



Planning shapes the places where people live and work and the country we live in. It plays a key role in supporting the Government's wider social, environmental and economic objectives and for sustainable communities.

Planning Policy Statement: Consultation

Consultation on a Planning Policy Statement:
Planning for a Low Carbon Future in a
Changing Climate



Consultation on a Planning Policy Statement: Planning for a Low Carbon Future in a Changing Climate

March 2010

Department for Communities and Local Government

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Summary form

SCOPE OF THE CONSULTATION

Topic of this consultation:	New draft policy that sets out a planning framework for securing enduring progress against the UK's targets to cut greenhouse emissions and use more renewable and low carbon energy, and to plan for the climate change now inevitable.
Scope of this consultation:	The purpose of the consultation is to get stakeholder views and comments on the new draft planning policy which combines and updates the existing planning policy statements on climate change (PPS1 supplement) and renewable energy (PPS22).
Geographical scope:	England.
Impact assessment:	See Part 4 of the consultation.

BASIC INFORMATION

To:	Local planning authorities, regional planning bodies, key stakeholders and the general public.
Body/bodies responsible for the consultation:	Planning Resources and Environmental Policy Division, Planning Directorate, Communities and Local Government.
Duration:	12 week public consultation. Ends 1 June 2010.
Enquiries:	Susan Tipping Communities and Local Government Planning Resources and Environment Policy Zone 1/B1 Eland House Bressenden Place LONDON SW1E 5DU Telephone: 0303 444 3230 Fax: 0303 444 2761 Or by email: CCPPSConsultation@communities.gsi.gov.uk
How to respond:	Preferably using the online consultation form, available from: www.communities.gov.uk/corporate/publications/consultations/ or by email using the details above.

Additional ways to become involved:	We will be engaging with key stakeholders during the consultation period so as to discuss the draft PPS and gain their views.
After the consultation:	We shall take into account the responses to this consultation in implementing our proposals and these will inform the revised policy. Our ambition is to publish the final version in 2010. We anticipate there will be a widespread 'roll-out' of any revised policy, with a wide range of stakeholders, so as to promote robust implementation of the policy. In addition, the PPS will be supported by practice guidance developed with stakeholders.
Compliance with the code of practice on consultation:	The consultation complies with the code.

BACKGROUND

Getting to this stage:	
Previous engagement:	We have held a range of pre-consultation discussions with stakeholders drawn from industry, planning authorities, membership organisations and others with an interest in this area.

The consultation process

1. We look forward to receiving comments and views on this planning policy statement on planning for a low carbon future by **1 June 2010**. You may wish to refer to Part 3 in making your response, this sets out the questions on which we would like your views.
2. You can respond to the consultation on the Communities and Local Government website: <http://www.communities.gov.uk/publications/planningandbuilding/ppsclimateconsultation>.

Responses and any questions about the consultation should be directed to:
Susan Tipping
Communities and Local Government
Planning Resources and Environment Policy
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Eland House
Bressenden Place
LONDON
SW1E 5DU
Telephone: 0303 444 3203

Fax: 0303 444 2761
Or by email: CCPPSConsultation@communities.gsi.gov.uk

It would be helpful if responses from representative groups could give a summary of the people and organisation they represent.
3. We intend to publish a summary of responses to this consultation within three months of the close of this consultation on the Communities and Local Government website. Paper copies of the summary will be available on request.
4. All responses will be made public unless confidentiality is specifically asked for. However, correspondents should be aware that confidentiality cannot always be guaranteed, for example where a response includes evidence of a serious crime. Any automatic confidentiality disclaimer generated by your organisation's IT system will not be respected unless you specifically include a request to the contrary in the main text of your response.
5. This consultation is being conducted in accordance with the Government's code of practice on written consultation. The criteria are reproduced on page 5. Any procedural observations or complaints about the consultation exercise should be sent to:

Communities and Local Government Consultation Co-ordinator
Zone 6/H10
Eland House
Bressenden Place
LONDON
SW1E 5DU

Or by email to consultationcoordinator@communities.gsi.gov.uk

CONSULTATION CRITERIA

About this consultation

1. This consultation document and consultation process have been planned to adhere to the code of practice on consultation issued by the Department for Business, Innovation and Skills and is in line with the seven consultation criteria, which are:
 - formal consultation should take place at a stage when there is scope to influence the policy outcome
 - consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible
 - consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals
 - consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach
 - keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in to the process is to be obtained
 - consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation
 - officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience
2. Representative groups are asked to give a summary of the people and organisations they represent, and where relevant who else they have consulted in reaching their conclusions when they respond.
3. Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004).
4. If you want the information that you provide to be treated as confidential, please be aware that, under FOIA, there is a statutory code of practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the department.

5. The Department for Communities and Local Government will process your personal data in accordance with DPA and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.
6. Individual responses will not be acknowledged unless specifically requested.
7. Your opinions are valuable to us. Thank you for taking the time to read this document and respond.
8. Are you satisfied that this consultation has followed these criteria? If not or you have any other observations about how we can improve the process please contact:

CLG Consultation Co-ordinator
Zone 6/H10
Eland House
Bressenden Place
LONDON SW1E 5DU

Or by email to: consultationcoordinator@communities.gsi.gov.uk

PART 1: Policy discussion

“I want to construct a global ‘green new deal’ that will pave the way for a low carbon recovery and help us build tomorrow’s green economy today... so let us set a challenge to our scientists... to business... to our planners: let us build homes and buildings and businesses and then eco towns and eco cities around the vision of a low carbon environment.”

The Prime Minister at the Low Carbon Industrial Strategy Summit, 6 March 2009.

CHANGING CONTEXT

1. In December 2007, the Government published Planning Policy Statement (PPS): Planning and Climate Change supplement to PPS 1. This placed tackling climate change at the heart of planning. Its cross-cutting importance was signalled by making it a supplement to PPS 1: Delivering Sustainable Development, which sets out the overarching planning policies on the delivery of sustainable development through the planning system.
2. This consultation document brings together the Planning and Climate Change supplement to PPS 1 with the 2004 PPS 22 on Renewable Energy into a new draft PPS on Planning for a Low Carbon Future in a Changing Climate. This new PPS will replace the 2007 and 2004 PPS and it is proposed that it will become a consolidated supplement to PPS 1. This will support and provide an overarching framework for PPS 25 on Development and Flood Risk and emerging planning policies on green infrastructure (to be consulted on separately).
3. The reason we are consulting on a new PPS two years after publishing the Planning and Climate Change supplement, is because a significant amount of new legislation and policy has been put in place that affects planning and the policies that underpin plan-making and development management. The list below, whilst not exhaustive, demonstrates how much has happened since we last consulted on planning policies for climate change.
 - The Climate Change Act 2008 introduced a statutory target of reducing carbon emissions by 80 per cent below 1990 levels by 2050, with an interim target of 34% by 2020. Government departments will prepare carbon budgets to indicate how greenhouse gas emissions will be reduced across the Government estate and in sectors where departments take a policy lead.
 - EU Directive 2009/28/EC on the promotion of the use of energy from renewable sources, where the UK has committed to sourcing 15% of its energy from renewable sources by 2020 – an increase in the share of renewables by almost a factor of seven from about 2.25% in 2008, in scarcely more than a decade.

- The Low Carbon Transition Plan and the Renewable Energy Strategy were both published on 15 July 2009 and set out how the UK will achieve dramatic reductions in emissions and meet targets on renewables.
 - The Household Energy Management Strategy was published on 2 March 2010, and placed a greater emphasis on district heating schemes and identified a essential role for planning in facilitating delivery of these and other community-scale energy schemes.
 - Publication of the proposed definition of zero carbon homes¹. Meeting the zero carbon standard involves a combination of energy efficiency measures and the use of decentralised energy solutions, to be set out through Building Regulations and through use of a range of 'allowable solutions', the details of which are still to be decided.
 - Climate change projections were updated in 2009 by the UK Climate Impacts Programme. These set out three global emission scenarios based on high, medium and low forecasts for a range of climate and weather related impacts such as temperature, rainfall, flooding and other extreme weather events.
 - The Local Democracy, Economic Development and Construction Act 2009 replaces the requirement for a regional spatial strategy and regional economic strategy with a regional strategy (RS) from April 2010. Climate change, along with economic development and housing, has been identified as a priority for the regional strategies.
 - The Energy Act 2008 introduced powers for a Feed-In Tariff and the Renewable Heat Incentive aimed at driving an increase in renewable energy generating capacity, and which is likely to have an impact on planning.
4. The Planning Act 2008 introduced a new planning regime for nationally significant infrastructure projects, including energy generation over 50 megawatts (MW). The Infrastructure Planning Commission (IPC) will consider such applications within a planning policy framework created by National Policy Statements. The National Policy for Renewable Energy Infrastructure which was consulted on recently will have read-across to the planning system for applications of less than 50MW. Alongside this new regime, the Act also introduced a new duty for regional spatial strategies (RSS) (until replaced by RS in April 2010) and local development frameworks (LDF) to include policies within them on climate change, ensuring that they make a contribution to the mitigation of, and adaptation to, climate change.

¹ <http://www.communities.gov.uk/statements/corporate/ecozerohomes>

5. We have also commissioned two research studies looking at renewable energy targets at the regional level and the implementation of the climate change PPS, both of which inform the update of the policy.
6. The first research² project looked at targets in RSS and found that there were considerable inconsistencies between targets and accompanying policies across the regions. There was also a large delivery gap in respect to achieving the targets for 2010. The study also reported that targets were not always clearly underpinned by the supporting evidence base. The study informed the conclusion in the Renewable Energy Strategy that there is a need for a standard regional methodology for calculating capacity (referred to in proposed policy LCF1.3).
7. The second, more recent report³, looked at the implementation of the planning and climate change supplement to PPS 1. This research, published alongside this consultation, concluded that implementation of the planning and climate change supplement to PPS 1 has been patchy to date and that there is a need to improve the skills of planners in this area.
8. Reflecting on these findings, we have sought to sharpen the draft PPS to focus on a clearer set of outcomes. In doing so, we have looked to build from the existing policy in the current PPSs and avoid disruption to plan-making at either regional or local levels. The draft PPS sets out how this can be achieved and asks you to consider your response guided by a number of questions set out in Part 3 of this consultation document.

THE CHALLENGE FOR PLANNING

9. One of the central challenges for planning is to respond to, and integrate with, the Government's ambitions to tackle climate change. Planning makes a significant contribution to both mitigating and adapting to climate change through its ability to influence the location, scale, mix and character of development. The draft PPS sets out how planning, in providing for the new homes, jobs and infrastructure needed by communities, should help shape places to achieve lower carbon emissions and greater resilience to the impacts on climate change. The planning system sets out the overall framework for development. This should help secure progress against the UK's emissions targets, both by direct influence on energy use and emissions through, for instance, encouraging energy efficiency, and through bringing together and encouraging actions from others. Planning should give local communities real opportunities to take action on climate change and should be doing so now.

² Renewable Energy Capacity in Regional Spatial Strategies: Final Report.
<http://www.communities.gov.uk/publications/planningandbuilding/renewableenergyreport>

³ Take up and application of the policies in the Planning Policy Statement on Planning and climate change, Arup, CLG (2010)

10. Evidence based plan-making is at the heart of the Government's planning agenda. Sustainability appraisal should be used, as set out in proposed policy LCF1.1 and 1.2, to secure planning strategies that help deliver both mitigation and adaptation. The regional methodology to assess capacity for renewable energy, which we committed to developing in the Renewable Energy Strategy will complement sustainability appraisal and is now available. The draft PPS proposes in policy LCF1.3 that regional assessment should be drawn up having regard to, and where feasible be consistent with, the methodology.
11. Understanding the potential for supply and demand opportunities for renewable and low carbon energy in a local area is an essential starting point for considering the opportunities to move to low carbon communities. It is also vital for delivering on a range of wider local priorities, such as fuel poverty, local energy security, waste management and targets for renewable capacity. This is why proposed policy LCF1.4 expects sources of heat sources and demand to be mapped as a part of infrastructure planning – to identify strategic opportunities for marrying up heat suppliers and consumers. Heat maps can provide such data and developing such a map at a local level can assist plan makers in identifying opportunities in the future in line with the expectation in the proposed policy set out in LCF7.
12. Planning low carbon communities requires joined-up working. This includes taking account of the raft of work taking place in and around the planning community. For example, the proposed changes to energy efficiency and carbon standards in Part L of the Building Regulations (see proposed policy LCF8.1); the Government's target for new homes to be zero carbon from 2016 and ambition for new non-domestic buildings to be zero carbon from 2019 and how the concept of allowable solutions, first introduced via the consultation on the definition of zero carbon homes, will be taken forward. All of these initiatives are designed to cut green house gas emissions and planning needs to ensure that it integrates with, not duplicates, these initiatives to achieve the most sustainable outcome possible.
13. Policy LCF7.1 concerns local authorities setting requirements for decentralised energy in a DPD, derived from its assessment of local opportunities in line with policy LCF1.4. These would need to be consistent with national policy, including the Government's policy for all new homes to be zero carbon from 2016. One element of the zero carbon homes policy is allowable solutions (see glossary). The Government is currently considering the scope and delivery mechanisms for allowable solutions which could be delivered locally, and therefore would be set out in a DPD policy on decentralised energy. The Government's decisions on allowable solutions will be reflected in the final PPS.
14. The changes to the building regulations and move to zero carbon buildings will push the boundaries of current energy efficiency and encourage decentralised and renewable energy. We want to emphasise the importance of local energy planning

supporting new development in meeting these progressively more demanding standards of emissions. As a result, authority wide targets to secure decentralised energy supply to development will become unnecessary. So we think it right to signal now that, over time, we expect planning to move away from setting these type of targets. This is one of the reasons we are proposing in policy LCF8.1 that post 2013 authority-wide targets to secure decentralised energy will be unnecessary, although local authorities can still set site or development specific targets where local circumstances justify this. In the interim period, to 2013, we propose that the Secretary of State will continue to support authority wide targets where these are included in the development plan.

