework to guide the transition for a low carbon Scotland.

Draft Climate Change Bill (June, 2017)

- 2.6.5 A draft Climate Change Bill was published by the Scottish Government in June 2017. The Government intends that the Climate Change Bill will update Scotland's framework of statutory emission reduction targets by increasing the ambition enshrined in the Climate Change (Scotland) Act 2009. The provisions of the draft Bill are based upon the advice received by the Scottish Government by the Committee on Climate Change (CCC).
- 2.6.6 The proposed Climate Change Bill will amend only those part of the 2009 Act that relate to emission reduction targets and associated reporting duties. It remains the case that detailed proposals and policies for delivering against statutory targets are to be set out in Climate Change Plans. In this regard the draft Climate Change Plan (CCP) for the period 2017 – 2032 was laid before the Scottish Parliament on 19th January on 2017 for scrutiny.
- 2.6.7 The key provision in the draft Bill is a more ambitious emission reduction target for 2050. Advice from the CCC is that a 90% reduction in greenhouse gas emissions by 2050 would be consistent with limiting temperature rise to 1.5°C than the current 80% target. The Scottish Government therefore proposes to increase the ambition of the 2050 target to 90% greenhouse gas emission reduction from the baseline, recognising the social, environmental and economic benefits that this will deliver.
- 2.6.8 Furthermore, in line with advice from the CCC, provisions will be included in the Bill to allow Scottish Ministers to set a net-zero emissions targets for the second half of the century subject to regular reviews of evidence. In addition, the Government proposes to update the interim target for 2020, to at least 56% and to set new interim targets for at least 66% in 2030 and at least 78% in 2040.
- 2.6.9 The proposed Bill is expected to become legislation in early 2019. The provisions of the Bill therefore indicate that targets will become more stretching and increasing deployment of renewable energy is recognised (in the Scottish Energy Strategy) as being fundamental to driving the attainment of Scotland's decarbonisation objectives and emission reduction targets.

Housing (Scotland) Act 2001

- 2.6.10 The 2001 Act places a statutory duty on local authorities to produce a Local Housing Strategy (LHS) which is to set out its strategy, priorities and plans for the delivery of housing including how the authority will ensure that “*persons do not live in fuel poverty*”. The Act also has provisions in terms of reducing greenhouse gas emissions.
- 2.6.11 As set out in Chapter 3 below with regard to emerging Scottish Government policy as set out in the new Scottish Energy Strategy (2017) the Scottish Government’s intention is that the duty to report on tackling fuel poverty and climate change in the 2001 Act aligns closely with Local Authorities’ plans for improving the energy efficiency of buildings and decarbonising heat supply therefore the Government propose moving that duty from a LHS to a new initiative and statutory duty to be placed on Local Authorities to prepare Local Heat and Energy Efficiency Strategies. This is a new and innovative legislative provision and is further explained in Chapter 3.

2.7 Existing Building Legislation and Regulation

- 2.7.1 While the planning system has limited scope to influence the energy efficiency of existing buildings, there are a number of regulatory requirements that apply to existing buildings of certain classes, requiring their enhancement by way of energy efficiency measures. Such requirements apply to both domestic and non-domestic buildings, with the requirement for enhancement of energy efficiency generally triggered by a sales or leasing event.
- 2.7.2 The energy performance of buildings is measured through the Energy Performance Certificate (EPC) process, which measures the likely energy performance of a building based on technical characteristics. The output of this measuring exercise include an EPC score, rating and recommendations for enhancing energy performance.
- 2.7.3 Minimum Energy Efficiency Standard (MEES) make it unlawful for properties with poor EPC scores to be let, without implementing cost-effective energy efficiency improvements unless exemption criterion are met. (Note: The trigger for requiring performance measures to be introduced are different within the devolved administrations to that within England). Such performance measures can require replacement of building heating infrastructure, improvement to insulation, air tightness and electrical infrastructure.
- 2.7.4 A more detailed assessment of EPCs and MEES is set out in the JLL Report to ESC in relation to the Greater Manchester Spatial Framework: Briefing Note 3 ‘National Housing and Sustainability Standards for the Built Environment’ (August, 2016).

3 Energy and Climate Change Policy

3.1 Introduction

3.1.1 This chapter addresses energy and climate change policy covering the UK position as well as specific policy provisions covering Wales and Scotland. The focus is in relation to most recent energy and climate change policy documents. In terms of the wider and more historic policy context, reference is made to previous JLL reports prepared for both ESC and the ETI and appropriate cross-references are made.

3.2 UK Energy Policy

3.2.1 The policy position relating to climate change and energy in the UK arises from a range of sources including International Agreements, European Directives and national legislation. This section focuses on most recent relevant energy and climate change policy, principally the UK Government's Industrial Strategy and Clean Growth Plan – both contain very relevant provisions with regard to LAEP.

Department for Business, Energy and Industrial Strategy Single Departmental Plan

3.2.2 Each UK Government department is required to publish a Single Departmental Plan (SDP) to outline the key goals of each department. The most recent SDP published by the Department for Business, Energy and Industrial Strategy (BEIS) was issued on 14 December 2017 and outlines five objectives:

1. Deliver an ambitious Industrial Strategy;
2. Maximise investment opportunities and bolster UK interests;
3. Promote competitive markets and responsible business practices;
4. Ensure the UK has a reliable, low cost and clean energy system;
5. Build a flexible, innovative and collaborative department.

3.2.3 With regard to the fourth aim, BEIS outline the following principles:

- *“We will ensure we maintain adequate energy capacity, for example through the annual operation of the capacity market, to guarantee that we can cope with unexpected peaks in demand and enable a reliable supply of electricity.*
- *We will make our electricity system smarter and more flexible, creating the right environment for more storage, demand side response, smart grids, and interconnection.*
- *As we set out in our Clean Growth Strategy, encouraging the uptake of heat networks is an important way to reduce carbon and cut heating bills for customers.”*

The UK Clean Growth Strategy

3.2.4 The UK Government published the Clean Growth Strategy ‘Leading the Way to a Low Carbon Future’ in October 2017. The Clean Growth Strategy (CGS) strategy defines ‘clean growth’ as “growing our national income while cutting greenhouse gas emissions. Achieving clean growth, while ensuring an affordable energy supply for businesses and consumers, is at the heart of the UK’s Industrial Strategy”.

3.2.5 The introduction refers to the 2015 Paris Agreement and states that the actions and investments that will be needed to meet the Paris commitments will ensure the shift to clean growth will be at the forefront of policy and economic decisions made by Governments and businesses in coming decades.

3.2.6 The introduction stresses the economic opportunity presented by clean growth and sets out that the UK low carbon economy could grow by an estimated 11% per annum between 2015 and 2030 and could deliver between £60 - £170 billion of export sales of goods and services by 2030. It adds *“this means that clean growth can play a central part in our Industrial Strategy – building on our strengths to drive economic growth and boost earning power across the county”*.

- 3.2.7 The introduction also emphasises the need to reduce emissions created by heating homes and businesses which it states accounts for almost a third of UK emissions.
- 3.2.8 Background reference is made to the 2008 Climate Change Act which committed the UK to reducing greenhouse gas emissions by at least 80% by 2050 when compared to 1990 levels and the associated carbon budgets. The Government states that in order to meet the 4th and 5th carbon budgets (covering the periods 2023 – 2027 and 2028-2032) *“we will need to drive a significant acceleration in the pace of decarbonisation and in this strategy we have set out stretching domestic policies that keep us on track to meet our carbon budgets”*.
- 3.2.9 The CGS sets out a comprehensive set of policies and proposals that aim to accelerate the pace of clean growth i.e. to deliver increased economic growth and decreased emissions. It adds *“in order to meet these objectives the UK will need to nurture low carbon technologies, processes and systems that are as cheap as possible”*.

Clean Growth Strategy - Key Policies and Proposals

3.2.10 The CGS sets out a range of key policies and proposals and those of particular relevance to the built environment and local area energy planning include:-

- Improving business and industry efficiency – 25% of UK emissions;
- Raise minimum standards of energy efficiency for rented commercial buildings;
- Explore how voluntary building standards can support improvements in the energy efficiency performance of business buildings;
- Improving our homes – 13% of UK emissions;
- Improving the energy efficiency of our homes;
- Support around £3.6 billion of investment to upgrade around one million homes through the Energy Company Obligation (ECO);
- All fuel poor homes to be upgraded to Energy Performance Certificate (EPC) band C by 2030 and as many as possible to be band C by 2035;
- Develop a long term trajectory to improve the energy performance standards of privately rented homes;
- Consult on how social housing can achieve similar standards over this period;
- Following the outcome of the Independent Review of Building Regulations consult on strengthening energy performance standards for new and existing homes under Building Regulations, including future proofing new homes for low carbon heating systems;
- Offer all households the opportunity to have a smart meter to help them save energy by the end of 2020.

3.2.11 In terms of low carbon heating the proposals include:-

- Build and extend heat networks across the country, underpinned with public funding;
- Phase out the installation of high carbon fossil fuel heating in new and existing homes currently off the gas grid during the 2020s, starting with new homes;
- Improve standards on the 1.2m new boilers installed every year in England and require installations of control devices to help people save energy;
- Invest in low carbon heating by reforming the Renewable Heat Incentive, spending £4.5 billion to support initiatives for low carbon heat technologies in homes and businesses between 2016 and 2021;
- Innovation – invest £184m of public funds including two new £10m innovation programmes to develop new energy efficiency and heating technologies to enable lower cost low carbon homes.