15. The RS is where we expect English regions to assess the opportunity for, and constraints on, developing renewable energy in their areas. We also expect regions to establish appropriate regional targets with levels of ambition consistent with meeting the national targets for renewable energy and emissions reductions. The priority given to climate change in the RS – on an equal footing with housing and economic development – indicates how important this is. LDFs will draw from these regional strategies and their supporting evidence base in setting out the local planning strategy for moving to a low carbon economy.
16. The proposed policy in LCF4 sets out what we expect from the LDF and how it should support renewable and low carbon energy generation. The ambition in LDFs needs to be commensurate with that set out at a regional level and based on evidence. Using the capacity assessment that will be available for each region, local planning authorities could, for example, set stretching local targets to develop renewable energy sources in their area. Planning for more renewable and low carbon energy development should be at the heart of good planning; it is neither optional nor additional. This is why we have proposed within policy LCF4 a clear set of expectations for LDFs and proposed in policy LCF10 that local planning authorities should support the take-up of electric and plug-in hybrid cars, setting local requirements for cabling and charging infrastructure where appropriate. This complements our proposals for electric charging points to become permitted development⁴.
17. We've sharpened the policy on locating renewable and low carbon energy projects. The draft PPS makes no judgements about what technologies are most suitable to deliver our cuts in greenhouse gas emissions but underlines that, depending on their scale and impact, renewable and low carbon energy developments should be capable of being accommodated in most locations. Planning should ensure that adverse impacts on the environment are addressed satisfactorily but applications for cutting-edge, well-designed buildings should not be turned down simply because they do not look familiar. This is set out in proposed policy LCF13.4. Just because a building looks different, does not mean it is not good design.

⁴ Permitted Development Rights for small scale renewable and low carbon energy technologies, and electric vehicle charging infrastructure consultation.
<http://www.communities.gov.uk/publications/planningandbuilding/microgenelectriccars>

18. Much of the discussion around climate change is about reducing carbon emissions, but preparing for the effects of climate change is just as important. Some degree of climate change is already inevitable and is likely to have a range of impacts, including increased temperatures in the summer and risk of more flooding or droughts. These effects can have devastating consequences, as seen in the recent floods in Cumbria in 2009 or Gloucestershire in 2007. We want to make sure that local planning authorities consider the likely impacts of climate change and, using the available evidence, plan for these impacts when considering new development and develop adaptation options for existing areas. This is why we encourage the appropriate use of UK Climate Projections in proposed policy LCF1.2 and set out a proposed planning approach to adapting to a changing climate in policy LCF5. Green infrastructure also has a role to play in bringing all these elements together – environments where people want to live and work that integrate the biodiversity, heat, water, healthy living and transport needs of the future.
19. New developments should take all these factors into account: good site selection at the plan-making stage is critical. This is why we have set out a proposed list of criteria in policy LCF6.1 which should be used when allocating sites to assess their suitability, considering for example the type of building and the intensity of use.
20. Determining applications for major development, local authorities should give great weight to compliance with criteria set out in proposed policy LCF13.2. The criteria are there to ensure that the wide range of measures available to create low carbon communities are considered, sustainable drainage systems, waste management, transport, and the vulnerability of existing developments. There is a clear message here that the expectation is that new development should be low carbon development that can adapt to the impacts of climate change. In finalising the PPS we will ensure that the policy on sustainable drainage systems reflects both the national standards currently being developed and the requirements of the Flood and Water Management Bill when enacted.
21. We will consider all consultation responses and look at them in the light of developments in other areas, such as the publication of the Household Energy Management Strategy.

PRACTICE GUIDANCE

22. We are not including details of practice guidance as part of the consultation process for this draft PPS. We are currently reviewing the existing companion guide for PPS22 and the online practice guide for the climate change PPS. Once we have completed this review, we will develop new practice guidance that reflects the outcomes of this consultation process. We intend to develop new practice guidance with the help of the Planning Advisory Service and the user community. There will be opportunities, outside the formal consultation process for this PPS, for stakeholders to shape and influence this so that it is as helpful as possible.

PLANNING REFORM

23. In May 2007 the Government published its white paper *Planning for a Sustainable Future*. Amongst the white paper's proposals was a commitment to produce a more strategic and clearly focused national policy framework, with Planning Policy Statement 1 (Delivering Sustainable Development) at its heart. A key first step is a comprehensive review of current planning policy statements and guidance and other relevant policy material. The aim is to achieve a significant streamlining of the existing suite of documents by separating out policy from guidance. That commitment is reflected in the draft policy statement on planning for a low carbon future in a changing climate.

THE CONSULTATION STAGE IMPACT ASSESSMENT

24. A consultation stage impact assessment, setting out the costs and benefits of the draft PPS, is provided in Part 4 of this consultation document. It concludes that merging the two policy statements provides a streamlined and more strategic framework for planning for renewable energy and climate change; provides clarity about the objectives and requirements of the policy; and clarifies planning's relationship with other regimes, such as changing building regulations.
25. The streamlining and revision to the policy is expected to create a number of benefits for local authorities, developers of residential and commercial land, and developers of renewable energy, and local communities. These benefits include the ability to target resources better, provide greater certainty of outcomes, and wider societal benefits, such as increased renewable energy provision with its commensurate reduction in carbon emissions, and new development better prepared for the effects of climate change, such as increased temperatures.
26. This impact assessment has also identified non-monetised costs but the proposal is expected to have an overall benefit to society as planning's ability improves to contribute to delivering renewable energy, reducing emissions and adapting to the effects of a changing climate.
27. As part of this consultation exercise your comments are also invited on the consultation stage impact assessment.

PART 2: Consultation draft

INTRODUCTION

Planning Policy Statements (PPSs) set out the Government's national policies on different aspects of spatial planning in England. This document supplements PPS1 by setting out how planning should contribute to mitigating climate change and adapting to its impacts.

The PPS replaces the earlier supplement to PPS1 'Planning and Climate Change' and PPS22 'Renewable Energy'. The document does not, however, assemble all national planning policy relevant or applicable to climate change. It should be read alongside other national policy including the overarching National Policy Statement for Energy, the National Policy Statement for Renewable Energy Infrastructure and the Marine Policy Statement⁵. Where there is any difference in emphasis on climate change between the policies in this PPS and in other PPS/PPG in the national series this PPS takes precedence.

The development plan-making policies in this PPS must be taken into account by responsible regional authorities in the preparation of regional strategies⁶, by the Mayor of London in relation to the spatial development strategy for London, and by local planning authorities in the preparation of local development documents⁷. The preparation of development plans should not be delayed unnecessarily to take the policies in this PPS into account. Development plans should not repeat development management policies in this PPS or reformulate them⁸ unless there are specific factors justifying variation of these policies.

The policies in this PPS are a material consideration which must be taken into account in development management decisions where relevant⁹. Therefore the development management policies in this PPS can be applied directly by the decision-maker when determining whether development should proceed.

THE GOVERNMENT'S OBJECTIVES

Climate change is the greatest long-term challenge facing the world today. Addressing climate change is therefore the Government's principal concern for sustainable development.

The Government expects planning to continue to provide for the development needs of all in the community, contribute to housing supply and economic growth and support social justice. Planning should also continue to sustain biodiversity and protect natural and historic environments. All planning strategies, and the decisions taken in support of them,

⁵ Consultation expected in 2010

⁶ See Section 77(1) of the Local Democracy, Economic Development and Construction Act 2009

⁷ See Section 19(2) of the Planning and Compulsory Purchase Act 2004

⁸ See paragraphs 4.30–4.32 of Planning Policy Statement 12: Local Spatial Planning

⁹ See Section 38(6) of the Planning and Compulsory Purchase Act 2004

must however reflect the Government's ambition to help business and communities build a low carbon future and prepare for the impacts of climate change.

Plan-making and development management should fully support the transition to a low-carbon future in a changing climate. This means planning should:

- shape places so as to help secure radical cuts in greenhouse gas emissions. This requires the location and layout of new development to be planned to deliver the highest viable energy efficiency, including through the use of decentralised energy, reducing the need to travel, and the fullest possible use of sustainable transport.
- actively support and help drive the delivery of renewable and low carbon energy.
- shape places and secure new development so as to minimise vulnerability and provide resilience to impacts arising from climate change, and do so in ways consistent with cutting greenhouse gas emissions.
- ensure local communities are given real opportunities to take positive action on climate change; in particular by encouraging community-led initiatives to reduce energy use and secure more renewable and low-carbon energy.

PLAN-MAKING POLICIES

Policy LCF1: Evidence base for plan-making

- LCF1.1 Sustainability appraisal (incorporating strategic environmental assessment) should be used by plan-makers to identify options for regional and local plans which best reflect the objectives and policies in this PPS.
- LCF1.2 Sustainability appraisal, in considering the vulnerability of areas to impacts arising from changes in the climate, should draw from published material on projected climate change and its impacts (including flooding) prepared by the Department for Environment, Food and Rural Affairs (Defra) and the Environment Agency, and be carried out in line with published policy for the relevant risk where provided¹⁰. For impacts not covered by this derived material, such as changes in temperature or extreme weather events, the assessments can be informed directly by the latest set of UK Climate Projections¹¹ and the latest UK Climate Change Risk Assessment¹².
- LCF1.3 Responsible regional authorities should, working with regional and local partners, assess the potential in their region for renewable energy and complete this as part of the evidence base. The assessment should be drawn up having regard to, and where feasible be consistent with, guidance on assessing potential for renewables in the English regions published by the Department of Energy and Climate Change (DECC)¹³.
- LCF1.4 Local planning authorities should assess their area for opportunities for decentralised energy¹⁴. The assessment should focus on opportunities at a scale which could supply more than an individual building and include up-to-date mapping of heat demand and possible sources of supply. Local planning authorities should in particular look for opportunities to secure:
- i. decentralised energy to meet the needs of new development;
 - ii. greater integration of waste management with the provision of decentralised energy;
 - iii. co-location of potential heat suppliers and users; and,
 - iv. district heating networks based on renewable energy from waste, surplus heat and biomass, or which could be economically converted to such sources in the future.

¹⁰ Notably in Planning Policy Statement 25 *Development and Flood Risk* and the new planning policy on coastal change.

¹¹ <http://ukclimateprojections.defra.gov.uk>

¹² The first UK Climate Change Risk Assessment will be published in 2012.

¹³ Published by DECC on 5 March 2010.

¹⁴ See Annex A.

LCF1.5 In preparing the evidence base for plan-making consideration should be given to joint working across local planning authority boundaries and between tiers (in two-tier areas) to develop assessments for sub-regions, including city-regions.

Policy LCF2: Regional planning approach

LCF2.1 Regional strategies (RS) should support the move to a low-carbon economy and secure low-carbon living in a changing climate. The RS should therefore plan for substantial new development in locations and ways which:

- i. reduce the need to travel and enable the fullest possible use of sustainable low carbon transport;
- ii. provide for energy, in particular heat, to be gained from existing decentralised energy systems, including those integrated with waste management, or where there are clear opportunities for new or extended decentralised energy systems; and,
- iii. avoid increased vulnerability to impacts arising from climate change, unless it is viable to manage likely risks through suitable measures so as to provide resilience. In areas of water stress, and so as to secure development that would otherwise be unacceptable for its proposed location, resilience should be provided by setting sub-regional standards for water usage in new development¹⁵.

LCF2.2 The RS should set ambitious targets for renewable energy and a clear strategy to support their delivery. Each RS should include targets for renewable electricity generation. Targets should be set taking account of the assessment of the region's renewable energy resource and any contribution from imported resources should be clearly identifiable. Targets should be expressed as the minimum amount of installed capacity in megawatts and be set for 2015, 2020 and 2030. Any targets for renewable heat generation should build on policies in the RS which support the development of identified opportunities. Targets for renewable energy should be treated as minima not maxima.

LCF2.3 The RS should identify the broad areas where substantial development of renewable energy is anticipated and ensure that these areas are not prejudiced by other proposals and policies in the strategy.

¹⁵ Any proposed standard should be consistent with the local planning approach in Policy LCF9 for setting requirements for sustainable buildings and LCF11 on testing local requirements.

Policy LCF3: Local planning approach for a low-carbon future in a changing climate

LCF3.1 Local development frameworks should support the move to a low-carbon economy and secure low-carbon living in a changing climate. This should be reflected in the vision for how the area and the places within it should develop and respond to local challenges and opportunities.

Policy LCF4: Local planning approach for renewable and low-carbon energy and associated infrastructure

LCF4.1 Local planning authorities should:

- i. design their policies to support and not unreasonably restrict renewable and low carbon energy developments;
- ii. ensure any local criteria-based policies, including local approaches for protecting landscape and townscape, that will be used to assess planning applications for renewable and low-carbon energy and associated infrastructure:
 - a. provide appropriate safeguards, so that any adverse impacts are addressed satisfactorily, but do not preclude the development of specific technologies other than in the most exceptional circumstances;
 - b. expect the scale and impact of developments in nationally recognised designations¹⁶ to be compatible with the purpose of the designation;
 - c. are informed by the approach and policies set out in the National Policy Statements for nationally significant energy infrastructure;
- iii. ensure the development of renewable energy in any broad area set out in the regional strategy for where the substantial development of renewable energy is anticipated is not prejudiced by non-energy developments;
- iv. set out how any opportunities for district heating (to supply existing buildings and/or new development) identified through heat mapping will be supported;
- v. set out the decentralised energy opportunities that can supply new development proposed for the area; and,
- vi. support opportunities for community-led renewable and low carbon energy developments, including the production, processing and storage of bioenergy fuels.

¹⁶ Sites of Special Scientific Interest, National Nature Reserves, National Parks, the Broads, Areas of Outstanding Natural Beauty, Heritage Coasts, Scheduled Monuments, Conservation Areas, Listed Buildings, Registered Historic Battlefields and Registered Parks and Gardens.

LCF4.2 Strategic sites which are central to delivering the local planning approach for decentralised energy should be allocated in the core strategy.

Policy LCF5: Local planning approach for adapting to a changing climate

LCF5.1 Local development frameworks should set out how the local authority area will be planned to adapt to the opportunities and impacts arising from changes in the climate. In their local development framework, local planning authorities should therefore:

- i. set out how new development should be planned to avoid significant vulnerability to impacts arising from changes in the climate;
- ii. ensure that when new development is brought forward in areas with significant vulnerability to impacts arising from changes in the climate, risks can be managed through suitable adaptation measures so as to provide sufficient resilience. In areas of water stress, and so as to secure development that would otherwise be unacceptable for its proposed location, resilience should be provided by setting standards for water usage in new development¹⁷;
- iii. bring forward adaptation options for existing development in areas with significant vulnerability to impacts likely to arise from changes in the climate. Options should pay particular attention to vulnerable groups as different impacts (and options to manage impacts) will affect parts of the community differently; and,
- iv. plan green infrastructure so as to optimise its many benefits, and as part of wider green infrastructure networks, in order to support local biodiversity and healthy, living environments, including through providing urban cooling, local flood risk management, and local access to shady outdoor space.

Policy LCF6: Local planning approach for selecting sites for new development

LCF6.1 Local planning authorities should assess the suitability of sites for new development, and for what type and intensity of development, against the following criteria:

- i. the extent to which existing or planned opportunities for decentralised energy could contribute to the energy supply of new development on the site;
- ii. the potential for new development on the site to contribute heat demand where a heat network exists or could be provided;
- iii. the impact on travel demand of developing the site and whether there is a realistic choice of access, and opportunities to service the site, through sustainable low carbon transport;

¹⁷ Any proposed standard should comply with Policy LCF9 and LCF11.

- iv. whether development of the site would result in the loss of a significant carbon sink;
- v. whether developing the site would provide opportunities to help the existing community adapt to impacts arising from changes in the climate, including sustainable drainage systems¹⁸ and green infrastructure;
- vi. the effect of developing the site on biodiversity's capacity to adapt to likely changes in the climate; and,
- vii. whether developing the site is appropriate having regard to known physical and environmental risks such as sea-level rises, flooding, stability and extremes of weather having regard to increases in risk resulting from changes in the climate.

LCF6.2 Where sites perform poorly against the criteria in LCF6.1 they should not be allocated or identified for new development unless:

- i. there are proposals in the local development framework which would improve their performance; and/or,
- ii. their performance would be improved by, for example, limiting development on the site to particular uses and/or density.

Policy LCF7: Local planning approach to setting requirements for using decentralised energy in new development

LCF7.1 Local requirements for decentralised energy should be set out in a development plan document (DPD) and be derived from an assessment of local opportunities in line with LCF1.4. Local requirements for decentralised energy should:

- i. relate to identified development areas or specific sites;
- ii. be consistent with giving priority to energy efficiency measures; and,
- iii. focus on opportunities at a scale which developers would not be able to realise on their own in relation to specific developments.

LCF7.2 Local requirements should be consistent with national policy on allowable solutions¹⁹ set out in support of the zero carbon homes and buildings policy.

¹⁸ The Flood and Water Management Bill, includes provisions on Sustainable Drainage Systems <http://www.defra.gov.uk/environment/flooding/policy/fwmb/index.htm>

¹⁹ See Annex A

- LCF7.3 Where there are existing, or firm proposals for, decentralised energy supply systems with capacity to supply new development, local planning authorities can expect proposed development to connect to an identified system, or be designed to be able to connect in future. In such instances, and in allocating land for development, local planning authorities should set out how the proposed development would be expected to contribute to the decentralised energy supply system.
- LCF7.4 If a local requirement is set out as a target for the use of decentralised energy in new development the target should be expressed as either:
- the percentage reduction in CO₂ emissions to be achieved. In doing so, local planning authorities should set out how the target relates to standards for CO₂ emissions set by Building Regulations; or,
 - an amount of expected energy generation expressed in KWh.
- LCF7.5 Where a local requirement relates to a decentralised energy supply system fuelled by bioenergy, local planning authorities should not require fuel sources to be restricted to local sources of supply.

Policy LCF8: Local planning approach to setting authority-wide targets for using decentralised energy in new development

- LCF8.1 The progressively demanding standards for CO₂ emissions set through Building Regulations, together with the assessment of local opportunities for renewable and low carbon energy, will help drive greater use of decentralised energy. Targets for application across a whole local authority area which are designed to secure a minimum level of decentralised energy use in new development will be unnecessary when the proposed 2013 revisions to Part L of the Building Regulations (for both domestic and non-domestic buildings) are implemented. As an interim measure until the coming into force of the 2013 revisions, the Secretary of State will support the application of authority-wide targets where these are included in the development plan. At the local level, any target should be in a DPD and have met the tests in LCF11.

Policy LCF9: Local planning approach to setting requirements for sustainable buildings

- LCF9.1 Any local requirement for a building's sustainability should be set out in a DPD and:
- i. relate to a development area or specific sites and not be applicable across a whole local authority area unless the justification for the requirement can be clearly shown to apply across the whole area;

- ii. not require local standards for a building's performance on matters relating to construction techniques, building fabrics, products, fittings or finishes²⁰, or for measuring a building's performance; and,
- iii. be specified in terms of achievement of nationally described sustainable buildings standards. In the case of housing, this means a specific level of the Code for Sustainable Homes. Where local circumstances do not support specifying compliance with an entire Code level (because of the range of environmental categories covered) – or envisaged development could not attain the relevant Code level on all environmental categories – a local requirement can be stipulated solely in relation to the energy/CO₂ emissions standard and/or water standard in an identified level of the Code.

Policy LCF10: Local planning approach for electric and plug-in hybrid vehicles

LCF10.1 Local planning authorities should support the take-up of electric and plug-in hybrid vehicles and, in particular, encourage new developments with parking facilities to:

- i. be designed to provide opportunities for charging such vehicles;
- ii. include cabling for charging infrastructure; and,
- iii. provide charging infrastructure.

LCF10.2 Any local requirement relating to electric and plug-in vehicles, including for cabling or charging infrastructure, should be set out in a DPD. In bringing forward a local requirement, local planning authorities should be able to demonstrate that it satisfies the tests in Policy LCF11.

Policy LCF11: Testing local planning requirements

LCF11.1 A local requirement relating to decentralised energy, a building's sustainability or for electric vehicle charging infrastructure, will only be acceptable where the local planning authorities can demonstrate that it:

- i. would not make new development unviable having regard to the overall costs of bringing sites to the market, including the costs of any necessary supporting infrastructure;
- ii. is, in the case of housing development, consistent with securing the expected supply and pace of housing development shown in the housing trajectory required by PPS3, and does not inhibit the provision of affordable housing; and
- iii. will be implemented and monitored without duplication of applicable rating or assessment systems.

²⁰ Unless in the case of (i) electric vehicle charging infrastructure/ cabling this is a local requirement set out in line with Policy LCF10 or (ii) green roofs where this supports a local planning approach to adaptation set out in line with Policy LCF5.

DEVELOPMENT MANAGEMENT POLICIES

Policy LCF12: General approach

LCF12.1 Local planning authorities should:

- i. ensure their approach complements controls under building control and other regulatory regimes and avoids duplication;
- ii. only require information from applicants which is proportionate to the scale of the proposed development and is consistent with that needed to demonstrate conformity with the development plan and this PPS; and,
- iii. not require specific and standalone assessments of new development where the requisite information can be provided through:
 - a. a Design and Access Statement;
 - b. a national rating system such as for the Code for Sustainable Homes;
 - c. any environmental impact assessment or other regulatory requirement.

Policy LCF13: Designing for a low carbon future in a changing climate

LCF13.1 Local planning authorities should engage constructively with developers to deliver well-designed, sustainable buildings and high-quality local environments suitable for low-carbon living in a changing climate.

LCF13.2 In determining planning applications, local planning authorities should expect proposed new development to:

- i. be designed to reduce greenhouse gas emissions by:
 - a. using landform, layout, building orientation, massing and landscaping to reduce likely energy consumption;
 - b. using the layout, density and mix of development to support identified opportunities for decentralised energy;
 - c. connecting to an existing decentralised energy supply system where there is capacity to supply the proposed development, or being designed for a future connection where there are firm proposals for such a system;
- ii. provide public or private open space as appropriate so that an accessible choice of shade and shelter is offered, recognising the opportunities for people, biodiversity, flood storage and carbon management provided by multi-functional greenspaces and green infrastructure networks;
- iii. give priority to the use of sustainable drainage systems, paying attention to the potential contribution to be gained to water harvesting from impermeable surfaces and layouts that accommodate waste water recycling;

- iv. support sustainable waste management by providing space for recycling and composting;
- v. create and secure opportunities for sustainable transport by:
 - a. implementing travel plans when required in line with PPG13²¹ so as to minimise greenhouse gas emissions;
 - b. providing for safe and attractive walking and cycling opportunities including, where appropriate, secure cycle parking and changing facilities;
 - c. ensuring the provision of car parking is consistent with cutting greenhouse gas emissions, including through providing for electric vehicle charging infrastructure;
- vi. be designed to avoid adding to the vulnerability of existing or other proposed development to impacts arising from changes in the climate; and,
- vii. if the site has not been allocated for development in a DPD in accordance with Policy LCF6, reflect the site selection criteria set out in Policy LCF6.

LCF13.3 Local planning authorities should expect proposals for major²² new development to demonstrate through the submitted Design and Access Statement how the proposed development complies with the criteria in LCF13.2. In determining planning applications for major development, local planning authorities should give great weight to compliance with the criteria. Where a proposal for major development fails to meet one or more of the criteria, the application should be refused planning permission unless it can be demonstrated by the applicant (having regard to the type of development and its design) that meeting a criterion is not feasible.

LCF13.4 Local planning authorities should support innovation which secures well designed, sustainable buildings. Some features which are essential for securing a low or zero carbon building, or adapting to impacts arising from changes in the climate, may give rise to concerns about incompatibility with an existing townscape. Such concerns by themselves should not normally warrant planning applications being refused planning permission. Planning permission should only be refused where the concern relates to a heritage asset protected by an international or national designation and the impact would cause material harm, or removal of significance in relation, to the asset and this is not outweighed by the proposal's wider social, economic and environmental benefits.

²¹ Planning Policy Guidance 13: Transport available at:
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/155634.pdf>

²² 10 or more dwellings or commercial development with 1000 square metres or more commercial floor space.

Policy LCF14: Renewable and low carbon energy generation

LCF14.1 Local planning authorities should ensure their development management does not prevent, delay or inhibit proposals for renewable and low carbon energy, and associated infrastructure, which could be permitted having regard to the objectives and policies in this PPS.

LCF14.2 In determining planning applications for the development of renewable or low-carbon energy, and associated infrastructure, local planning authorities should:

- i. expect applicants to have taken appropriate steps to mitigate any adverse impacts through careful consideration of location, scale, design and other measures, including through ensuring all reasonable steps have been taken, and will be taken, to minimise noise impacts²³;
- ii. give significant weight to the wider environmental, social and economic benefits of renewable or low-carbon energy projects whatever their scale, recognising that small-scale projects provide a valuable contribution to cutting greenhouse gas emissions, and not reject planning applications simply because the level of output, or number of buildings supplied, is small;
- iii. not require applicants for energy development to demonstrate the overall need for renewable or low-carbon energy;
- iv. expect developers of decentralised energy to support the local planning approach for renewable and low-carbon energy set out in the local development framework and, if not, provide compelling reasons consistent with this PPS to justify the departure; but, otherwise, not question the energy justification for why a proposal for renewable and low carbon energy must be sited in a particular location;
- v. not refuse planning permission for a renewable energy project because a renewable energy target set out in the RS has been reached; but where targets have not been reached this should carry significant weight in favour of proposals when determining planning applications;
- vi. take great care to avoid stifling innovation, including by rejecting proposals for renewable energy solely because they are outside of a broad area identified in a RS for where substantial development of renewable energy is anticipated;
- vii. where the proposed development is for a renewable energy technology included in the National Policy Statement for Renewable Energy Infrastructure, or associated infrastructure, expect applicants to follow the approach to assessment and apply themselves as far as practicable the approach to decision-making and mitigation set out in National Policy Statements; and,

²³ For wind energy development, the approach to assessment and policies set out in the National Policy Statement for Renewable Energy Infrastructure should be used.

- viii. recognise that when located in the Green Belt elements of many renewable energy projects will comprise inappropriate development, which may impact on the openness of the Green Belt. Careful consideration will therefore need to be given to the visual impact of projects, and developers will need to demonstrate very special circumstances that clearly outweigh any harm by reason of inappropriateness and any other harm if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.