Leading in the Public Sector

3.2.12 The Strategy refers to ‘Leading in the Public Sector’ and states that the Government wants “*the public sector to be a leader in reducing carbon emissions....*”.

3.2.13 It adds (page 115) that to meet the UK’s 2050 target, emissions from buildings and activities of the public sector will need to be near zero. It further adds “*as with homes and commercial property, this means improving energy efficiency and energy management, and decarbonising the heating and cooling of buildings as far as possible*”.

3.2.14 The Government’s pathway to 2032 sees emissions from the public sector falling by around 50% compared to 2017 levels.

Local Leadership

3.2.15 The Strategy makes specific reference to local area land use planning and states “*moving to a productive low carbon economy cannot be achieved by central Government alone; it is a shared responsibility across the country. Local areas are best placed to drive emission reductions through their unique position of managing policy on land, buildings, water, waste and transport. They can embed low carbon measures in strategic plans across areas such as health and social care, transport and housing*”.

3.2.16 Other key points in terms of ‘local leadership’ set out in the Strategy include the following:-

- The Government recognises the importance of anchoring economic growth in the strengths of local areas - each local area is to be responsible for co-ordinating its own local industrial strategy in alignment with the national Industrial Strategy.
- Local leaders are recognised as already rising to the challenge – putting local carbon targets and strategies in place. Reference is made to nearly 70 local authorities signed up to use 100% clean energy by 2050 as part of the “*UK100 network*” – *reflecting leadership on climate change and clean energy.*”
- Partnerships across public, private and community sector organisations are recognised as being able to unlock powerful integrated local energy solutions.
- The Government is committed to supporting local leadership and has already given additional powers and responsibilities through the Cities and Local Government Devolution Act 2016.
- In 2017 in England, funding was provided to 13 Local Enterprise Partnerships (LEPs) to develop local energy strategies and support is to be given to the remaining 25 LEPs to produce further strategies.
- The Government is to launch a new Local Energy Programme to support local areas in England to play a greater role in decarbonisation – this is aimed at increasing local capacity and capability across England and to provide on the ground practical support and expertise to unlock local energy opportunities.
- The Programme is to start to support delivery of the Industrial Strategy and Smart Systems Plan, working with local areas to demonstrate that deep decarbonisation can be achieved through local system change in a way that keeps costs down and which maximises economic benefit.
- Innovation at the local level is seen as being vital.
- Government is to continue to work with and support local leaders – a Local Energy Contact Group is to be established to continue the crucial dialogue between local stakeholders and ministers.

The UK Industrial Strategy

3.2.17 The Industrial Strategy White Paper entitled 'Building a Britain fit for the Future' was published by the UK Government in November 2017.

Clean Growth – a Grand Challenge and Key Policies and Programmes

3.2.18 The Strategy's overall aim is to create an economy that boosts productivity and earning power throughout the UK. What is termed 'grand challenges' are set to put the UK at the forefront of the industry of the future and one of these is entitled 'clean growth'. The Government states that *"we will maximise the advantages for UK industry from the global shift to clean growth"*.

3.2.19 The 'key policies' in the strategy relate to ideas, people, the business environment, places and infrastructure. Clean growth is addressed at page 42 *et seq* and it is set out that *"we will maximise the advantages for UK industry – through leading the world in the development, manufacture and use of low carbon technologies, systems and services which cost less than high carbon alternatives"*.

3.2.20 It adds that the Government wants to see UK businesses lead the development of new markets in area such as smart energy systems and the key objective set is the need to develop *"smart systems, cheap and clean energy cross power, heating and transport"*.

3.2.21 The Strategy adds (page 145) that *"many of our stakeholders have called on us to take a "whole systems approach to the decarbonisation of energy infrastructure systems. We agree with this principle, and will position the UK as a leader in clean and efficient power, transport and heat through an integrated approach to decarbonising these increasing connected systems"*.

3.2.22 References made to ongoing work on the options for the long term decarbonisation of heating and support is expressed for the growth of markets for technologies that create synergies between systems, such as energy storage, smart meters, vehicle to grid charging and heat networks.

Clean Growth – Prospering from the Energy Revolution

3.2.23 The Strategy sets out Industrial Strategy Challenge Fund Programmes and included in this is 'clean growth – prospering from the energy revolution' (this is referred to as a Wave 2 Programme to be subject to a final business case).

3.2.24 This states *"for the majority of our energy to be clean and affordable, we need much more intelligent systems. Smart systems can link energy supply, storage and use and join up power, heating and transport to increase efficiency dramatically. By developing these world leading systems in the UK, we can cut bills while creating high value jobs for the future"*.

3.2.25 All of the Wave 2 Challenges are subject, as noted, to a final business case, therefore further details on how much funding will be allocated to clean growth challenges will emerge in due course – likely to be in late 2018.

3.2.26 The 'Transforming Construction' challenge under the Clean Growth Programme has been allocated up to £170 million. This challenge sets out that:

"the way we create our buildings has not changed substantially in 40 years and needs a drastic overall if it is to deliver the buildings that the UK needs. Construction is currently expensive and too many buildings waste energy. We need to transform construction so that we can create affordable places to live and work that are safer, healthier and use less energy. By taking a lead in the UK, we can increase our ability to export. Global demand for efficient buildings is rising rapidly, driven by the pressures of urbanisation, affordability and the need to cut omissions".

3.2.27 With regard to infrastructure, the Strategy makes a number of cross references to the ‘Clean Growth Strategy’ and makes specific mention of the proposed Local Energy Programme (set out in detail in the Clean Growth Strategy and referred to above). The Industrial Strategy states that the Local Energy Programme will support areas to develop their capability in capacity to realise energy opportunities.

3.2.28 The Industrial Strategy concludes by stating that the overall aim by 2030 is that “*we will have transformed productivity and earning power across the UK to become the world’s most innovative economy and the best to start and grow a business, with upgraded infrastructure and prosperous communities across the country*”.

3.3 Wales: Energy and Climate Change Policy

Climate Change Strategy for Wales (October 2010)

3.3.1 The Climate Change Strategy for Wales was produced by the Welsh Assembly Government in October 2010. It sets out that the Assembly has a clear role to play in tackling climate change and the strategy and associated delivery plans set out a range of commitments to reduce greenhouse gas emissions and enable effective adaptation in Wales.

3.3.2 Chapter 2 of the document sets out the Assembly Government’s role in leading and supporting action on tackling climate change and chapter 3 sets out a vision for 2050. A key target is to cut greenhouse gas emissions by 3% per annum from 2011 in areas of devolved competence.

3.3.3 The Strategy identifies a number of areas that cut across what the Government terms the whole climate change agenda and which underpin action in various sectors. These include:-

- Buildings – to strengthen Wales as planning policy to reflect commitments on climate change and to extend powers to enable the setting of ambitious standards for new build.
- Energy generation - to drive reduced energy consumption and improve energy efficiency, and maximise renewable and low carbon energy generation in Wales.

Energy Wales – A Low Carbon Transition

3.3.4 ‘Energy Wales – A Low Carbon Transition’ was published by the Welsh Government in March 2012. The document makes references to a ‘whole system’ transition to low carbon energy covering electricity, heating and transport. The expectation is set out that there will be widespread deployment of a diverse range of low carbon technologies which will help to generate low carbon electricity bringing about a steady decarbonisation of energy supply. It is identified that greater electrification of overall energy consumption will occur as electricity becomes more widely used in transport and heating.

3.3.5 Reference is made in the document to the need to improve the planning and consenting regime and clearly action has now taken place in that regard with the introduction of the Planning (Wales) Act 2015 and with other legislative provision referred to in the previous Chapter.

3.3.6 The update to Planning Policy Wales has also included greater provision in this regard with regard to the planning system and that is explored in Chapter 4 below. The document sets out the broad strategic approach to low carbon energy generation and also contains a detailed delivery plan (March 2014).

3.4 Scotland: Energy and Climate Change Policy

Introduction

3.4.1 The Government has been clear in setting out that the sectors responsible for most emissions are energy, transport and agriculture and although significant progress has been made in decarbonising the energy sector (in particular with the closure of Scotland’s last coal fired power station at Longannet) the Climate Change Committee has stated that stronger policies are needed in a new Climate Change Plan and that little progress had been made in reducing emissions from transport and agriculture.

3.4.2 Against this background, in January 2017 the Scottish Government published two key energy policy documents, namely:

- the draft Climate Change Plan; and
- the draft Scottish Energy Strategy ‘The Future of Energy in Scotland’.

3.4.3 Together, these policy documents represented the Government’s intended energy and climate change strategy for the period to 2050. The Government issued the finalised Energy Strategy in December 2017. These documents are referred to in turn below in terms of their key content.

The Scottish Government Draft Climate Change Plan (2017)

3.4.4 The Scottish Government published the draft Climate Change Plan (CCP) – ‘the draft Third Report on Policies and Proposals 2017 – 2032 (RPP3)’ on 19 January 2017. It has been laid in the Scottish Parliament under the provisions of the Climate Change (Scotland) Act 2009.

3.4.5 The CCP addresses how the Scottish Government intends to meet its greenhouse gas emission reduction targets from 2017 – 2032. The Ministerial Foreword to the CCP sets out that it, together with the Energy Strategy are rooted in the ambition and vision of Scotland’s Economic Strategy. It adds that to achieve the transformation to a low carbon economy and ambitious carbon reductions in various sectors:

“we have developed policies and proposals in the context of the Scottish Government’s wider objectives to create a dynamic, sustainable and inclusive economy. This is a huge opportunity – setting a course that will modernise and transform the economy over the next 15 years while setting us up for almost complete de-carbonisation by 2050”.