Policy LCF15: Safeguarding renewable and low carbon energy supplies

LCF15.1 In determining planning applications, planning authorities should consider the likely impacts of proposed development on:

- i. existing or other proposed development and their supply of, or potential for using, decentralised energy; and,
- ii. existing, or proposed, sources of renewable or low carbon energy supply and associated infrastructure.

LCF15.2 Where proposed development would prejudice renewable or low carbon energy supply, consideration should be given as to how the proposed development could be amended to make it acceptable. Where this is not achievable planning permission should be refused.

ANNEX 1

Explanations of words and terms used in this PPS and their application to the policies in this PPS.

Adaptation

Involves adjustments to natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Allowable Solutions

The measures permitted for dealing with residual emissions remaining from a home or other building after taking account of carbon abated through on-site technologies and connections to low and zero carbon heat networks in order to achieve zero carbon status. In a July 2009 Written Ministerial Statement, the Minister for Housing and Planning announced a list of measures that received broad support as allowable solutions – see <http://www.communities.gov.uk/statements/corporate/ecozerohomes> for further details.

The Government is currently considering the scope and delivery mechanisms for allowable solutions. The Government's decision on allowable solutions will be reflected in the final PPS.

Associated infrastructure for renewable and low-carbon energy

Associated infrastructure for renewable and low carbon energy includes electricity and heat networks.

Bioenergy

Bioenergy is the production of useful energy in particular heat and power, from biomass, biogases or bioliquids. Biomass means the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste. Bioliquids means liquid fuel for energy purposes including electricity and heating and cooling, produced from biomass.

Carbon sinks

Atmospheric carbon in the form of carbon dioxide is captured and stored in living (trees and other green vegetation) or non-living reservoirs (soil, geological formations, oceans, wood products). Land uses which absorb and store carbon over long periods of time ('carbon sinks') may help to offset carbon dioxide emissions, at least in the short to medium term.

Cabling for electric vehicle charging infrastructure

The required sub-surface electrical cabling to support electric vehicle charging infrastructure but not the charging points themselves.

Combined Heat and Power/Combined Cooling Heat and Power (CHP/CCHP)

The simultaneous generation of usable heat and power (usually electricity) in a single process, thereby reducing wasted heat and putting to use heat that would normally be wasted to the atmosphere, rivers or seas. CHP is an efficient form of decentralised energy supply providing heating and electricity at the same time. CHP's overall fuel efficiency can be around 70-90% of the input fuel, depending on heat load; much better than most power stations which are only up to around 40-50% efficient.

Decentralised energy

Local renewable energy and local low-carbon energy usually but not always on a relatively small scale. Decentralised energy is a broad term used to denote a diverse range of technologies, including micro-renewables, which can locally serve an individual building, development or wider community and includes heating and cooling energy.

Development area

Part of a planning authority's area where development is anticipated, which could be an urban extension or town centre.

Energy efficiency

Making the best or most efficient use of energy in order to achieve a given output of goods or services, and of comfort and convenience.

Greenhouse gas emissions

The release of greenhouse gases into the atmosphere. Greenhouse gases 'trap' energy radiated by the Earth within the atmosphere and include carbon dioxide (CO₂), methane, nitrous oxide and fluorinated gases. Carbon dioxide is the main greenhouse gas from the UK.

Green Infrastructure

Green infrastructure is a network of multi-functional green space, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities.

Installed capacity

Installed capacity is the amount of generation the renewable energy development/installation is capable of producing.

Mitigation

Involves taking action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Renewable and low carbon energy

Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass. Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels). Renewable and low-carbon energy supplies include, but not exclusively, biomass and energy crops; CHP/CCHP (and micro-CHP); heat pumps, such as ground-source and air-source heat pumps; energy-from-waste including from solid recovered fuel; hydro; solar thermal and photovoltaic generation; and wind generation.

Renewable energy resource in a region

This is the renewable energy resource occurring or arising in the region.

Sustainable drainage systems

Are a sequence of management practices and control structures designed to drain surface water in a more sustainable fashion than some conventional techniques. The Flood and Water Management Bill includes provisions relating to drainage systems for managing rainwater for new developments. The final PPS will reflect these requirements.

Travel plans

A travel plan sets out to combat over-dependency on cars by boosting all the possible alternatives to single occupancy car use. See the Essential Guide to Travel Planning²⁴ for more information.

Urban cooling

Moderating high summer temperatures, through for example the design of buildings and their energy supply, layout of urban open space, green infrastructure and shading and cooling from trees. Climate change will exacerbate the temperature gradient that rises from the rural fringe and peaks in city centres. This is described as ‘the urban heat island’ because the warmer urban air lies in a ‘sea’ of cooler rural air.

²⁴ <http://www.dft.gov.uk/pgr/sustainable/travelplans/work/>

ANNEX 2

London

The Mayor is responsible for strategic planning for London, and in particular for producing a spatial development strategy (SDS) for London. The SDS, also known as the 'London Plan', provides a strategic framework for the boroughs' local development documents and sets out the spatial context for the Mayor's other policies and strategies. GOL Circular1/2008 *Strategic Planning In London* provides advice and guidance on the planning arrangements that apply in London.

Under the Town and Country Planning (Mayor of London) Order 2008, certain categories of planning applications have been identified as requiring referral to the Mayor. These proposals must be referred to the Mayor, who may after due consideration, direct a refusal of permission if he considers that the proposal is contrary to the London Plan or to good strategic planning in London, or, he may decide to take over the application for his own determination if the application meets certain category criteria and a policy test.

The Mayor and Assembly also have a duty to tackle climate change, and in doing so to have regard both to guidance produced by the Secretary of State and to national policies on climate change. As part of this the Mayor is required to prepare and publish a statutory Climate Change Mitigation and Energy Strategy, as well as a Climate Change Adaptation Strategy for London.

These attributes of strategic planning in London will influence the expected content of the London Plan and its implementation which will differ from that of RSs in the regions. The London Plan is not a local development document and does not allocate development to specific sites, but the plan-making policies set out in this PPS relating to local planning should, commensurate with the strategic role performed by the London Plan, inform its development and implementation alongside the approach set out for regional planning.

PART 3: Consultation questions

Name:.....

Organisation:.....

Public (individuals not affiliated to any group) ☐

Business (including business trade associations) ☐

Charities, environmental and community groups ☐

Government bodies (national, regional and local regional planning bodies,
local authorities, government agencies and non-departmental government bodies) ☐

Professionals and academics (including representative bodies for professionals) ☐

Address:

E-mail address:

Questions on which we would particularly like your views:

Please state whether you agree to your response being made public. Yes/No

1. Do you support the consolidation and streamlining of the PPS1 supplement and PPS22 on renewable energy into a single planning policy statement?
Yes ☐ No ☐ Comment:
2. Does the proposed PPS address sufficiently all the issues that planners face in relation to climate change? If not, what is missing and why?
Yes ☐ No ☐ Comment:
3. Do you agree that this proposed PPS should continue to be a supplement to PPS1?
Yes ☐ No ☐ Comment:
4. We propose that regional strategies should set ambitious targets for renewable energy and that targets should be expressed as a minimum amount of installed capacity in Megawatts (MW). Do you agree with how this target is described and that the assessment supporting the target should, where feasible, be consistent with the methodology provided by Department of Energy and Climate Change (DECC)?
Yes ☐ No ☐ Comment:

5. We propose that local planning authorities should assess opportunities for decentralised energy in their area. Are these requirements sufficiently clear and manageable?
 Yes ☐ No ☐ Comment:
6. We propose that sites that perform poorly against the criteria in policy LCF6.1 should not be allocated for development (with limited exceptions). Do you agree with this suggested approach?
 Yes ☐ No ☐ Comment:
7. We propose in LCF7 the approach for local authorities when setting local requirements for using decentralised energy in new development. We also propose, in LCF8, that, as an interim measure until the coming into force of the 2013 revisions, the Secretary of State will support the application of authority-wide targets where these are included in the development plan. Do you agree with this approach?
 Yes ☐ No ☐ Comment:
8. Do you agree with the approach to setting requirements for sustainable buildings including in water stressed areas?
 Yes ☐ No ☐ Comment:
9. We propose that local planning authorities should support the takeup of electric vehicles, including being able to set local requirements for installing cabling or charging infrastructure for electric vehicles in new developments with parking facilities. Do you agree with the proposed approach?
 Yes ☐ No ☐ Comment:
10. Proposals for major new development that do not comply with the criteria set out in proposed policy LCF13 should normally be refused planning permission. Do you agree with this proposed approach?
 Yes ☐ No ☐ Comment:
11. We have set out a positive framework for renewable and low carbon energy, including the factors in proposed policy LCF14, that should be taken into account in determining planning applications. Do you agree with these and are they sufficiently clear?
 Yes ☐ No ☐ Comment:

12. Do you agree with the conclusions of the consultation stage Impact Assessment? In particular, have we correctly identified any additional burdens for local planning authorities? Is the impact on owners/developers correctly identified and proportionate to their responsibilities?

Yes ☐ No ☐ Comment:

13. Do you think that the proposals in this proposed PPS will have different impact, either positive or negative, on people, because of their gender, race or disability? If so, how in your view should we respond? We particularly welcome the views of organisations and individuals with specific expertise in these areas.

Yes ☐ No ☐ Comment:

Part 4: Consultation stage Impact Assessment

Summary: Intervention & Options		
Department /Agency: Communities and Local Government	Title: Impact Assessment on a Planning Policy Statement: Planning for a Low Carbon Future in a Changing Climate	
Stage: Consultation	Version: Draft	Date: March 2010
Related Publications:		

Available to view or download at:

www.communities.gov.uk/publications/planningandbuilding/ppsclimateconsultation

Contact for enquiries: Susan Tipping

Telephone: 0303 444 3203

What is the problem under consideration? Why is government intervention necessary?

Government ambition for reducing carbon emissions and increasing renewable energy have increased since the original Planning Policy Statement 1 supplement on climate change was published in 2007. Evidence suggests that the current planning framework will not be able to deliver these ambitions due to a number of factors, particularly inconsistency in the application of the policy to plan making and development management processes. The revision also provides the opportunity to update policy in order to ensure that coordination failures in the development of renewable and low carbon energy are better addressed and ensure the planning system continues to be able to take account of the external costs of new development in the form of CO₂ emissions.

In addition national planning policy has been identified as being overly complex. This may lead to unnecessary costs for users of policy which Government can address by streamlining policy.

What are the policy objectives and the intended effects?

To provide a stronger and clearer framework which lays out how spatial planning can help to drive and support the delivery of a low carbon economy and low carbon living in a changing climate.

The intended effects are that planning makes a full contribution to securing enduring progress against the UK's targets to cut greenhouse gas emissions and facilitates delivery of more renewable and low carbon energy; that planning helps communities to adapt to the impacts of climate change; and that there is clarity as to planning's interaction with other regimes such as building regulations and National Policy Statements.

What policy options have been considered? Please justify any preferred option.

Two options have been considered:

Option 1: Do nothing and maintain the existing policy framework in PPS22 and climate change supplement.

Option 2: Merge and revise the two documents in a single, integrated PPS.

Option 2 is the Government's preferred option as it offers the most benefits in terms of achieving a streamlined, integrated policy for delivering measures to tackle climate change.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

Approximately two years after publication. In the interim it is anticipated that Annual Monitoring Reports will report on core output indicators, which include measures relevant to the implementation of the PPS, such as renewable energy capacity installed.

Ministerial Sign-off For consultation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible minister:



Date: 5 March 2010

Summary: Analysis & Evidence

Policy Option: 2		Description: Merge and revise PPS 22 and PPS1 supplement: climate change	
COSTS	ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' Costs to local planning authorities (LPAs), responsible regional authorities and developers have not been monetised at this stage. Consultees are asked to provide evidence on the possible scale of costs identified in the evidence base.
	One-off (Transition)	Yrs	
	£		
	Average Annual Cost (excluding one-off)		
	£		Total Cost (PV)
Other key non-monetised costs by 'main affected groups'. Some additional costs for LPAs, responsible regional authorities and developers of becoming familiar with revised policy. LPAs may face additional costs related to clarification around evidence base requirements. There may be costs for developers from ensuring planning applications meet explicit criteria in PPS which are passed back to landowners. Costs associated with fuel and the provision of pipe networks where planning identifies opportunities for district heating.			
BENEFITS	ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups' It has not been possible to monetise the overall benefits of the policy. This is due in part to the difficulty of separating the direct impact of planning policy from other policy interventions, for example, on increased renewable energy developments. Overall the revised PPS is expected to contribute to reduced carbon emissions from new development as well as better adaptation of new and existing development to future impacts of climate change.
	One-off	Yrs	
	£		
	Average Annual Benefit (excluding one-off)		
	£		Total Benefit (PV)
Other key non-monetised benefits by 'main affected groups'. Streamlining policy will lead to greater clarity and minimise duplication and complexity with associated resource and time savings. Planning's role as a strategic coordinator will allow developers to take advantage of more cost-effective solutions in meeting carbon reduction targets. Developers will benefit from greater certainty around support for renewable energy and the criteria that need to be met by other planning applications.			

Key Assumptions/Sensitivities/Risks The policy has been sharpened to underline the importance of reducing carbon emissions in making planning decisions. There is therefore a small risk that the new policy could affect the delivery of new development if insufficient attention has been paid to cutting emissions. This risk has been mitigated in a number of ways, including the policy expectation that any local requirement should not make development unviable or be consistent with securing the pace and supply of housing development shown in the housing trajectory required by PPS3.

Price Base Year	Time Period Years	Net Benefit Range (NPV) £	NET BENEFIT (NPV Best estimate) £			
What is the geographic coverage of the policy/option?			England			
On what date will the policy be implemented?			2010			
Which organisation(s) will enforce the policy?						
What is the total annual cost of enforcement for these organisations?			£			
Does enforcement comply with Hampton principles?			Yes			
Will implementation go beyond minimum EU requirements?			No			
What is the value of the proposed offsetting measure per year?			£			
What is the value of changes in greenhouse gas emissions?			£ Not quantified			
Will the proposal have a significant impact on competition?			No			
Annual cost (£-£) per organisation (excluding one-off)		Micro	Small	Medium	Large	
Are any of these organisations exempt?		No	No	N/A	N/A	
Impact on Admin Burdens Baseline (2005 Prices)			(Increase – Decrease)			
Increase of £		Decrease of £0		Net Impact £		
Key:	Annual costs and benefits: Constant Prices		(Net) Present Value			

Evidence Base (for summary sheets)

Background

1. The UK Government believes that climate change is the greatest long term threat facing the world. Current scenarios suggest that the UK is likely to experience hotter, drier summers and wetter, milder winters with more extreme weather events. The Stern review in 2006 examined the costs and risks of climate change and found that, whilst the costs of responding to climate change now would be significant, the costs associated with the impacts of climate change in the future would be substantially greater.
2. Planning can make a significant contribution to both mitigation of climate change (reducing greenhouse gas emissions), through its impact on energy supply and energy demand, and adaptation to climate change. The planning system does this through its ability to influence the location, scale, mix and character of development. It is able to allocate sites for, and consent, renewable energy development, for example, as well as coordinate new residential or commercial development with potential sources of renewable or low carbon energy and maximise efficiencies from scale and mix. The location and design of new development may also have an impact on energy demand, both in terms of transport energy consumption and energy use in buildings.
3. The Government's aims for planning are set out in Planning Policy Statements (PPS) or, previously, Planning Policy Guidance (PPG), which planning authorities must have regard to when preparing development plans or determining planning applications. The Government's ambitions relating to climate change and renewable energy are currently set out in PPS22 on renewable energy and the PPS1 supplement on climate change, although other PPSs may also be relevant. For example, PPS 1 itself sets out the overarching principles on delivering sustainable development, of which climate change is a key consideration, and PPG 13 on transport seeks to reduce demand for travel and consequently should have a beneficial impact in terms of reducing carbon emissions. The detail on the role of green infrastructure in mitigating and adapting to climate change is set out in proposed PPS on the natural environment, open space, sport and recreation.

4. PPS 22 was published in August 2004 and sets a positive planning framework to enable the Government's renewable energy objectives to be delivered on the ground. It expects renewable energy to be supported by regional spatial strategy (RSS) and local development framework (LDF) policies, designed to promote and encourage the development of renewable energy resources. It is supported by a companion guide published in 2004, which provides practitioners with practical guidance on planning for renewables, through, for instance, an explanation of various renewable technologies.
5. The PPS 1 supplement on climate change was published in December 2007. It placed climate change at the heart of the planning system, demonstrated by its status as a supplement to PPS1, which sets the principles for the planning system as a whole. The supplement set out how the Government expects planning to help secure enduring progress against UK emission targets, deliver its ambition on zero carbon development and shape sustainable communities resilient to the changes in the climate now accepted as inevitable, through its ability to shape new development and places. The PPS is supported by web based practice guidance, published originally in 2008, which provides advice to practitioners in implementing the PPS policy.
6. The PPS aims to direct development towards suitable locations, including where there are opportunities to cut carbon or make use of decentralised or renewable and low carbon energy. Development plans should promote positive planning for renewables through the setting of regional targets and the creation of a supportive planning framework at the local levels, as well as potentially including local standards for sustainable buildings. The PPS also includes factors which development proposals at the planning application stage should be considered against, to ensure development is planned to minimise carbon dioxide emissions.
7. However, knowledge and understanding about climate change and its impacts are continually developing. The wider policy framework has responded to these developments and there have been a number of important initiatives since the PPS 1 supplement was published in 2007, including:
 - The Climate Change Act 2008 introduced a statutory target of reducing carbon emissions by 80 percent below 1990 levels by 2050, with an interim target of 34% by 2020. Government departments will prepare carbon budgets to indicate how greenhouse gas emissions will be reduced across the Government estate and in sectors where departments take a policy lead.

- The Low Carbon Transition Plan (LCTP)²⁵ and Renewable Energy Strategy (RES)²⁶ were published in July 2009. The LCTP provides a route map to the 2050 target in the Climate Change Act and sets out how the UK will achieve the 34 percent cut in emissions on 1990 levels by 2020, outlining a number of initiatives such as making homes greener, increasing the amount of electricity generated from low carbon sources and supporting initiatives such as funding for electric car infrastructure charging under pilot projects.
- The Renewable Energy Strategy (RES) sets out how the UK will achieve the binding EU target of 15 percent of all energy to come from renewable sources. The lead scenario suggests that to meet these targets, 30% of our electricity and 12% of our heat should come from renewable sources. The strategy identifies a number of delivery mechanisms to help the UK reach this target and underlines the importance of an efficient planning system which supports the development of renewable energy. A number of the proposed measures relate to planning for renewable energy, including £10 million to improve planners' skills, promoting planning performance agreements for renewable energy projects, and a pilot project to evaluate the use of local development orders. The RES also committed the Government to develop a new standardised methodology for assessing the capacity for renewable energy at the regional level to be used in the development of the new regional strategies.
- In July 2007 the Government's "Building a Greener Future: Policy Statement" announced that all new homes will be zero carbon from 2016. Following up the commitment in the Policy Statement to consult further on the definition of zero carbon, in December 2008 the Government published "Definition of Zero Carbon Homes and Non-Domestic Buildings: Consultation". This proposed an approach, subsequently confirmed in a Written Ministerial Statement²⁷ in July 2009, based on:
 - high levels of energy efficiency in the fabric of the home;
 - a minimum level of carbon reduction to be achieved onsite or through directly connected heat; and
 - a list of allowable solutions for dealing with all the remaining emissions.

²⁵ The UK Low Carbon Transition Plan. DECC (2009) Available from http://www.decc.gov.uk/en/content/cms/publications/lc_trans_plan/lc_trans_plan.aspx

²⁶ The UK Renewable Energy Strategy 2009 DECC (2009) Available from http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/res/res.aspx

²⁷ The WMS is at <http://www.communities.gov.uk/statements/corporate/ecozerohomes>

- A consultation on zero carbon for new non-domestic buildings was launched in November 2009 which also considers planning's role in achieving a zero carbon build standard for non-domestic buildings.
 - Publication of the Household Energy Management Strategy (HEM) on 2 March 2010. The HEM placed greater emphasis on district heating schemes, consistent with the ambitions in the RES. The HEM recognised the role of planning in facilitating the development of district heating and Combined Heat and Power plants, as well as outlining a number of non planning related initiatives, such as improving the energy efficiency of domestic buildings through cavity wall insulation.
 - UK Climate Impacts Programme, UKCIP, 2009 Projections were published in June 2009. The approach builds on previous projections, particularly the latest set from 2002, but provides a finer grain, down to 25sq km. It also introduces a new probability range for the projections based on three global emission scenarios; high, medium and low. It gives projections for a wide range of climate and weather related impacts such as temperatures, including heat events, rainfall patterns, flooding and other extreme weather events.
8. In order to achieve the Government's increasing ambitions for climate change, the planning system needs to ensure that it responds to, reflects, and supports these initiatives.
9. The Planning Act 2008 introduced a new planning regime for nationally significant infrastructure projects, including energy generation over 50 Megawatts (MW). The Infrastructure Planning Commission (IPC) will consider such applications within a planning policy framework created by National Policy Statements (NPS). The Draft National Policy for Renewable Energy Infrastructure consultation closed in February 2010 and will have direct read-across to the planning system for applications of less than 50MW. Alongside this new regime, the Act also introduced a new duty for RSSs and LDFs to include policies within them on climate change, ensuring that they make a contribution to the mitigation of, and adaptation to, climate change.

What is the problem and why is Government intervention necessary?

The existing PPS and the legislative/policy framework

10. As outlined above, there have been significant changes to the legislative and policy framework through the Climate Change Act, LCTP and RES, which demonstrate Government's increased ambitions on reducing carbon emissions and delivering renewable energy. These ambitions need to be reflected in the national planning framework in the PPSs to enable the planning system to make a full and effective contribution to addressing this agenda. This was recognised in the Renewable Energy Strategy, which included a commitment to merge and update PPS22 and the PPS 1 supplement on climate change.

11. Evidence from two studies by Arup suggests that the current framework is not sufficient to deliver these increased ambitions. The first of these examined the potential renewable energy capacity in England as delivered through the RSSs²⁸. The report found that there were considerable inconsistencies between targets and accompanying policies across the regions, and there was a large delivery gap in respect to achieving the targets for 2010 that existed then. The study also reported that targets were not always clearly linked with the supporting evidence base. The study informed the conclusion in the RES that there was a need for a standard regional methodology for calculating capacity, which the revision of the PPS will need to reflect.
12. The second study examined the take-up of the climate change PPS supplement 18 months after it was published and sought to identify barriers to its effective implementation²⁹. The study found that the take up of the supplement had been patchy but many authorities had yet to finalise development plan documents and those which had been adopted were often based on earlier planning policies. The study suggested that the climate change supplement needs to improve the extent to which it shapes the gathering of evidence. The study also found a varied response to the PPS supplement with regard to development management, with some authorities giving it much greater consideration than others. The report made a number of recommendations which the revision of the PPS partly seeks to address. These recommendations include ensuring the appropriate weight is given to climate change, addressing problems with energy feasibility assessments and the relationship between national initiatives and local standards for building sustainability.
13. The RES also identified a need to ensure that the RES, energy NPSs and PPS are all consistent. While the NPS on renewable energy is primarily for the IPC determining applications, it will still form material considerations for the conventional town and country planning system as it will include locational considerations for siting renewable energy installations. As a result of the wish to reduce overlap with these considerations in PPS 22, PPS22 lends itself to a merger with PPS 1 supplement on climate change to create an overarching PPS on climate change and renewable energy. Whilst the IPC regime will address the largest applications, the vast majority of medium and small scale renewable energy installations will still need to be consented through the normal planning route via local planning authorities. In light of the anticipated increase in the numbers of planning applications, the planning system needs to be fit for purpose in order to respond appropriately to this challenge.

²⁸ Renewable Energy Capacity in Regional Spatial Strategies: Final Report, CLG (2009) Available from <http://www.communities.gov.uk/publications/planningandbuilding/renewableenergyreport>

²⁹ Take up and application of the policies in the Planning Policy Statement on Planning and climate change, Arup, CLG (2010)

14. The revision of the PPS will also provide an opportunity to ensure that the planning system is fully integrated with other changes that have taken place since 2007, including:
 - The changing building regulations and the Zero Carbon homes initiative, which provides an opportunity to minimise duplication between planning and other regimes;
 - Increased focus on district heating as a means to reduce carbon emissions; and
 - Increased understanding of adaptation issues following the publication of the UKCIP 2009 projections.
15. Alongside the changes in policy context, the Government committed to significantly streamlining the national policy framework in the 2007 Planning White Paper in order to achieve a more strategic and focused framework, which is clearer and more accessible. This is to be achieved by:
 - A clearer separation of policy from guidance;
 - Setting out clearly and succinctly the policies that should guide plan making and planning decisions, and making it clear where there is scope for local flexibility;
 - drawing together national development policies that apply to the process of determining planning applications; and
 - setting out clearly the evidence needed to make robust decisions.
16. The merger and revision of PPS22 and the PPS 1 supplement on climate change is consistent with achieving this aim.

Market failure

17. The key justifications for government intervention through the planning system are twofold. Firstly, there are the externalities imposed by new development on wider society. These externalities may be associated with the carbon emissions from new development, whether homes or non-domestic buildings, or with other impacts such as the contribution of new development to urban heat island effects. Secondly, there may be coordination failures associated with the provision of renewable energy. An individual developer wishing to install some form of renewable or low carbon energy to supply a new development may be unaware of opportunities to link to or anchor a network covering a larger area which may provide a more cost-effective means of supplying the necessary renewable energy.

18. The planning system can address the externalities associated with new development by considering its impacts as part of the planning process, and by applying criteria on development design which ensure that the impact of negative externalities is minimised or that positive externalities are maximised.
19. The planning system also has an important role to play in acting as a strategic coordinator. Planning authorities may be better able than an individual developer to identify appropriate sites for decentralised energy installations, or map heat demand and identify possible sources of supply across their local area and this may enable more cost-effective solutions to the provision of renewable and low carbon energy.

Policy objectives

20. The objectives of the PPS revision are to deliver a stronger and clearer framework for planning to tackle climate change and contribute to meeting the Government's climate change ambitions. Consistent with the Government's focus on streamlining planning policy, the revision has sought to clarify the primary objectives for the planning system, namely ensuring that the planning system makes a full contribution to making progress against the UK targets to reduce carbon emissions and use more renewable and low carbon energy. In addition, it must help communities adapt to the climate change which is now inevitable.
21. The intended effects of the policy are to:
 - Improve planning's ability to support delivery of the climate change agenda, thereby contributing to higher reductions in carbon emissions and increasing the amount of renewable energy delivered through the planning system.
 - Provide clarity to stakeholders as to what requirements the policy places upon the planning system, enabling stakeholders to prioritise and deploy resources to the most critical areas.
 - Provide clarity as to planning's interaction with other regimes, such as building regulations and NPS, and thereby avoid duplication between them.
22. The full list of policy objectives can be found on page 16 of the consultation document.