3.4.6 Key points in the document can be summarised as follows:

- By 2030 Scotland’s electricity system will be wholly decarbonised and supply a growing share of Scotland’s energy needs.
- By 2030 electricity will be increasingly important as a power source for heat and transport – as a result the total volume of electricity supplied within Scotland will increase to 2032.
- The Scottish Government will not meet the ambitious emissions reductions targets on its own and the private sectors, amongst others has an important role to play.
- Following advice from the Climate Change Committee (CCC) in 2016 the Scottish Parliament passed legislation setting the third batch of annual targets in October 2016, for the years 2020 to 2032. The targets set an emissions reduction pathway to 2032 and in doing so establish a 2032 target that represents a 66% reduction below 1990 levels.
- For the electricity sector, Policy Outcome 1 is that *“Scotland’s electricity grid intensity is below 50gm CO₂ per kilowatt hour, aided by enhanced flexibility mechanisms and powered by high penetration of renewables, using a range of technologies including onshore wind” amongst others.*
- The Government will seek that by 2020, at least 1GW of renewable energy will be in local or community ownership.
- Section 5.2 refers to the planning system and the current consultation for planning reform. Paragraph 5.2.1 adds *“ensuring the planning system supports decarbonisation is another essential element of the Scottish Government’s approach to meeting the statutory climate change target”.*

The Scottish Energy Strategy (2017)

3.4.7 The finalised Scottish Energy Strategy (SES) was published in late December 2017. The SES sets a 2020 vision for energy in Scotland as “*a flourishing, competitive local and national energy sector, delivering secure, affordable, clean energy for Scotland’s households, communities and businesses.*” The vision is guided by three core principles namely:

- A whole system view;
- An inclusive energy transition;
- A smarter local energy model.

3.4.8 The 2050 vision is expressed around six priorities as follows:

- Consumer engagement and protection - including the promotion of the benefits of smarter domestic energy applications and systems;
- Energy efficiency – including actions to improve the use and management of energy in Scotland’s homes, buildings, industrial processes and manufacturing;
- System security and flexibility – ensuring there is the capacity in connections, flexibility and resilience necessary to maintain secure and reliable supplies of energy to all homes and businesses as the energy transition takes place.
- Innovative local energy systems – actions to empower communities by supporting the development initiative and integrated local energy systems and networks;
- Renewable and low carbon solutions - continued actions to explore the potential of Scotland’s renewable energy resource and its ability to meet local and national heat, transport and electricity needs – assisting the achievement of ambitious emissions reduction targets;
- Oil and gas industry strengths – supporting innovation and diversification across the oil and gas sector.

3.4.9 The strategy also contains whole system targets for 2030 as follows:-

- The equivalent of 50% of the energy for Scotland’s heat, transport and electricity consumption to be supplied from renewable sources;
- An increase by 30% in the productivity of energy use across the Scottish economy.

Scotland in 2050 – Energy Strategy Scenarios

3.4.10 The SES sets out two illustrative scenarios for the energy system in 2050 consistent with the Government’s change targets. These illustrate how low carbon electricity and hydrogen could be used to meet demand across the industry, services, residential and transport sectors. The SES stresses that these are illustrative, design to assist understanding of what infrastructure and behaviours might be required under different future scenarios.

3.4.11 It is set out that the energy system in 2050 will probably include aspects of both scenarios and it is recognised that given the likely pace of technological change across the energy sector over the next three decades, that this will have a huge bearing on the energy system. Both scenarios represent radical changes to the energy system and would require sustained investment, high levels of public acceptance and support across wider society.

3.4.12 The SES sets out that the scenarios have been informed by sector specific analysis and the Scottish ‘TIMES’ model: a strategic whole system energy model, which takes into account a range of policy and other constraints.

3.4.13 The SES sets out that the scenarios are intended to assist the consideration of the influence that developments in the near term could have on the eventual shape of the overall energy system.

- 3.4.14 The Strategy further recognises that some regions of Scotland may depend on hydrogen or other low carbon gases for decarbonisation, whilst others could rely more on electrical solutions. It is set out that heat pump development and uptake would likely lead to a range of technologies being deployed, including gas hybrid options. District heating is acknowledged as having an important role to play, with both scenarios having these networks meeting over 10% of residential and service sector demand.
- 3.4.15 Importantly, the SES sets out that there will be a need to take a flexible and open approach to decarbonisation. This will involve a portfolio of options, capable of adapting overcoming decades in light of wider change. Chapter 3 of the SES (pages 68 – 73) set out what are termed a range of ‘no regret’ or ‘low regret’ options in terms of near term actions and these cover consumer engagement, energy efficiency (buildings) and in relation to both the residential and industrial sector, actions in relation to renewables, innovative local energy systems and system security.
- 3.4.16 Given the strength of the renewable sector in Scotland it is not surprising that the SES sets out that renewable and low carbon energy will provide the foundation of the future energy system and it is also recognised that this sector and approach offers a huge opportunity for economic and industrial growth.

Innovative Local Energy Systems

- 3.4.17 The SES sets out that Scotland aims to maintain its leadership in developing local energy systems, building on the global shift away from centralised generation and passive consumption.
- 3.4.18 The documents sets out that Scotland has a strong legacy of community engagement in local renewable generation and the Government is determined to build on this in the transition towards energy systems that more directly benefit local economies and consumers.
- 3.4.19 The SES sets out that a key challenge is expanding these principles into more densely populated and urban areas, and identifying sustainable, replicable commercial models. It is also noted that there is a need to move from projects that have a single beneficiary, to ones that are more strategic and which cover larger geographical areas and involve partnership agreements between communities, local authorities and the public and private sectors.
- 3.4.20 The SES recognises that delivering low carbon energy including such more innovative approaches within the local energy system will require greater private sector activity in investment in Scotland’s low carbon sector. References are made to the benefits of demonstration programmes and projects and there is a cross reference to the UK Government’s approach as set out in the new Industrial Strategy Programme ‘Prospering from the Energy Revolution’.
- 3.4.21 The SES sets out that there is intent to develop a Local Energy System Position Paper in the near future which will contain detailed principles including:
- Local heat and energy efficiency strategies in use at a local level, creating a strategy to guide investment in energy efficiency and heat decarbonisation. This will be led by Local Authorities working closely with their communities. The intention is to set out a long term prospectus for investment in new energy efficiency, district heating and other heat decarbonisation programmes;
 - Communities will be empowered wherever possible to develop and commission local energy system plans where they are full or part owners of the final scheme; and
 - All local projects will be encouraged to use existing energy infrastructure before development projects with new transmission or distribution requirements.
- 3.4.22 The SES sets out that these principles are intended to support and promote the following outcomes:
- Systems designed and developed in line with local need;
 - Active, energy efficient consumers (both residential and non-residential);

- Lower annual energy bills and;
- Opportunity for local supply chains and investment in local businesses.

Conclusions on Scottish Energy Policy

3.4.23 In recent years Scotland has had a strong policy drive in relation to generating renewable energy linked to ambitious climate change targets as set out in the Climate Change Scotland Act 2009. Scottish renewable energy and electricity targets for 2020 and 2030 have now been updated as set out in the Scottish Energy Strategy which has been published very recently – December 2017.

3.4.24 The Climate Change Scotland Act 2009 set world leading greenhouse gas emissions reduction targets, including a target to reduce emissions by 80% by 2050. The Government intends to introduce a new Climate Change Bill with even more ambitious targets - this includes increasing the 2050 to 90% emissions reduction and making provisions for net / zero greenhouse gas emissions target to be set on a credible and costed pathway can be demonstrated.

4 National Planning Policy and Guidance

4.1 Introduction

- 4.1.1 The current land use planning system operating in England and Wales is based upon a plan led system, whereby national and local planning policy is set out in Development Plans which provide a broad framework to guide development and regulate land use.
- 4.1.2 The land use planning policies for England are set out in the National Planning Policy Framework (NPPF) and for Wales in Planning Policy Wales (PPW). Key relevant provisions are set out below.

4.2 England – National Planning Policy

The National Planning Policy Framework

- 4.2.1 The NPPF was published on 27 March 2012 and sets out the national planning policy for England and how the UK Government expects these to be applied. The NPPF must be taken into account in the preparation of Local Plans and is a material consideration in planning decisions. The NPPF covers two themes of note; firstly the support for technology in the promotion of sustainable development; and secondly the mitigation of climate change and guidance in the preparation of Local Plans, the means by which development is managed.
- 4.2.2 The NPPF is accompanied by planning guidance in the form of Planning Practice Guidance (PPG). The NPPF also states that National Policy Statements form part of the overall framework of national planning policy and are material to decision making on planning applications.

Achieving Sustainable Development

- 4.2.3 The NPPF sets out the UK Government's objective that the planning system is to contribute to the achievement of sustainable development. Paragraph 7 outlines that sustainable development is considered to have a three elements; social, economic and environmental. These elements give rise to three key roles to be played by the planning system. The environmental role is considered to protect and enhance the national, built and historic environment together with the mitigation and adaptation to climate change, including the need to move to a low carbon economy.
- 4.2.4 The NPPF sets out a presumption in favour of sustainable development and reiterates that "planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise". While the NPPF is a material consideration in the determination of planning applications, it does not change the status of the Development Plan as the starting point for decision making.

Core Planning Principles

- 4.2.5 Within the three key roles identified above, the NPPF sets out (paragraph 17) the specific "core principles" which govern plan making and decision taking. In respect of climate change, it states:
- 4.2.6 *"support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy)*
- 4.2.7 *take account of local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs".*
- 4.2.8 In order to be in conformity with the NPPF, planning decisions and Local Plans should ensure that they have full regard to climate change mitigation and adaptation.