Overview of options for consultation

23. Two options were considered when drafting the PPS. These are summarised below.

Option 1: Do nothing

24. PPS 22 and the PPS 1 supplement would remain separate and unrevised, and continue to form the policy framework for planning for renewable energy and climate change.

Option 2: Merge, revise and streamline the two PPS into one document

25. PPS 22 and the PPS 1 supplement on climate change would be updated and streamlined in one single PPS covering both renewable energy and climate change.

26. Option 2 is the Government's preferred approach. This represents the best way to create a robust framework to tackle climate change and provides the greatest opportunity to streamline policy with the consequent benefits of this and opportunity to align with other regimes such as the NPSs.

27. Initially, a third option was considered of updating the two PPS but maintaining them separately. This has not been taken forward as an option for consultation following initial consideration of its costs and benefits. While the benefits of revising the policy would be very similar to those outlined under option 2 below, the maintenance of two separate documents loses the benefit of a strategic approach to climate change and renewable energy and is unlikely to have the same benefits in merging the two documents in terms of achieving clarity and minimising duplication. This option has therefore not been taken forward for further consideration.

Summary of preferred option

28. The draft revised supplement differs to the existing policy framework set out in the existing supplement and PPS 22 in a number of ways, including:

- Adoption of a new streamlined approach, with the two PPSs merged into one and separation of policy and guidance.
- Increased clarity about the importance of tackling climate change and adapting to its consequences, through clearer objectives focused on these two elements. The PPS sets out clear expectations on LPAs in planning for renewable energy, such as ensuring that development does not prejudice the broad areas identified at regional level for renewable energy, and setting out how decentralised energy will supply new development in the area.

- Changes to local and regional evidence base requirements; including the requirement to use the standardised methodology committed to in the RES for identifying capacity at the regional level, greater encouragement of heat mapping where appropriate, and promotion of greater integration of the waste and energy agendas.
- Increased focus on adaptation to the impacts of climate change, with adaptation policy made much more explicit.
- Changes to the policy on provision of decentralised renewable and low carbon energy. Local planning authority-wide targets for decentralised energy to serve new development will, over time, become unnecessary as this will be addressed via Building Regulations.
- Increased powers to LPAs and responsible regional authorities to set targets relating to water usage.
- Stronger application of site selection, and development management criteria at the LDF and planning application stage, through a greater expectation that sites and applications will be refused where they do not meet the relevant criteria.

Sectors and groups affected

29. The proposed policy would have an impact on the following:

- **Local planning authorities** who have responsibility for setting out spatial policies for their local areas in LDFs and determining planning applications;
- **Responsible regional authorities** in their role in preparing regional strategies (RS), which form part of the development plan and set the strategic planning framework for the region as a whole. Three key policy areas which the RS should cover are housing, economic development and climate change;
- **Developers of housing or commercial land:** the PPS aims to influence the location and design of all development to ensure that opportunities to mitigate and adapt to climate change are considered, for instance, careful site selection;
- **Renewable energy developers/suppliers**, who are responsible for bringing forward sites and technology for renewable energy; and
- **The general public**, who may be affected by the results of development proposals.

Cost Benefit Analysis

30. The purpose of the Impact Assessment is to present the Government's assessment of the likely costs and benefits of the changes to existing policy in the PPS1 supplement on climate change and PPS 22 on renewable energy. The overall costs and benefits of introducing the original PPS 1 supplement were assessed in the final impact assessment accompanying the publication of the PPS³⁰.
31. It has not been possible to quantify the overall impacts of the changes to the PPS. National planning policy is not applied directly by central Government, and local authorities have primary control over plan-making and development management decisions. Planning Policy Statements are important considerations for plan making and development control but it is for regions and local authorities to apply them in the light of their circumstances. This means it is difficult to define both the type of development that might be brought forward in different localities under the do nothing scenario, as well as development brought forward under a revised policy.
32. It can also be challenging to disentangle the impacts of changes in planning policy from the impacts of other Government initiatives. This is mainly because planning is an instrument which can facilitate the delivery of certain types of development rather than a direct policy lever.

Option 1: Do nothing

33. Under the do nothing option the formulation of planning policies in RSSs and LDFs, and decisions on planning applications, will be guided by existing national planning policy in the PPS1 supplement and PPS22 and their accompanying practice guide. This will not result in any additional costs and benefits.
34. However, the existing policy framework does not fully reflect the scale of Government's ambitions in tackling climate change and in some instances this may not deliver the outcomes necessary to achieve these ambitions. Over the longer term, this may have adverse consequences for the country if the planning system does not make a full contribution to mitigating climate change through reducing emissions, facilitating increased delivery of renewable energy through the planning system, and encouraging adaptation to the changes in climate that are already accepted as inevitable.

³⁰ Impact Assessment of the Planning Policy Statement: Planning and Climate Change
<http://www.communities.gov.uk/publications/planningandbuilding/climatechange>

Option 2: Merge and revise PPS22 and PPS 1 Supplement on Climate Change

35. The impacts of the proposal are considered in relation to (i) the streamlining and merging of PPS 22 and the PPS 1 supplement on climate change and (ii) the revisions made to the policy content.

Impacts of streamlining and merging PPS 22 and the PPS 1 supplement on climate change

36. Streamlining is the process of separating policy from guidance, organising policy material around the key planning processes (plan making and decision taking), and removing policy duplication. The aim is a strategic and user-friendly planning framework.

Benefits

37. It has not been possible to quantify the benefits and costs of streamlining policy given the inherent difficulties of assessing the impact of changes in the way that policy is structured and presented. However, analysis for the Killian Pretty Review³¹ provides some context for what the benefits of streamlining could look like if they were implemented across the planning system as a whole.
38. The Killian Pretty review considered that if Government overhauled and simplified the national policy framework and the secondary legislation for the process of planning applications, this would enable faster and more effective handling of applications by reducing the inherent complexity in the process. They estimated that this complexity costs applicants a total of £750m per year in consultants and legal fees, and that a 10% reduction would save applicants £75m per year and local authorities £30m per year.
39. The specific benefits arising from streamlining and merging PPS 22 and the PPS 1 supplement are:

Greater clarity around what is expected of practitioners

40. The separation of policy from guidance allows shorter policy documents which are focused on key policy principles. The outcomes which users should be working towards are clearer, as are the policy principles that they are expected to follow to deliver these objectives. As guidance is set out separately from policy, this indicates that there is discretion in the way in which users (primarily local authorities) can deliver the outcomes and policy principles.

³¹ The Killian Pretty Review Planning applications: A faster and more responsive system (November 2008)
http://www.planningportal.gov.uk/uploads/kpr/kpr_final-report.pdf

41. Being clear where there is discretion and flexibility encourages local authorities to consider what is best for their local circumstances, by using or adapting the guidance as they see fit, or developing their own approach.

Resource and time savings

42. Restructuring the policy documents with key users in mind has an important 'reading and complying benefit' for many users – they do not have to read the whole policy document to ensure they have not missed a crucial instruction, but can dip in and out of the document as necessary. This translates into resource savings for local authorities and applicants for planning permission, as it will enable speedier plan making and decision making, and help developers in producing applications for development, which have a greater chance of success (and hence lead to fewer planning appeals).

Minimises duplication and complexity

43. Bringing together planning policy related to climate change and renewable energy in a single document and aligning policy with that in the NPS will cut out duplication and minimise complexity for users, both applicants and LPAs.

Encourages strategic thinking

44. Consolidating climate change policy into a single document enables Government to set out a clear, integrated and strategic approach for planning for climate change and renewable energy. This should help regions and local authorities to be more strategic in their approach, particularly to renewable energy.

Costs

45. Revision of existing policy is likely to impose some small costs on planning bodies as they need to familiarise themselves with the new policy. However, it is assumed these costs will not be substantial because after initially reading the new policy, planners within LPAs and responsible regional authorities will simply refer to relevant sections when undertaking particular activities. The restructuring of policy should make it easier for practitioners to identify the relevant information within the policy and lead to greater efficiency in the day-to-day use of the policy.
46. LPAs will also need to take into account the policy on renewable energy within the draft National Policy Statements for energy infrastructure, including the draft National Policy Statement for Renewable Energy Infrastructure.

Impacts of policy revisions in the PPS climate change supplement

47. The analysis of the impacts arising from the revisions to current policy within the two PPSs is set out for each of the policy changes as follows:
- Clarification and consolidation of the policy objectives
 - Greater clarification of regional evidence base requirements
 - Local energy planning
 - Climate change considerations at the heart of site assessment in plan making and decision taking
 - Clarity around zero carbon and building regulations
 - Electric car charging infrastructure
48. The overall impact of the proposed changes to the PPS is then considered in relation to the supply of renewable energy coming through the planning system, and the need to consider adaptation to climate change in both plan-making and development control activities.
49. In assessing the impacts of the proposed changes to planning policy, it is useful to be more specific about the role of the planning system. Planning is a process which allows consideration of, and democratic engagement with, the positive and negative impacts of proposed new development and changes in land use. It does not in itself bring forward new development: it is developers who identify specific opportunities and make proposals for development. However, the planning system can play an important role in encouraging particular types of development in specific locations, particularly through its plan-making function; in acting as a strategic coordinator of new development; and in facilitating the delivery of proposed development through the planning application process.

Clarification and consolidation of the policy objectives

50. The clearer objectives within the revised PPS respond to the findings of research commissioned by CLG into the take up of the PPS supplement, which found that LPAs felt that the key planning objectives were too broad. It recommended that the objectives within the PPS should be made clearer to make it easier for LPAs to use them in decision making. This has been reflected in the new shorter and more focused policy objectives.

Benefits

51. The clarification and consolidation of policy objectives will make it clearer for planning bodies where their main focus should lie in relation to climate change and renewable energy. This will encourage them to target their resources in both plan-making and development control more effectively, which in turn should lead to better outcomes.
52. One of the tests of soundness, against which DPDs must be assessed through an Examination in Public, is consistency with national policy. The greater clarity of the objectives in the PPS should lead to them being better reflected in plans, improving the overall quality of plans in taking account of climate change and renewable energy issues, and making it easier to demonstrate how a DPD complies with this test of soundness.

Costs

53. It is not thought that there will be any additional costs directly stemming from the clarification of the policy objectives.

Greater clarification of regional evidence base requirements

54. The Arup report on renewable energy capacity in RSSs found that there is currently considerable variation in the regional targets set in terms of their format, content and ambition and concluded that “a consistent methodology is needed for future reviews of renewable energy resources to ensure that both the evidence base and the subsequent regional targets are set on the same basis, using the same terminology and method and thus that the data used is directly comparable.”
55. The revised PPS requires that the regional evidence base should be consistent with the standardised methodology for assessing regional capacity for renewable energy promoted in the RES.

Benefits

56. The expectation that responsible regional authorities follow a standardised methodology in drawing up a regional evidence base should ensure that the current observed variation in regional targets is reduced. This in turn should mean that more consistent evidence is used to set targets which will encourage a more equitable outcome where the potential for renewable energy is measured in the same way across the regions. Consequently, more realistic and ambitious targets can be set by the regions, helping to facilitate increased delivery of renewable energy at the local level.

Costs

57. There are likely to be costs to the regional responsible authorities in collecting the information required under the standardised regional methodology. However, the methodology means that they no longer need to interpret what is required for the evidence base, which should allow them to fulfil the policy requirements with less unnecessary work.

Local energy planning

58. The revised PPS requires LPAs to take a more proactive approach to local energy planning, with clearer requirements for the evidence base at local level, and an expectation that LDFs will provide a supportive framework for renewable and low carbon energy that specifies relevant opportunities. These opportunities include protecting the broad areas identified by the region, supporting opportunities for community-led renewables and decentralised energy, identifying strategic sites for decentralised energy where appropriate, and setting out how any opportunities for district heating will be supported. This approach to local energy planning should provide a clearer framework in which to bring forward decentralised and renewable energy and consequently make delivering this easier and more cost effective.

Identifying opportunities for decentralised energy

District heating schemes

59. District heating allows the production of heat in a central location with hot water then piped to the buildings connected to the network, rather than the generation of heat within an individual building. Gas fired, waste fed or biomass combined heat and power (CHP) schemes can produce power and heat with greater energy efficiency than conventional energy sources³².
60. Local planning authorities have an important role as strategic coordinators due to their influence over spatial considerations which in turn may determine whether more cost effective provision of district heating can be chosen. Recent research published by DECC suggests the importance of public sector involvement in addressing the current high levels of risk for developers who are considering the construction of a district heating scheme³³. A key factor in reducing risk for developers is the need to identify sufficient heat demand or anchor loads for the energy development. This means that initially district heating is likely to be suited to three main groups: new development; public buildings; and large non-domestic buildings.

³² Powering Ahead, Delivering Low Carbon Energy for London, GLA (2009)

³³ The Potential and Costs of District Heating Networks, Poyry Energy Consulting/Faber Maunsell, DECC (2009)

61. The requirement for local energy planning addresses a number of these issues. The PPS expects LPAs to assess opportunities for decentralised energy, focusing on opportunities “at a scale which could supply more than an individual building”. The requirement to undertake heat mapping and prepare a strategy for delivering decentralised energy means that a network can be planned to achieve maximum efficiency through, for instance, careful siting of the relevant plant and identification of anchor loads for the network. LPAs are in a position to make connections and identify opportunities for district heating that a developer may not be able to, or would find costly to do.

Benefits

62. The evidence base supporting the recently published zero carbon non-domestic buildings consultation³⁴ suggests benefits that could arise if planning is able to link new non-domestic development with CHP schemes to other heat users.
63. Cumulative capital costs for developers of reaching the target percentage reductions in regulated carbon emissions are reduced for different building types when district heat networks with surplus heat (or heat dumping) can be used. Essentially for many types of non-domestic building it can be more cost-effective for a developer to build a larger CHP plant which supplies a greater proportion of the power to the new non-domestic building due to greater economies of scale. Larger CHP plants will, however, produce a large heat surplus. If this heat can be harnessed to supply heat to other users in a locality, this will allow developers to construct larger CHP plants, giving them a more cost-effective way of meeting zero carbon targets³⁵.
64. Table 1 shows how the costs per square metre of meeting the zero carbon targets vary for different building types depending on whether renewable energy is produced through a stand-alone power source, a district heating scheme or a district heating scheme with heat dumping. This clearly shows how all types of non-domestic buildings can meet the 25%, 44%, 70% and 100% targets when the production of surplus heat is allowed, and that in most cases it is cheaper for them to do so.

³⁴ Zero Carbon for New Non-Domestic Buildings: Impact Assessment
<http://www.communities.gov.uk/publications/planningandbuilding/newnondomesticconsult>

³⁵ Developers of non-domestic buildings can meet zero carbon standards through a combination of energy efficiency measures, carbon compliance and allowable solutions.

Table 1: Costs (£/m²) of meeting targets for reduction in regulated emissions by building type and renewable energy provision³⁶

Building type	Renewable energy provision		Percentage improvement in regulated emissions on 2006 Building Regulations			
		Target reduction	25%	44%	70%	100%
City centre office	Stand alone	Reduction achieved	25%	38%		
		Cost £/m ²	£44	£254		
	District Heating	Reduction achieved	25%	36%		
		Cost £/m ²	£47	£134		
	DH with surplus heat	Reduction achieved	25%	44%	70%	100%
		Cost £/m ²	£45	£64	£86	£113
5* hotel	Stand alone	Reduction achieved	25%	44%	70%	84%
		Cost £/m ²	£7	£41	£53	£97
	District Heating	Reduction achieved	25%	44%	70%	91%
		Cost £/m ²	£7	£41	£52	£94
	DH with surplus heat	Reduction achieved	25%	44%	70%	100%
		Cost £/m ²	£7	£41	£55	£86
Large supermarket	Stand alone	Reduction achieved	25%	42%		
		Cost £/m ²	£345	£487		
	District Heating	Reduction achieved	25%	44%		
		Cost £/m ²	£227	£465		

³⁶ The information in Table 1 is taken from tables A2.1, A2.3 and A2.5 in the Zero Carbon Non-Domestic Buildings Impact Assessment, <http://www.communities.gov.uk/publications/planningandbuilding/newnondomesticconsult>

Table 1: Costs (£/m²) of meeting targets for reduction in regulated emissions by building type and renewable energy provision (*continued*)

Building type	Renewable energy provision		Percentage improvement in regulated emissions on 2006 Building Regulations			
	DH with surplus heat	Reduction achieved	25%	44%	70%	100%
		Cost £/m ²	£54	£63	£75	£89
Retail warehouse	Stand alone	Reduction achieved	25%	44%	70%	89%
		Cost £/m ²	£0.24	£1.30	£175	£341
	District Heating	Reduction achieved	25%	44%	70%	90%
		Cost £/m ²	£0.24	£1.30	£176	£338
	DH with surplus heat	Reduction achieved	25%	44%	70%	100%
		Cost £/m ²	£0.27	£4.11	£80	£152

65. A city centre office, for example, would be able to meet the target 100% reduction in regulated emissions at a cost of £113/m² if district heat with heat dumping is used, compared with meeting a 36% reduction in regulated emissions at a cost of £134/m² when district heat does not produce any excess heat. Figure A2.9 in the zero carbon non-domestic buildings impact assessment shows the cumulative cost curves for improving on 2006 Building Regulations for a large city office. This shows in graphical form the greater cost effectiveness for developers of meeting targets when they are able to use district heating with heat dumping. The above figures assume that biomass solutions are allowed, although similar modelling without biomass is also reported.
66. As well as the greater cost-effectiveness of meeting carbon reduction targets, developers could benefit from the reduced expenditure on offsite allowable solutions and, potentially, from incentives associated with abating carbon such as the Carbon Reduction Commitment or Renewable Heat Incentive. In addition, the research for DECC assessed the potential and costs of district heating networks, and identified opportunities for further investment and deployment³⁷ in urban centres, or where non-domestic buildings and homes create mixed areas with high heat load density.

³⁷ The Potential and Costs of District Heating Networks, Poyry Energy Consulting/Faber Maunsell, DECC (2009)
http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/distributed_en_heat/District_heat/District_heat.aspx

67. Where planning authorities have a well-developed evidence base, they may be in a better position than individual developers to consider the location of proposed new non-domestic development and identify opportunities to connect with heat demand in their area, and this coordinating role may allow developers to comply with carbon standards at a lower capital cost.

Costs

Society

68. Where local energy planning allows individual developers in some instances to install larger CHP plants and export heat to other users, there will also be some additional costs that would not be incurred in situations where developers do not export heat. The provision of piping and the retrofitting of existing buildings to enable linking to the network could be costly. The costs of the associated pipe network would depend on the area covered by the district heating scheme. An illustrative example of a multi-site mixed-use scheme in London is estimated to have costs for the pipe network and plant of up to £100 million³⁸. In addition, there would be extra costs associated with the additional fuel needed to feed a larger plant.

Local authorities

69. The original PPS required LPAs to have “an evidence based understanding of the local feasibility and potential for renewable and low carbon technologies” and suggests that local authorities should pay attention to opportunities for using decentralised energy, including co-locating heat suppliers and demand. New burdens funding was made available to local authorities to support them in meeting the requirements of the policy.
70. The new PPS places greater emphasis on LPAs, particularly in urban areas, having up to date heat mapping as part of their evidence gathering. However, urban areas with few opportunities for large-scale and grid-connected renewable energy should have, through the preparation of their evidence base as already required by the PPS on climate change, identified decentralised energy as a key local opportunity due to its predication of that technology on higher densities. DECC are currently considering the option of developing a national heat map.
71. The expectation of the new PPS should not therefore represent a new cost for all LPAs though it may be that in completing the local evidence base to a higher standard some extra cost is incurred. It is not clear how many authorities may need to do more work to meet the new policy requirement and the likely extent of this work and this cost has not been quantified at this time.

³⁸ Powering Ahead, Delivering Low Carbon Energy for London, GLA (2009)

72. Consultees are asked to provide evidence of the likely impact of this change to the PPS.

Other renewable energy

73. The requirements for local energy planning, coupled with a clearer national policy framework, should result in a more robust local plan relating to decentralised and renewable energy. This should give developers much greater certainty about what is acceptable to develop and which location may be appropriate for some types of energy development. As a result developers should be more likely to submit applications which are consistent with local policy, reducing the number of unsuccessful applications. Appeals against refusal of planning permission should therefore be reduced, saving time and money for both developers and LPAs.
74. Research by Arup shows the cost of appeals to the planning service as a whole across England³⁹ calculated as labour costs inclusive of overhead. The annual cost of dealing with appeals was estimated to be £23.9 million in 2006. In 2006-07 Planning Inspectorate statistics show that 20,858 appeals were decided⁴⁰. This suggests a cost per appeal for an LPA of approximately £1,145. This figure does not allow for the differing work that appeals for different development will involve, but gives an indication of potential savings to an LPA if an appeal is averted.
75. There is no evidence of the costs to developers of the work necessary to appeal against a planning application.

Climate change considerations at the heart of site assessment in both plan-making and decision-taking

76. Research suggests that the criteria in the current PPS do not have sufficient bite when applied to planning applications; research commissioned by CLG⁴¹ found that the Key Planning Objectives in the existing PPS were not being used effectively by LPAs when determining applications. Similarly, the Committee on Climate Change's annual report found that land use planning decisions were not fully reflecting the carbon dioxide implications of transport⁴² and that development of a land use framework could deliver an emissions reduction of at least 2 MtCO₂ in 2020 and 3.6MtCO₂ in 2030.

³⁹ Arup, Planning Costs and Fees, CLG (2007)

⁴⁰ http://www.planning-inspectorate.gov.uk/pins/reports/stats_2007/statistics_july_07.htm

⁴¹ Take up and application of the policies in the Planning Policy Statement on Planning and climate change, Arup, CLG (2010)

⁴² Meeting carbon budgets – the need for a step change, Committee on Climate Change (2009)
<http://www.theccc.org.uk/reports/progress-reports>

77. Building from the approach already existing in the PPS on climate change, the new policy enables LPAs to apply the development management criteria directly to planning applications for major development, taking into account the feasibility of achieving the criteria. In some cases, it may not be possible to achieve one, or more, of the criteria. This should not be a reason to refuse the application if the developer can demonstrate why this is the case. If, on the other hand, it is feasible, to achieve it, but the developer has not done so without good reason, then this should weigh in the balance when considering the application. The assessment of the impacts of strengthening the criteria against which planning applications must be considered has been made first in broad terms under the benefits and costs headings below and second, broken down in relation to the specific criteria in Table 2.

Benefits

78. The ability to use the PPS when determining applications should result in greater application of the PPS criteria, with the associated benefits in terms of reducing emissions, increasing adaptation capacity, and encouraging greater delivery of renewable energy. This provides benefits to LPAs in terms of greater clarity on using the PPS in development management and avoids the need for LPAs to repeat these criteria within LDFs, saving resources and time. Developers of residential and commercial land also benefit from the clarity as to what the expectations are for new development, which should make it easier to meet these requirements.
79. Greater application of the site selection criteria should have multiple benefits in terms of securing greater mitigation and adaptation, contributing to these benefits as described above. It should mean reduced emissions from new developments, and fewer developments designed or located in places not suitable for the future climate. The benefits are thus to the society as a whole, with reduced risks and costs due to reduced need to retrofit developments.

Costs

80. LPAs will need to consider proposals for new development against the list of criteria laid out in the PPS in Policy LCF12. These criteria existed within the previous PPS but the new policy is much clearer in allowing LPAs to apply the criteria directly to planning applications. As a result, the criteria around the requirements for new development may be more vigorously or consistently applied. The need to meet these criteria may impose additional costs on developers. Developers will need to demonstrate through the submitted Design and Access Statement how the development complies with these criteria.

81. Where the clarity of these criteria increases costs on developers, these will be passed back to landowners in the form of lower prices paid for land. This is because residential developers are price takers in the housing market as the proportion of new stock brought on to the market annually is only a small share of the total housing stock. Developers are therefore unable to pass costs forward to homebuyers and instead pass them back to landowners. At the margins, this may lead to some potential sites becoming unviable if the price which developers are willing to pay for land does not exceed its existing or alternative use value. This may in turn have a marginal impact on housing supply.
82. It is not clear the extent to which the criteria impose extra costs on developers, in particular because some of the criteria are already covered by other policy or regulation, and it is not clear how far the need to consider them in the round may be costly. Consultees are asked to provide evidence on the likely costs of meeting these criteria.
83. The behaviour of developers in response to the policy has been considered. There are a number of possible responses:
 - Developers bring forward proposals which demonstrably meet the criteria in the policy, taking account of any extra cost imposed by the policy in their negotiations with landowners. The housing and other development supplied meets the standards laid out in the policy and contributes towards the overriding objectives of the policy.
 - Developers do not bring forward proposals on particular sites due to the extra costs making sites unviable.
 - Developers bring forward sub-optimal proposals on which LPAs have to make decisions.

Impacts in relation to specific criteria

Table 2: Criteria against which planning applications must be assessed with assessment of potential impacts

Criteria in policy	Costs	Benefits
Be designed to reduce greenhouse gas emissions by: using landform, layout, building orientation, massing and landscaping to reduce likely energy consumption; using the layout, density and mix of development to support identified opportunities for decentralised energy; connecting to an existing decentralised energy supply system where there is capacity to supply the proposed development, or being designed for a future connection where there are firm proposals for such a system.	The key costs for developers will be in the design of new development. Through bringing together a number of concerns around the planning of development to reduce emissions, this may mean extra costs for developers. The possible magnitude of those costs is not clear. Where it is possible for the development to connect to an existing or proposed decentralised energy supply system, there may also be additional costs imposed on developers. Incorporating these connections into the design of the development should lead to lower costs than if they are added at a later date.	Contribution of new development granted planning permission to targets for reduced greenhouse gas emissions. Reduced energy costs for occupiers. Parts of this are/will be covered by the building regulations.
Provide public or private open space as appropriate so that an accessible choice of shade and shelter is offered, recognising the opportunities for people, biodiversity, flood storage and carbon management provided by multi-functional green spaces and green infrastructure networks	The cost for developers will be the opportunity cost involved in not using land for housing or employment uses. The magnitude of this cost depends on the extent to which additional open space is required by the PPS compared to the current situation.	Open space provides health benefits, both from the opportunities it offers for people to exercise and maintain a healthy lifestyle, and from its contribution towards reduced flooding and reduction in extreme temperatures in urban areas. Research suggests that a 10% increase in green cover could reduce temperatures in an urban area by 4°C ⁴³ . This links with other PPSs, including PPS25 on flooding and PPS9 on biodiversity.