Meeting the Challenge of Climate Change, Flooding and Coastal Change

- 4.2.9 The Government approach to climate change is set out in Paragraph 93 of the NPPF, which seeks to secure a “radical reduction” in greenhouse gas emissions.
- 4.2.10 Paragraph 94 of the NPPF makes it clear that Planning Authorities should adopt proactive strategies to mitigate and adapt to climate change. It makes it clear that decisions should be made in line with the objectives and provisions of the Climate Change Act 2008 (Footnote 16).
- 4.2.11 The NPPF supports the move to a low carbon future by seeking to influence the design and location of developments, supporting energy efficiency in existing buildings and setting local requirements for building sustainability (paragraph 95).
- 4.2.12 In determining planning applications the NPPF encourages new development to comply with adopted Local Plan policies on local requirements for decentralised energy supply and to take account of landform, layout, orientation, massing and landscaping to minimise energy consumption (paragraph 96).
- 4.2.13 It is relevant to note that paragraph 96 makes it clear that the requirements to comply with decentralised energy policies is dependent upon feasibility and viability.
- 4.2.14 Paragraph 97 highlights that all communities have a responsibility to contribute to a reduction in carbon emissions and requires that LPAs should:
- *“have a positive strategy to promote energy from renewable and low carbon sources;*
 - *design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;*
 - *consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources;*
 - *support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and*
 - *identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers”*
- 4.2.15 Paragraph 98 informs LPAs that when determining applications, that they should:
- *“Not require applicants for energy development to demonstrate overall need for renewable or low carbon energy and also recognise that even small scale projects provide a valuable contribution to cutting greenhouse gas emissions;*
 - *Approve the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should also expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas”.*
- 4.2.16 Paragraph 99 of the NPPF states that Local Plans should have regard to climate change over the longer term, with new development being planned to avoid increased vulnerability to the range of impacts from climate change.

Decision Taking and Determining Applications

- 4.2.17 Paragraph 186 states that LPAs should take decisions “*in a positive way to foster the delivery of sustainable development*”. Paragraph 187 adds that “*Local planning authorities should look for solutions rather than problems, and decision-takers at every level should seek to approve applications for sustainable development where possible.*”

Plan Making

- 4.2.18 The NPPF makes it clear that Local Plans are the key to delivering sustainable development. Paragraphs 150 to 185 provide guidance for plan makers on a range of topics initially reiterating the importance of Local Plans in reflecting the aims and objectives of local communities and forming the basis upon which decision should be made while contributing to the delivery of sustainable development.
- 4.2.19 The NPPF seeks to ensure that Local Plans are based on adequate, up-to-date and relevant evidence which is objective and proportionate. LPAs should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and that they take full account of relevant market and economic signals.
- 4.2.20 Paragraph 153 allows for the use of additional Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs) where there is a justified need and will not cause unnecessary financial burdens to developers.
- 4.2.21 Paragraph 156 sets out the need for LPAs to define the strategic priorities for their area in the Local Plan including *“climate change mitigation and adaptation, conservation and enhancement of the natural and historic environment, including landscape.”*
- 4.2.22 Paragraph 158 reiterates the need for Local Plans to be founded on *“adequate, up-to-date and relevant evidence”* relating to the local economy, environment and social needs. As part of the evidence base, Paragraph 162 states that Local Authorities should work with a range of other parties to assess the capacity and quality of infrastructure for a range of utilities and services such as “energy”.

Viability

- 4.2.23 In relation to viability and deliverability, further clarification is provided on feasibility and viability of proposals. Paragraph 173 requires that in pursuing sustainable development there is a requirement for careful attention to viability and costs in plan making and decision taking. The NPPF states that plans should be deliverable and that the sites and scale of development identified in a plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably, is threatened. Thus policy requirements within a plan can be removed if it can be demonstrated that they will compromise the profit margins of developers and landowners.
- 4.2.24 Paragraph 182 details the grounds on which Local Plans will be examined including assessments against the ‘Duty to Cooperate’, legal and procedural requirements and whether or not the plan is sound. “Soundness” is considered against whether the plan is:
- *“Positively prepared;*
 - *Justified;*
 - *Effective; and*
 - *Consistent with national policy”.*

4.3 England : National Planning Practice Guidance

- 4.3.1 The National Planning Practice Guidance (PPG) was launched on 6th March 2014. The online resource is designed to accompany and cross-reference with the NPPF and is updated as policy, guidance and case law develops.
- 4.3.2 The PPG covers a wide range of topics relevant to applicants, decision takers and plan makers. Extracts of the topics with the greatest relevance to local area energy planning are summarised below.

Climate Change

- 4.3.3 The statutory duty to include consideration of climate change in Local Plans is reiterated in the climate change section of the PPG. A number of suggestions relating to how climate change can be mitigated and adapted to in Local Plans are set out including “providing opportunities for renewable and low carbon energy technologies” and “providing opportunities for decentralised energy and heating”.
- 4.3.4 The Climate Change section of the PPG also highlights the opportunity to consult with third parties regarding the most appropriate approach for ensuring climate change is addressed:
- “Engaging with appropriate partners, including utility providers, communities, health authorities, regulators and emergency planners, statutory environmental bodies, Local Nature Partnerships, Local Resilience Forums, and climate change partnerships will help to identify relevant local approaches.”*
- 4.3.5 The PPG specifically identifies how decentralised energy opportunities can be identified, and points out that there is an important contribution to be made by planning. For example, getting the right land uses in the right place can underpin the success of a district heating scheme. Similarly, planning can influence opportunities for recovering and using waste heat from industrial installations.
- 4.3.6 The PPG identifies that information on local heat demand is published by Government to assist planners and developers in identifying locations with opportunities for heat supply: this includes the national heat maps. It also encourages this evidence base to be supplemented by further investigations, including detailed mapping on the potential for combined heat and power and district heating and cooling.
- 4.3.7 The PPG recognises that every area will have different challenges and opportunities for reducing carbon emissions and recommends robust evaluation of future emissions and consideration of different emission sources. The PPG provides an approach to monitoring reductions in carbon in order to meet the national target to reduce the UK’s greenhouse gas emissions by at least 80% (from the 1990 baseline) by 2050.

4.4 Wales – National Planning Policy and Guidance

Planning Policy Wales – Edition 9

- 4.4.1 Planning Policy Wales (PPW) (Edition 9) published in November 2016 sets out the land use planning policy for Wales and is to be taken into account when LPAs prepare development plans.
- 4.4.2 There are two chapters which relate specifically to energy and its distribution and these are Chapter 4 – ‘Planning for Sustainability’ and Chapter 12 – ‘Infrastructure and Services’.
- 4.4.3 There are a number of Technical Advice Notes (TAN) which supplement the PPW. TAN 8, ‘Planning for Renewable Energy’ (July 2005) provides advice regarding onshore renewable energy technologies and their design. TAN 8 also provides guidance on energy and how renewable energy should integrate with development plans and management.
- 4.4.4 Paragraph 5.6 states that *“the inclusion of a large amount of detail relating to renewable energy and energy efficiency is not appropriate in local development plans”* and suggests that local planning authorities produce a dedicated *“complementary SPG to cover detailed technical guidance on the various forms of renewable energy.”*
- 4.4.5 Paragraph 5.7 goes into further depth on what this could include, suggesting that a *“design and energy SPG could cover such wide ranging topics as housing fenestration and estate layout relating to passive solar gain or the requirement of renewable energy generating capacity for new office developments, such as the utilisation of heat pumps, micro-generation systems and community heating networks”*.
- 4.4.6 Section 4.5 is entitled ‘Planning for Climate Change’ and it explains that tackling climate change is a fundamental part of delivering sustainable development. Paragraph 4.5.2 refers to targets and notes these as:-

“The Welsh Governments target of achieving annual carbon reduction – equivalent emissions reductions of 3% per annum from 2011 in areas of devolved competence which includes land use planning.

A commitment to achieving at least a 40% reduction in all greenhouse gas emissions in Wales by 2020 against 1990 baseline – this is stated as assisting and making a significant contribution to the UK carbon budget.

Paragraph 4.5.3 states “climate change will have potentially profound environmental, economic and social justice implications and failure to address it will make planning for sustainability impossible”.

4.4.7 Paragraph 4.5.7 goes on to state that planning has a role to minimise the causes of climate change and this means taking decisive action to move towards a low carbon economy, by proactively reducing the demand for energy facilitating the delivery of new and more sustainable forms of energy provision at all scales and minimising the emissions of greenhouse gases to the atmosphere.

Infrastructure and Services

4.4.8 Chapter 12 of PPW addresses ‘infrastructure and services’ including electricity and gas. Paragraph 12.1.4 sets out that the Welsh Government aims to secure the environmental infrastructure necessary to achieve sustainable development objectives and these include *“to promote the generation and use of energy from renewable and low carbon energy sources at all scales and promote energy efficiency, especially as a means to secure zero or low carbon developments and to tackle the causes of climate change”.*

4.4.9 Paragraph 12.1.5 sets out that the planning system has an important part to play in ensuring that the infrastructure on which communities and businesses depend is not only adequate to accommodate proposed development, but also minimises the impacts associated with climate change.

4.4.10 Paragraph 12.1.7 sets out requirements for LPAs and states they *“they must develop a strategic and long term approach to infrastructure provision when preparing development plans”.* It also adds that *“development may need to be phased, in consultation with the relevant utilities providers, to allow time to ensure that the provision of utilities can be managed in a way consistent with general policies for sustainable development”.*

4.4.11 Section 12.8 of PPW refers specifically to renewable and low carbon energy. The start of the section sets the overall policy and target context with reference to the EU Renewable Energy Directive and UK targets.

4.4.12 Paragraph 12.8.2 sets out that planning policy at all levels should facilitate delivery of both the ambitions set out in ‘Energy Wales : A Low Carbon Transition’ and UK and European targets on renewable energy. Specific mention in this regard is made of the role of district heating and cooling in the context of the development of industrial and residential areas.

4.4.13 Paragraph 12.8.8 sets out that the Welsh Government is committed to using the planning system to:

- Optimise renewable energy generation;
- Optimise low carbon energy generation;
- Facilitate combined heat and power systems (in combined cooling heat, and power) where feasible; and
- Recognising that the benefits of renewable energy in tackling climate change, reducing greenhouse gas emissions as well as in relation to increasing energy security.

4.4.14 In terms of the obligations of LPAs, paragraph 12.8.9 sets out that they should facilitate *“the development of all forms of renewable and low carbon energy to move towards a low carbon economy to help to tackle the causes of climate change”.* Specifically they should make positive provision by *inter alia*:-

- Considering the contribution that an area can make towards developing and facilitating renewable and low carbon energy, and ensuring that development plan policies enable this contribution to be delivered;
- Ensuring that development management decisions are consistent with national and international climate change obligations, including contributions to renewable energy targets and aspirations;

- Recognising the environmental, economic and social opportunities that the use of renewable sources to make to planning for sustainable; and
- Ensuring that all new publicly financed or supported buildings set exemplary standards for energy conservation and renewable energy production.

4.4.15 Paragraph 12.8.11 sets out that in mitigating the causes of climate change, development proposals should after reducing energy demand, optimise the use of energy from renewable and low carbon sources. It adds that developers should take into account future requirement for carbon reduction in new buildings as a result of changes to Welsh Building Regulations.

4.4.16 In Section 12.9 of PPW, the document deals with development plans and renewable and low carbon energy. Paragraph 12.9.1 sets out that LPAs should plan positively for all forms of renewable and low carbon energy development “*using up to date and appropriate evidence*”.

4.4.17 Paragraph 12.9.2 goes on to say that an LPA should guide appropriate renewable and low carbon energy development by undertaking an assessment of the potential of all renewable energy resources and renewable and low carbon energy opportunities within their area and include appropriate policies in development plans. LPAs are encouraged to work collaboratively “*in order to gather evidence on a sub-regional basis wherever possible*”.

4.4.18 The need for evidence is referred to and it is stated that an evidence base should –

- Take into account the contribution that could be made by their local area towards carbon emission reduction and renewable and low carbon energy production;
- Recognises the approaches for the deployment of renewable and low carbon energies technologies will vary;
- Identify the accessible deliverable renewable energy resource potential “including heat” for their area and consider the likely utilisation of this resource over the plan period;
- Take into account the environmental, social and economic impacts and opportunities from renewable and low carbon energy development; and
- Take into account the likely mechanisms for determining applications for sites based on their potential and actual output.

4.4.19 Section 12.10 of PPW deals with development management and renewable and low carbon energy. Paragraph 12.10.1 sets out that in determining applications for renewable and low carbon energy, development and associated infrastructure, LPAs should take into account:

- The contribution the proposal would play in meeting identified national, UK and European targets
- The wider environmental, social and economic benefits from renewable and low carbon energy development as well as impacts on natural heritage, communities and the environment.

The National Development Framework

4.4.20 The Welsh Government is preparing the National Development Framework (NDF) which will create a development plan for Wales as a whole. It will outline national planning policies over the next 20 years and upon adoption, will form part of the statutory plan used to determine applications, including DNS applications. The Framework will sit alongside PPW.

4.5 Scotland – National Planning Policy

4.5.1 Scottish planning policy at the national level is contained within two principal documents, namely,

- the National Planning Framework 3 (NPF3); and
- Scottish Planning Policy (SPP).

4.5.2 Both documents were issued in June 2014. As noted below, significant planning reform is underway in Scotland and a revised combined NPF and SPP is expected to be published for consultation in late 2018.

4.5.3 NPF3 is a high level document setting out spatial and policy priorities for the long term. SPP is a more detailed policy document used for development planning (i.e. the preparation of Development Plans) and for development management decision making.

4.5.4 Relevant policy from NPF3 and SPP is set out in this section, in particular where there is reference to low carbon heat and how the topic is to be addressed in Development Plans and in development management.

The National Planning Framework 3 (2014)

4.5.5 The top tier of national planning policy in Scotland is contained within NPF3.

4.5.6 NPF3 address a ‘low carbon place’ at page 30. It states that the Government’s ambition is to achieve at least an 80% reduction in greenhouse gas emission by 2050. Paragraph 3.5 acknowledges that heating and cooling constitutes around half of Scotland’s total demand for energy and acknowledges that renewable heat infrastructure is growing.

4.5.7 Paragraph 3.8 sets out that by 2020, the aim is to reduce total final energy demand by 12%. It adds that heat accounts for a significant share of energy consumption and by 2020: *“we are aiming to source 11% of heat demand.....from renewable sources”*.

4.5.8 In terms of ‘key actions’, in relation to ‘a low carbon place’ (Action 11, p68) states that the Government *“will work with local authorities to build national and local authority heat maps into development plans”*.

Scottish Planning Policy (2014)

4.5.9 SPP was published in June 2014 and is the current statement of the Scottish Government on nationally important land use planning matters.

4.5.10 SPP addresses a ‘low carbon place’ – delivering heat and electricity (page 36). It again refers to the national policy context set by the NPF. The SPP sets out ‘policy principles’ and states at paragraph 154 that the planning system should support the transformational change to a low carbon economy consistent with national objectives and targets. One of these targets is that 11% of heat demand should come from renewable sources by 2020.

4.5.11 A further principle is that the planning system should help to reduce emissions and energy use in new buildings and from new infrastructure by enabling development at appropriate locations that contributes to energy efficiency, heat recovery and sufficient energy supply and storage.

4.5.12 SPP cross refers to key other national policy documents including:-

- ‘The Electricity Generation Policy Statement’;
- ‘The 2020 Routemap for Renewable Energy in Scotland’;
- ‘Towards Decarbonising Heat: Maximising the opportunities for Scotland, Draft Heat Generation Policy Statement’;
- ‘Low carbon Scotland: Meeting our Emissions Reduction Targets 2013 – 2027’.

- 4.5.13 In terms of development planning, paragraph 155 states that *“development plans should seek to ensure an area’s full potential for electricity and heat from renewable sources is achieved, in line with national climate change targets, giving due regard to relevant environmental, community and cumulative impact considerations”*.
- 4.5.14 Specifically in terms of heat, paragraph 158 states that:
- 4.5.15 *“Local Development Plans should use heat mapping to identify the potential for co-locating developments with a high demand with sources of heat supply. Heat supply sources include harvestable woodlands, sawmills producing bio-mass, bio-gas production sites and developments producing unused excess heat, as well as geothermal systems, heat recoverable from mine waters, aquifers, other bodies of water and heat storage systems. Heat demand sites for particular consideration include high density developments, communities off the gas grid, fuel poor areas and anchor developments such as hospitals, schools, leisure centres and heat sensitive industry.”*
- 4.5.16 Paragraph 159 of SPP makes specific reference to the role of Development Plans and states that they:
- “should support the development of heat networks in as many locations as possible, even where they are initially reliant on carbon based fuels, if there is potential to convert them to run renewable or low carbon sources of heat in the future. Local Development Plans should identify where heat networks, heat storage and energy centres exist or would be appropriate and include policies to support their implementation. Policy should support safeguarding of pipeworks within developments for later connection and pipework to the curtilage of development. Policies should also give consideration to the provision of energy centres within new development. Where district network exist or are planned or in areas identified as appropriate for district heating, policies may include a requirement for new development to include infrastructure for connection, providing the option to provide heat from the network.”*
- 4.5.17 Paragraph 160 adds that where heat networks are not viable, micro-generation and heat recovery technologies associated with individual properties should be encouraged.
- 4.5.18 Overall therefore, SPP is proactive in identifying the specific roles that Development Plans should play in supporting the development of heat networks and decentralised low carbon energy systems. The national policy specifically directs that policies in Development Plans should support the implementation of low carbon heat infrastructure.
- 4.5.19 As noted above, planning reform is currently underway in Scotland and a draft Planning (Scotland) Bill was published in 2017. This contains proposals to merge the NPF and SPP. A draft new NPF/SPP document is expected to be issued for consultation in late 2018.

5 Policy Limitations and Barriers

5.1 Introduction and Approach

- 5.1.1 This Chapter examines policy limitations and barriers and gives specific consideration to aspects of the current planning system in England and Wales that act as potential barriers to the wider deployment and scaling up of local area energy planning activity.
- 5.1.2 The approach builds upon the findings from previous JLL research undertaken for the ETI in August 2014 which included the review of UK energy and heat related policy as well as planning policy. Furthermore, this matter was also examined by JLL in advice to ESC with regard to the assistance provided on the preparation of policy aspects of the Greater Manchester Spatial Framework in 2016. Our conclusions from that exercise are also drawn upon and cross referenced.
- 5.1.3 We have also taken account of the findings of the detailed research undertaken by the Town and County Planning Associations (TCPA) in their detailed research report entitled 'Planning for the Climate Challenge – Understanding the Performance of English Local Plans' (2016) as well our very recent research as part of this commission which included the execution of a questionnaire to a number of Planning Authorities in England and Wales and discussions with professional planning officers from a number of Planning Authorities. JLL (together with Squire Patton Boggs (UK) LLP which is our sub-consultant providing specific legal planning advice on this commission) have also drawn upon our respective firms' experience and practice of the planning system in operation.

5.2 Key Findings from Previous JLL Research

- 5.2.1 The JLL Report to the ETI in August 2014 entitled 'Smart Systems & Heat Programme – Planning Policy & Consenting Strategy: Review and Recommendations' included a review of UK energy and heat policy as well as planning policy. In terms of UK energy and heat policy documents, our finding was that it was clear that the various policy documents recognise the pivotal role that Local Authorities have in helping to secure progress in meeting the UK's emission reduction targets and helping to shape places such that they have greater resilience to address the various impacts of climate change. In particular, Local Authorities were seen as having the opportunity to provide a clear leadership role and to enable action locally. The planning system, delivered by Local Authorities was in turn acknowledged as being able to play an important role in enabling the development, deployment and expansion of the necessary energy related infrastructure, including action on decarbonizing heat. At the present time however it is unclear what this role should be, there are different approaches being taken throughout the UK and there would be benefits in a much more coordinated, resourced and consistent approach.
- 5.2.2 The 'Future of Heating' series of reports published by DECC (2012 & 2013) made reference to a number of actions required to overcome barriers to the wider deployment of heat networks. These included reference to matters such as increasing powers for statutory undertakers to addressing the use of planning powers to support further heat network development.
- 5.2.3 It was notable that future actions related to the need to further share good practice but also made reference to the need for practice guidance to support the implementation of national planning policy and low carbon and renewable heat networks.
- 5.2.4 Since we concluded our report to the ETI in 2014, there have been a number of UK heat and decentralized energy related energy reports produced by DECC and now BEIS. Reference has been made earlier in this report to the recent Clean Growth Strategy (2017) and Industrial Strategy (2017) with regard to what they say on national level objectives for the transition to a low carbon economy.
- 5.2.5 Whilst there remains strong support at the national levels for decentralised energy, decarbonisation and local approaches to energy planning (including specifically acknowledgement of the important role that Local Authorities can play) as expressed through these more recent policy documents, the evidence suggests that

barriers clearly remain. Current planning policy and guidance would benefit from being strengthened and sharpened to enable delivery of objectives and attain carbon reduction targets. We consider that may also be a role of legislative action.

5.3 National Planning Policy

- 5.3.1 The overall conclusion reached on the national planning policy position in the previous JLL research, was that whilst decentralised energy, heat and related infrastructure are referenced in documents such as the NPPF and the more recent PPG in England, such policy provisions could be strengthened to accelerate and enable wider deployment of the type of development infrastructure that could come forward under the SSH Programme across the UK.
- 5.3.2 We considered in all our previous advice to the ETI and ESC that establishing a stronger supportive and enabling NPPF policy position would be essential for the successful wider deployment of decentralised energy networks and decarbonisation action. Such a change in policy could also have the aim of encouraging and or requiring LAEP and local area energy strategies. At the present time there is relatively weak policy wording in the NPPF combined with competing considerations such as viability policy (also contained in the NPPF). The lack of statutory obligations in certain areas is a constraint but also provides an opportunity for change. As referenced earlier, the Scottish Government is proposing legislative change to place a new duty on Local Authorities to prepare local energy plans – this new enabling mechanism is addressed in the following Chapter.
- 5.3.3 These points, in terms of barriers to action as a result of policy (and potentially legislative) shortcomings are also reflected in the key findings from research by the Town and Country Planning Association (TCPA) completed in 2016 which had specific regard to the performance of English Local Plans in the context of policies in the NPPF. The TCPA research is particularly relevant as it drew upon a sample of some 64 LPAs and specifically examined Local Plans published since the NPPF was published in 2012. The study examined the extent to which climate change mitigation and adaptation were reflected as priorities in local plan policy in England.
- 5.3.4 An overall finding was that Local Plans are not delivering on legal obligations and policy for either mitigation or adaptation and in order to deliver fundamental change required, the TCPA view was that “*climate change must be placed front and centre of the policy priorities of the spatial planning system*”.
- 5.3.5 The study found that Local Plans were not dealing with carbon dioxide emission reductions effectively, there was a wide variety of practice and since 2012 the view was that climate change had been de-prioritised as a policy objective in the spatial planning system. The report stated that “*the large scale failure to implement the clear requirements of national planning policy is a striking finding, as is the reduced capacity of the local authority planning service.... to support the long term plan making process*”.
- 5.3.6 Amongst the reasons for this situation, it was identified that the UK Government has an overwhelming priority for housing delivery (allocations, policy and viability matters). JLL’s position is that these matters have continued and actions such as the loss of DECC (there being now no stand-alone Government Department for energy or climate change); Government back-tracks on commitments to zero carbon homes; the introduction of highly restrictive planning policies which have placed a fundamental brake on future deployment of onshore wind in England (including barring access to Contracts for Difference for onshore wind); the introduction of very supportive planning policies for unconventional gas extraction; together with a strong continued priority in the delivery of housing infrastructure all contribute to a lowering of the priority given to climate change action and decarbonisation. There is also no clear policy approach to decarbonise existing buildings which account for a significant proportion of emissions. Taken together, these factors inhibit effective local policy making in practice with regard to tackling climate change through mitigation and adaptation and in relation to the delivery of low carbon infrastructure.

5.3.7 In summary the key findings from the 2016 TCPA research included the following:

1. Climate change has been de-prioritised as a significant local planning policy issue.
2. Policy and legislation on climate change are poorly understood.
3. National policy with regard to viability prevents some key actions being delivered.
4. Changes to energy and zero carbon policies have made action on many climate change responses more difficult.
5. Evidence gathering, methodologies and policy making for matters such as flood risk are far more sophisticated than the equivalent for climate mitigation or any aspect of adaptation.
6. Local Plans deal with carbon dioxide emissions reduction vaguely, often without an explicit methodology for measuring reductions.
7. The governance of climate change issues at the local level is complex and sometimes contradictory
8. LPAs are not supported by a national agency to secure national climate change reduction objectives (contrast flood risk which is reliant upon the support of Environment Agency)
9. Specific approaches to dealing with climate change are still novel to many Local Authority planners, and access to affordable training is a major issue.
10. Climate change related policy in Local Plans is generally short term and not sufficiently 'future facing' to deal with climate risk.
11. The duty to co-operate among LPAs is overwhelmingly focused upon housing growth, with little or no emphasis placed on cross-boundary climate change issues.

5.3.8 From our review of the TCPA research we agree with the findings and indeed these are very broadly consistent with the previous JLL findings on policy constraints as reported to ETI and ESC in our advice of 2014 and 2016.

5.3.9 A number of these matters were also further explored in the JLL engagement with local authorities as part of this current commission on LEAP. This is referred to below.

5.4 Consultation with Planning Authorities

5.4.1 As part of our methodology, JLL has executed a questionnaire that was issued to 40 Local Authorities: designed to explore the experiences of those Local Authorities to date with Local Area Energy Planning. The questions posed included exploring topics such as the extent to which low carbon requirements for new development and low carbon energy production are a policy requirement for new development, views on policy and legislative constraints on the delivery of low carbon development and to what extent the planning system has/can contribute to the low carbon agenda.

5.4.2 The questionnaire is provided under separate cover to the ESC together with illustrative analysis. The questionnaire set out 35 questions, both qualitative and quantitative, under the following headings:

- Part A: What is your understanding of Local Area Energy Planning;
- Part B: How Might Local Area Energy Planning affect different stakeholders;
- Part C: What could the local area energy planning process look like and who might need to be involved; and
- Part D: What changes may be required to planning policy and local authority capability to deliver Local Area Energy Planning.

5.4.3 To date, key responses from Part D which deals with policy matters are referenced below:

5.4.4 Some authorities identified that there was a lack of technical knowledge amongst planners that would be required in order to deliver on the low carbon agenda and that there was insufficient funding available to train both planners (and developers) regarding low carbon delivery. For example, Stockport Council was of the view that:

“Consultants have traditionally delivered detailed assessments of what the existing and potential energy circumstances are for districts in terms of the Local Plan (Spatial). In Stockport my knowledge level is basic in terms of what technologies can do and what the design constraints are. We have some expertise in strategic

planning with some staff (no longer working on the agenda but still at the council) who worked on local energy strategies and schemes a few years ago. “

- 66% of respondents identified that there was insufficient planning policy at the national level to achieve robust policy requirements within the development plan to secure decentralised energy generation within the development plans.
- 83% of respondents considered that national planning policy should be strengthened to require local area energy planning to be made a requirement for the development plan to address.
- 50% of respondents considered that national planning policy should prescribe a percentage of energy to be derived from local energy generation for new development and 50% of respondents consider that this should not be the case.
- 50% of respondents identified that national planning policy should prescribe carbon reduction targets for new development instead of specifying levels for energy generation and 33% of respondents identified that national planning policy should not prescribe carbon reduction targets. For example, Plymouth Council was of the view that:

“Our planning policies have been upheld at appeal based on two underpinning policy objectives; carbon reduction and increase in decentralised energy (incl. Renewable energy). Because of the split between Building regs and planning, it is difficult to impose a complete solution as set out in Q31 unless done through Building Regs. Building Regs are not a tool to deliver multiple building solutions however. National planning policies could be stronger however especially as they refer to the Governments zero carbon buildings policy, which no longer exists. Imposing a blanket target may not be the best scenario, as local targets may be more appropriate especially as urban areas and rural areas are quite distinct, in terms of energy demand and opportunities for larger scale generation... Clear, specific, measurable and robust policies are needed to achieve outcomes if the aim is to increase the levels of renewable energy generation or require connection to a district energy solutions. Building Regs could also play a stronger role with district energy. Other incentives or tax relief mechanisms could also help.”

5.4.5 Leeds City Council was of the view that:

“Nationally, whilst it is legislation for us to consider climate change, the requirement to deliver development takes precedence over the need to reduce emissions. For example, we had to prove to a plan inspector that our climate change policies would not be a barrier to housing delivery. It’s a very short-sighted view and means that we are making climate change problems worse in the future. The Government back-tracking on the zero carbon commitment has made it worse as it has been taken to mean that reducing carbon emissions is not as important as delivering houses.”

- Only 33% of respondents identified that their planning authority had the skills to effectively plan for local area energy provision.
- Only 17% of respondents identified that the authority has the resources available to effectively plan for local energy provision.

5.4.6 Leeds Council stated:

“Our Energy team have been moved to a different part of the Council to work on retro-fitting existing council housing stock. We need them back so that we have proper in-house support to implement planning policy.”

5.4.7 Whilst the responses received represent a small sample of Planning Authorities, the general consensus of the responders included:

- National planning policy needs to be strengthened in order to deliver effectively on local area energy planning.
- There was a suggestion that the split between planning and Building Regulation control makes it difficult to impose comprehensive low carbon energy solutions.

- The lack of Local Authority resources to deliver on local area energy planning is a consistent theme;
- It was identified that in light of resources being severely stretched (staff and funding), there would need to be a statutory requirement for the delivery of local area energy planning to achieve the traction and extent of take up / deployment required.
- Some respondents also identified that the requirement to deliver housing is taking precedence over the need to reduce emissions from that new development, which highlights that there are competing priorities at present in the wider planning system in terms of what it is expected to deliver.

5.5 Viability

5.5.1 One of the key barriers identified in our research is the issue around viability and deliverability of development. This was also a key point raised in the TCPA review of 2016.

5.5.2 Section 19 of the Planning and Compulsory Purchase Act 2004, as amended; together with the general requirements within the NPPF, set out the requirements in relation to carbon reduction. However it is important to recognise the implications of the flexibility provided by Paragraph 173 of NPPF, which states that:

“pursuing sustainable development requires careful attention to viability and costs in plan making and decision taking. The plan should be deliverable. Therefore, the sites and scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viability is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing landowner and willing developer to enable the development to be deliverable.”

5.5.3 The viability of developments is a key issue and often acts as a justification to reduce obligations in the development management process. In practice, most new housing in the form of planning applications submitted are accompanied by a viability statement which will set out the various commercial viability considerations of a particular proposal. A key issue is that the parameters on viability are open to broad interpretation and there are concerns over transparency.

5.5.4 In the Government’s consultation on the NPPF, it included placing emphasis on viability at the plan making stage, which would potentially avoid the matter being raised again in the development management process, although it is difficult to see how this would work in practice.

5.5.5 The Government consulted on changes to the NPPF between December 2015 and February 2016 however this only related to matters on the topic of housing delivery, covering affordable housing, residential densities and role of sustainable new settlements. The consultation contained no reference to climate change mitigation or adaptation.

5.6 Local Area Energy Planning – Review by ESC

5.6.1 In considering our conclusions on policy, we have also reviewed the observations identified by the ESC (2017) with regard to local area energy planning. Key points raised in relation to Local Government practice and relevant to our consideration of planning policy barriers and opportunities included:

- The NPPF requires Councils to assist in the transition to a low carbon economy. Councils read into the NPPF as far as they feel able in order to justify policies and planning requirements for sustainable design, construction and energy in development plan documents.
- Local Authorities are also already involved in many discrete energy related activities, and the need for a more integrated approach to near and long-term planning and energy decisions is recognised by Councils, the LGA and Local Partnerships, the Welsh and Scottish Governments, and in some parts of the UK Government (e.g. BEIS Heat Strategy Team).

- Integrated energy planning is not high on most Local Authorities' agendas, in part because they have many other priorities. It is also because there is no consistent framework for identifying where integrated energy analysis, planning and decision making could improve other high priority Council objectives.
- There is form of market failure occurring in that Local Authorities have the potential to coordinate a more integrated (and cost effective) local energy system, but lack the data, analysis, resource and capabilities funding and national policy remit to do it properly.
- Local Authorities have seen budgets and staff levels for planning services fall consistently since 2005 and now have very stretched planning resources (ref: ARUP report RTPi NW. 2015).

5.6.2 These observations also accord with our own findings and those of the TCPA review (2016).

5.7 Conclusions on Policy Barriers

5.7.1 A range of policy barriers have been identified, as set out above, in particular with regard to how national planning policy and guidance is expressed. When these are combined with other wider constraining factors in the context of Local Government, such as those identified in the comprehensive TCPA review and in the findings of the ESC (2017) it is clear that accelerating deployment of local area energy planning activity faces a number of challenges.

5.7.2 Based upon the feedback from the survey undertaken as part of this commission, some Local Authorities support the principle of LAEP, however, the ability to implement LAEP is further constrained by a lack of financial and staffing resources within Councils. There are examples where local area planning activity has been undertaken and outputs included with a Local Plan but funding constraints or lack of local political support has restricted implementation and priorities.

5.7.3 From a policy perspective, there are potential enabling policy mechanisms and potentially legislative actions which could be pursued to improve this situation. This is explored in the following Chapter.

6 Potential Enabling Policy Mechanisms

6.1 Introduction

- 6.1.1 In this Chapter, we set out overall conclusions in relation to possible enabling policy mechanisms which could lead to stronger supporting action and wider deployment of local area energy planning.
- 6.1.2 In terms of the approach to national planning policy and related changes and actions that may be required to overcome the barriers that have been identified (as set out in the previous Chapter), we have drawn upon our previous study findings from 2014 and 2016 and from our wider experience. We have also taken account of the various recommendations set out by the TCPA as expressed in their 2016 review. The recommendations that follow are based on all of these considerations and make reference to policy, guidance and potentially legislative mechanisms.

6.2 National Policy, Guidance and Legislation: Recommendations.

- 6.2.1 As highlighted earlier in this report, there is a duty set out within Section 19 of the 2004 Planning and Compulsory Purchase Act which requires that

“development plan documents must include policies designed to secure that the development and use of land in the Local Planning Authorities area contribute to the mitigation of, and adoption to climate change”.

- 6.2.2 Whilst the NPPF (Section 10) seeks to require policies and decisions to be in line with the objectives and provisions of the Climate Change Act 2008, it is clear that there is limited support for effective climate change mitigation policy within the NPPF.
- 6.2.3 As highlighted, an important policy provision in the NPPF to inform policy in a Development Plan is Paragraph 94 which states “in determining planning applications, local planning authorities should expect new development to comply with adopted Local Plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable”.
- 6.2.4 Furthermore, Paragraph 97 requires Planning Authorities to “have a positive strategy to promote energy from renewable and low carbon sources”.
- 6.2.5 Over the long term (by 2050) in order to achieve the ESC’s local area planning objectives and a significant scaling up of deployment of local area energy planning activity, it will be essential to have a more supportive and facilitative policy framework in place. Our recommendations are as follows:

Recommendation 1: Re-prioritise Climate Change and introduce the role of Local Area Energy Planning in the existing Local Plan system, to be delivered by Local Government.

- 6.2.6 Central Government should provide guidance and clarification on the role Local Government has in relation to LAEP. This can include reference to the framework of relevant local stakeholders and their expected roles and responsibilities in the local area energy planning process.
- 6.2.7 In this context, a key requirement for improved outcomes on climate change mitigation and adaptation, and to support the undertaking of local area energy planning in the Local Plan process, is a clear direction from Central Government that such action is a priority outcome for a Local Plan. Ministers have the opportunity to clarify the place of climate change and the role of LAEP through amendments to the NPPF, the PPG, through a Ministerial Statement or Letter to Chief Planning Officers. There is also the option of legislative change. Whether policy change to further encourage a new approach is taken or if a new legislative provision is introduced, clarity is required on what the role of Local Government is and how the activity of LAEP can be coordinated with different stakeholders.

Recommendation 2: Provide emphasis in national policy on the Legal Requirements on Climate Change Action and Decarbonisation with reference to existing Legislation.

6.2.8 Central Government could issue a statement or amend the NPPF to make clear the nature of the requirements of Section 19 of the 2004 Planning and Compulsory Purchase Act and could reference other statute: in particular that all Local Plans must contain policy on mitigation and adaptation and should contain policies for local decarbonisation targets and in relation to local area energy planning. Such policy must be in conformity with the NPPF and PPG requirements on climate change.

Recommendation 3: Consider the introduction of new Legislative Requirements in relation to the duty of Local Authorities to coordinate and produce Local Area Energy Strategies OR strengthen policy and sufficiently support and enable Local Authorities in the delivery of LAEP.

6.2.9 As we have set out earlier, the Scottish Government is introducing, through amendments to existing legislation, a statutory duty on Local Authorities to prepare what are in effect, Local Area Energy Strategies. The approach is described as follows which is very apt to LAEP, namely:

“Led by Local Authorities working closely with their communities, this will provide opportunities for communities to not only develop their own energy projects, but also to have their voices heard in the planning processes for energy developments. Local authorities will have an enhanced role in this strategic approach – helping to deliver new investment and to manage the local challenges of decarbonisation.”

6.2.10 The new Scottish Energy Strategy has set out that Local Authorities will have an obligation to produce local heat and energy efficiency strategies at a local level covering their areas. These strategies are expected to guide investment in energy efficiency and heat decarbonisation. These strategies are to be led by Local Authorities working closely with their own communities. The intention is to set out a long term prospectus for investment in new energy efficiency, district heating and other heat decarbonisation programmes.

6.2.11 The approach is explicit in that there is a clear expectation that Local Strategies will inform, and be informed by the development plan for the area. Therefore there is a direct intention for the planning system to have an integral role in the planning and delivery of local energy strategies. Local Authorities and partner stakeholders are seen as essential to effective delivery.

6.2.12 Strategies could therefore operate under a separate legal regime. They would not change the status of the development plan, but they would be a material consideration for Planning Authorities.

6.2.13 As an alternative to the introduction of a specific legislative provision placing a duty on Local Authorities to undertake LAEP and produce local strategies, policy and guidance could be strengthened at the national level and as per Recommendation 1, sufficient support and enabling provisions could be made to ensure LAEP is delivered.

Recommendation 4: Provide Further Clarity in National Policy and address Viability.

6.2.14 There is not sufficient clarity within the NPPF and PPG to ensure that carbon reduction targets are achieved. Changes to policy in the NPPF could include:-

- The imperative, set out at paragraph 6, that NPPF policy should be “taken as a whole” could be reinforced.
- The current definition of viability for plan-making set out in paragraph 173, needs to be reconsidered. The main consideration for reform should be to include as part of the assessment of viability not only the profitability of a given development project to a developer and landowner, but the wider and long-term benefits arising from emission reductions and adapting the urban environment to the effects of climate change, in particular through action on heat etc. Very often, such wider environmental benefits will be diffuse, longer term and not immediately obvious. In short, this will involve re-prioritising where the wider public interest sits in the planning balance.

6.2.15 We acknowledged in our previous research that the deployment of decentralised energy infrastructure may raise issues of impact on viability for refurbishment, regeneration and housing developments (new build and retrofit). This would require resolution between potentially competing objectives such as bringing forward necessary housing supply and the wider deployment of low carbon and decentralised energy. Guidance on the weight to be accorded to these competing objectives would enable a more strategic assessment of the viability of deployment in a particular situation given the current issues around the viability policy at paragraph.173 of the NPPF. This should look beyond the profitability of a project to the long term benefits of carbon reduction.

Recommendation 5: Encourage LAEP over the Long Term and Address Skills and Resourcing.

6.2.16 There should be much greater emphasis on the need to plan for the long term, with sight of 2050 national emission reduction targets. For example, the Environmental Agency flood risk allowances for climate change provide the basis for this approach in some aspects of climate change adaptation in the planning system adaptation. Guidance could be provided to encourage near term actions in Local Area Energy Strategies but aimed at future resilience and outcomes.

6.2.17 Our consultations with Planning Authorities raised as a key issue the availability of the right skills and resources for progressing LAEP. Consideration should be given to an appropriate delivery model to help address this matter. It is widely acknowledged that Local authorities will have a key role to play in LAEP.

6.2.18 A model for assisting Local Authorities in the sector already exists in the form of the Heat Network Delivery Unit (HNDU) – specifically with regard to making heat networks succeed.

6.2.19 In order to address the capacity and capability challenges which Local Authorities identified as barriers to heat network deployment in the UK, the Government set up the HNDU in 2013. The HNDU provides grant funding and guidance to Local Authorities in England and Wales for heat network project development. The HNDU provides support through the early stages of heat network development, covering:

- heat mapping;
- energy masterplanning;
- techno-economic feasibility;
- detailed project development; and
- early commercialisation.

6.2.20 Grant funding is provided to successful local authorities under Section 31 of the Local Government Act. If successful, each local authority is supported by a team of specialists within HNDU.

6.2.21 At present regional resourcing is also to an extent provided by way of the low carbon energy work being undertaken by Local Enterprise Partnerships (LEPs).

6.2.22 The Liverpool City Region LEP has published a new report ‘LEPs and local energy’ on the role of LEPs in supporting the local energy agenda. The report was produced by the Local Carbon Team at the LEP, supported by the Department of Business Energy and Industrial Strategy (BEIS), Liverpool City Council and Richardo Energy and Environment.

6.2.23 The report explored a range of opportunities to deliver local, competitive energy and supply chain growth across English LEP areas, illustrated through examples of best practice. It also explored the role that LEPs could play in supporting investment in local energy and makes the case for greater LEP engagement to realise the economic, social and environmental benefits of local energy activities.

6.2.24 The model of the HNDU together with LEP activity in the sector could be built upon to address skills, resourcing and technical capacity to undertake LAEP activity and to ensure resourcing and capability is pushed down to a more granular level.

Recommendation 6: Expand and amend the Planning Guidance in the PPG.

- 6.2.25 In parallel with amendments described above to the NPPF, consequential and related guidance should be amended and added to the online PPG.
- 6.2.26 Guidance should be provided that assists local action on climate change and energy planning in terms of standard evidence base preparation. This could be similar to the ‘regional renewable and low carbon energy capacity methodology’ commissioned by the former DECC. This would help translate national targets into local action.
- 6.2.27 Guidance should make clear what is required of LPAs through their planning and wider corporate function and to provide an articulation of what the NPPF means in terms of ‘radical reductions in greenhouse gas emissions’.
- 6.2.28 Related to this is action required on having a system in place that increases the capacity of Local Authorities to deal with LAEP: the provision of advice, support and funding to Local Authorities in meeting carbon reduction targets and adapting the urban environment to ensure low carbon and ‘clean growth’ outcomes.
- 6.2.29 There should be recognition of the use of LAEP to facilitate the shift to a range of low and zero carbon and renewable sources including decentralised energy sources. The activity should be described and defined and the benefits arising and varied outcomes should be set out. There should be the recognition within the NPPF and PPG of the use of Local Area Energy Strategies to identify areas where there is a need for energy infrastructure requirements and opportunities for heat networks and related infrastructure to provide a competitive solution for supplying heat to buildings and consumers.

Recommendation 7: Provide clear Policy and Guidance on Retrofit.

- 6.2.30 Planning policy primarily deals with new development and this clearly limits the extent of influence and change that the planning system can exert on existing built form. There are however, examples of area based retrofit policy in development plans, however they tend to be the exception rather than the rule. The NPPF and PPG could contain policy guidance on this topic.
- 6.2.31 UK housing stock was estimated at circa 28 million units in 2014. Housing stock is estimated to increase by between 23 and 36% by 2050, however new stock will have significantly lower energy demand than current stock due to improved thermal efficiency, construction standards and boiler technology. Annual emissions from a year of new build stock is estimated at some 0.4 – 0.6 MtCO₂ and this compares to 2016 residential CO₂ emissions of some 67MtCO₂ (ESC, 2018). It will clearly be important therefore to tackle the legacy building stock which has relatively poor thermal performance and of which over 90% is expected to still be in use by 2050 (ETI, 2017).

Recommendation 8: Strengthen Requirements and Guidance in relation to Development Management Policy

- 6.2.32 A sound planning policy and guidance basis for the deployment of decentralised energy infrastructure is of primary importance for the preparation of Development Plans with effective policies and for development management actions. In terms of planning policy for use in development management, it exists on a spectrum from relatively weak encouragement for developers to consider decentralised energy and heat networks as part of development proposals - to much stronger obligations in relation to other matters, for example in relation to flood risk, with Local Plans supported by a Flood Risk Assessment, the role of the Environment Agency and the application of the sequential test and risk based approach to the location of development.
- 6.2.33 Strong policy in Development Plans to ensure that policies secure maximum compliance from developers can only occur if in turn, there is a strong policy position at the national level and a robust evidence base supporting effective local policies
- 6.2.34 Policy provisions must be well written and be sufficiently clear and transparent to be implementable without high risk of challenge to interpretation and to ensure continuity of policy application.

6.3 Development Management

6.3.1 There are a range of development management actions which could be further considered and which could contribute to the delivery and outcomes of local area energy planning. They are related to the high level policy objectives discussed above and include:

- Changes to permitted development rights;
- Widening statutory undertaker powers;
- Encouraging wider deployment of tools such as Local Development Orders (LDOs); and
- Introduction and encouragement of 'simplified energy planning zones'.

6.3.2 The detail of these mechanisms is beyond the scope of this report on policy but they are matters we consider should be further explored to complement policy changes.

7 Conclusions and Next Steps

- 7.1.1 Our recommendations arising from our previous research concluded in 2014 for the ETI still remain valid insofar as we consider further beneficial changes could be undertaken to planning policy and guidance provisions at the national level which could accelerate reducing carbon emissions from heating buildings.
- 7.1.2 In relation to Local Plan policies on carbon reduction and climate change, our research has shown that there appears to be recognition that local area energy planning activity (whether through Council area strategies or carbon reduction targets etc) has the potential to play an important role. This view is also reflected in a range of Government documents.
- 7.1.3 However, evidence is relatively limited to show that Local Plan policies have been informed by local area energy planning and where they have, the existence of a policy framework will not in itself guarantee meaningful outcomes. A clear and effective policy framework must be fully supported by strong and unambiguous central Government policy. Moreover, at a Local Government level in relation to civic leadership, professional capacity, financial resources and political will – these factors need to be present to support the utilisation of the planning system (and other Council actions) in relation to attaining carbon reduction targets and other decarbonisation actions. The success of local area energy planning will be dependent to a large degree on the strength of the policies and commitment to such policy implementation.
- 7.1.4 As set out in the introduction to this Report, the findings we have set out will help inform various aspects of planning guidance with regard to local area energy planning and can also be used to assist the justification for policy change at a national level. The current review of the NPPF provides an opportunity.



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