⁴³ S.E.Gill, J.F.Handley, A.R.Ennos & S.Pauleit, Adapting Cities for Climate Change: The Role of Green Infrastructure, Built Environment, 33, 1

Table 2: Criteria against which planning applications must be assessed with assessment of potential impacts (*continued*)

Criteria in policy	Costs	Benefits
Use sustainable drainage systems, paying attention to the potential contribution to be gained to water harvesting from impermeable surfaces and layouts that accommodate waste water recycling	There may be additional costs to developers in providing SUDs, although in some instances SUDs systems may be cheaper than conventional drainage.	The use of SUDs should lead to reduced likelihood of flooding; and where water harvesting is incorporated in the design of a development may lead to benefits in areas of water stress or shortage. This has strong links with other policies; the draft Floods and Water Management Bill includes a provision to make SUDs mandatory where practicable.
Support sustainable waste management by providing space for recycling and composting	If space for recycling or composting is designed into schemes from the beginning, costs should be low or similar to what would already be incurred. There may be some additional costs for developers immediately after the PPS is brought in, but these should reduce over time.	Currently most waste ends up in landfill and leads to emission of the greenhouse gas, methane. Reducing waste going to landfill has environmental benefits but may also reduce the costs of waste treatment and disposal. PPS10 sets the planning framework for waste.

Table 2: Criteria against which planning applications must be assessed with assessment of potential impacts (*continued*)

Criteria in policy	Costs	Benefits
<p>Create and secure opportunities for sustainable transport by:</p> <ul style="list-style-type: none"> - implementing travel plans when required in line with PPG13 so as to minimise greenhouse gas emissions; - providing for safe and attractive walking and cycling opportunities including, where appropriate, secure cycle parking and changing facilities; - ensuring the provision of car parking is consistent with cutting greenhouse gas emissions, including through the provision of electric charging infrastructure. 	<p>There may be some extra capital costs for developers from the provision of cycle or foot paths and electric charging infrastructure. Travel plans are, however, already required for many large developments and the provision of cycle and foot paths will only apply to certain applications.</p>	<p>These considerations at the planning stage should lead to reduced emissions from transport relating to the new development. (See also PPG13 on transport).</p>
<p>Be designed to avoid adding to the vulnerability of existing or other proposed development to impacts arising from changes in the climate</p>	<p>This requirement may also lead to additional design costs for developers.</p>	<p>These considerations may lead to a reduction in the costs of flood damage and reduced impacts of heat on health. Consequently these features should help to give the building a longer life and reduce the need to retrofit in the future.</p>

Clarity around allowable solutions and building regulations

84. The planning system needs to ensure that it integrates successfully with other Government initiatives, such as Zero Carbon Homes. A recent written ministerial statement⁴⁴ has provided some additional clarity as to what is to be expected from developers. The revision to the PPS provides clarity that any local approach will need to be consistent with emerging national policy, thereby reducing confusion and potential overlap for developers between planning and other regulatory regimes.
85. The revised PPS emphasises the importance of local energy planning supporting new development in meeting the progressively demanding standards of emissions set through building regulations. As a result, authority wide targets to secure decentralised energy will, over time, become unnecessary. LPAs can still identify site specific opportunities that exceed the national standards where local circumstances warrant it, and certain tests pertaining to the viability of developments have been met.

Benefits

86. The PPS provides a clear steer that the more demanding standards set through building regulations will secure greater use of decentralised energy. This will reduce the need for local authorities to develop authority wide targets to secure decentralised energy in new development. However, local authorities can still set local requirements for decentralised energy for identified development areas or specific sites. This move away from authority wide decentralised energy targets should allow local authorities to better target their resources in the plan-making process. Additionally, this should help to reduce the requirements on developers as part of the planning application process and enable them to determine the most cost effective way to meet the requirements of building regulations.
87. The ability for LPAs in areas of water stress to set water standards in place of the entire Code standard provides authorities with greater flexibility in determining appropriate local building standards. This should reduce evidence base requirements where an LPA decides to apply a water or energy standard from the Code for Sustainable Homes, in place of an overall Code rating which encompasses many additional elements, such as waste and ecology. This should allow more development to take place in areas of water stress where local policies require certain water standards to be met.

⁴⁴ Available from <http://www.communities.gov.uk/statements/corporate/ecozerohomes>

88. Where an LPA sets standards solely for energy and/or water rather than for the entire Code, this will reduce the costs for developers in meeting those standards. Table 3 below provides an indication of the savings that this change might mean for an individual dwelling assuming that an LPA sets energy or water standards at Code Level 4, rather than applying the Code in its entirety at Level 4. The aggregate savings will depend on the numbers of LPAs which choose to set standards for new development in their area, and the types of dwellings that are built.

Table 3: Costs for meeting energy, water and whole Code standards for different dwellings at Code Level 4 (all medium case scenarios)⁴⁵

	Code Level	Cost of meeting Code Level for energy	Cost of meeting Code Level for water	Cost of meeting entire Code standard	Saving from meeting energy standards only	Saving from meeting water standards only
Detached house	4	£9,868	£125	£11,733	£1,865	£11,608
End terraced house	4	£7,115	£125	£9,490	£2,375	£9,365
Flat	4	£5,054	£125	£6,059	£1,005	£5,934

Costs

89. The revised PPS allows local authorities to establish a Code level for water only, instead of imposing the whole code. This policy change does not impose mandatory costs on local authorities as it is voluntary but where an LPA does choose to establish a Code Level for water or energy this may lead to some extra cost.
90. Developers will face extra costs in the instances where LPAs establish a Code Level for either water or energy, where previously they did not set any standards relating to the Code. Table 3 above illustrates the magnitude of costs to developers of a local authority establishing a Code level 4 for energy and water. As with the benefits described above, it is not clear what the aggregate impact might be. This will depend on the number of LPAs which choose to set Code standards for development in their area backed up with the necessary evidence.

Electric vehicle charging infrastructure

91. Road transport is responsible for over 22% of the UK's CO₂ emissions and cars are responsible for the vast majority of this. The use of alternative fuels, like electricity, can help reduce these emissions. While the Government has not set out any targets for the number of electric vehicles that are expected to be on the road by 2020, the

⁴⁵ These costs are taken from the Cost Analysis of the Code for Sustainable Homes (published July 2008) available from <http://www.communities.gov.uk/documents/planningandbuilding/pdf/codecostanalysis.pdf>. An update of this cost analysis is due to be published early in 2010 but was not available at the time the analysis for this impact assessment was completed. Updated costs will be taken into account in any final stage impact assessment.

Committee on Climate Change has set a target of 1.7 million electric/plug-in hybrid cars by 2020. The Committee suggests that this would save around 8.5MtCO₂e a year by 2020. However, for this level of electric car usage to be achieved and sustained, an extensive charging infrastructure is required. For instance, the CCC suggests that 5% of work car park spaces and 25% of homes without access to off-street parking should have standard charging points and there should be 2 publicly available fast charging points per 1000 vehicles.

92. Planning has an important role to play in facilitating the development of this infrastructure and the revised PPS encourages local authorities to support the uptake of electric and plug-in hybrid vehicles by providing opportunities for charging infrastructure within new developments. Although public charging points will also be required, the Department for Transport expect that charging electric vehicles at home will predominate. The provision of opportunities for charging infrastructure in new development is therefore seen as essential. The policy provides a clear steer to developers that they should consider electric vehicle charging infrastructure when designing new development.

Benefits

93. By encouraging the installation of charging infrastructure the planning system will contribute to the provision of the necessary infrastructure to support an increase in the uptake of electric and plug-in hybrid cars and the associated benefits in terms of carbon reductions. For example, an electric car powered from today's grid could emit between 15% and 40% less CO₂ over its lifetime than a comparably sized petrol car and this will improve as the UK electricity generating sector moves to low carbon energy sources.
94. The Department for Transport expect that charging at home will predominate for the majority of electric vehicle users. The focus in the policy on new developments should help to reduce the cost of providing this infrastructure, as it will be cheaper to fit in new development than to retrofit existing development at a later stage, and enables a more rapid and large-scale roll out of charging infrastructure. Initial estimates from the Department for Transport suggest that for retrofit, the costs of publicly accessible charge points could be £1,200 – £1,700. This compares to an estimated cost of £800 – £1200 for the infrastructure on new development.

Costs

95. The revised PPS1 supplement on climate change allows LPAs to set a local requirement relating to electric and plug-in hybrid vehicles, which is likely to involve additional work for those authorities who choose to introduce this. It is not clear how many authorities would be likely to set such a requirement, or the likely extent of the work needed to support this and therefore the potential cost has not been quantified at this time.

96. It is not possible to quantify fully the expected costs to developers of providing electric car charging infrastructure or cabling to support charging points as this will vary according to the scale of development and type and provision of car parking. The Committee on Climate Change estimates that home charging off-street infrastructure could cost from £50 per charge point, and £2,500-£5,500 per charge-point for on-street public charging. As part of their Plugged-In Places scheme the Department for Transport are currently investigating the anticipated differences in cost of providing charging infrastructure as part of new developments and fitting it later.

Wider benefits

97. As well as cutting emissions from new development, the key objectives behind the policy changes described above are for the planning system (i) to contribute to an increased supply of renewable energy and (ii) to ensure adaptation to climate change is considered in all plan-making and development control activities. The following analysis describes the impacts of the combined policy changes in these two areas.

Increased supply of renewable energy

98. Cumulatively the changes to the PPS should help to facilitate an increase in decentralised, renewable and low carbon energy delivered through the planning system. The Government's Renewable Energy Strategy (RES), published in 2009, identified scenarios for meeting the EU 2020 renewable energy target. The lead scenario in the overall impact assessment⁴⁶ shows how the target would be met through the following share of renewables by sector: 29% large scale electricity, 12% heat, 10% transport and 2% small scale electricity. The resource costs and carbon savings from meeting the targets are laid out in the Impact Assessments accompanying the RES.
99. Clearly many of the installations that will be needed to meet the necessary share of each sector in the provision of renewable energy will pass through the planning system. Planning's strategic coordination role with regard to district heating schemes has already been considered above, but the policy in the PPS should also ensure that planning more generally facilitates the development of new renewable and low carbon energy installations. The following table from the overall IA for the RES shows what the consumption of renewable energy needs to be in order to meet the 2020 target when compared with projected renewable energy without the RES measures: an extra 152 TWh. This requires a seven fold increase in the share of renewable energy in eleven years.

⁴⁶ The UK Renewable Energy Strategy 2009: Overall Impact Assessment, available from: http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/res/res.aspx

Table from Renewable Energy Strategy Overall Impact Assessment showing projected renewable energy consumption in 2020 under lead scenario

Table1: Projected Final Energy and Renewable Energy Consumption in 2020			
Sector	Projected Final Energy Consumption, 2020, TWh	Projected Renewable Energy, 2020 without RES measures TWh	Projected Renewable Energy 2020 with RES measures, (S1) TWh
Heat	599	5	72
Transport – EU Directive Definition	605	25	49
Electricity	386	57	117
Final Energy Consumption – EU Directive Definition	1,590	87	239
Note: The electricity sector includes electricity for heat and transport. Figures are rounded to the nearest 1TWh, the target is 238.5 TWh to nearest 0.5TWh.			

100. It is not straightforward to estimate the number of renewable energy installations which might need to pass through the planning system in order to meet these targets from these projections of increased renewable energy consumption. Proposals for large scale renewable energy developments will be considered by the IPC whilst smaller scale installations will continue to go through the planning system under the Town and Country Planning Act (TCPA). It is unclear what proportion of installations will go through the IPC, and what proportion through the local authority planning process, or what proportion of this projected consumption these installations will meet.
101. However, historically, 91 % of applications for renewable onshore wind installations have gone through the conventional planning system, equating to 52% of the capacity proposed⁴⁷. If a similar pattern was to hold across all renewable energy installations over the next eleven years, and that proportion was applied to the projected consumption of renewable energy rather than capacity installed, then it would suggest that 79TWh of the additional projected renewable energy consumption in 2020 would come from installations which had been through the planning system and had been affected by the policies in this PPS.

⁴⁷ DECC analysis 2009

102. Overall the policies in the revised PPS, including the clearer planning objectives with respect to renewable energy, increased emphasis on local energy planning, and the greater strength of support for renewable energy applications should help the planning system to facilitate the development of the new renewable energy installations needed to deliver the projected energy supply described in the RES. In doing so, the planning system will make a contribution towards securing the benefits of those installations for society. These benefits include:
- Reduced emissions and the increased likelihood of meeting national and European targets related to emissions and renewable energy capacity;
 - Increased fuel security; and
 - Benefits to renewable energy developers of increased opportunities in the market.
103. It is not possible, however, to disentangle the impact that planning policy has in delivering these benefits, from the impact of other, more direct, policy levers. This means it is not possible to assign a proportion of the benefits from the increased number of renewable energy installations to planning directly.

Adaptation to climate change

104. Arup research into the take up of the climate change PPS found that there was insufficient technical understanding about adaptation and consideration of adaptation measures were often focused on flood risk. The report recommended that more detail within the PPS regarding the scope for addressing adaptation through spatial plans would be helpful.
105. The revision to the PPS supplement on climate change proposes a greater focus on adaptation, with LPAs having to set out in their LDFs how places within the local authority area will be planned to adapt to the impacts of changes in climate, and considering new development's vulnerability to climate change impacts through the planning application process, with greater ability to refuse applications where these criteria are not met.
106. The planning system is able to ensure that the design and location of development proposals take into account the need to adapt to future climate change through both its ability to grant planning permission and its allocation of suitable sites in plans. In particular, planning has a role in: ensuring inappropriate development does not take place in areas at high risk of river or sea flooding (covered in detail by policy in PPS 25); ensuring development does not exacerbate water shortages and drought; help to manage high temperatures, particularly in urban areas (urban heat islands) through protection and management of urban green space (policy detail in PPG 17) and control over the spatial design of new development, such as its layout and orientation.

107. The more explicit policy and inclusion of an objective relating to adaptation, alongside the requirement to take account of climate projections in their evidence bases, should lead LPAs and responsible regional authorities to prioritise adaptation considerations to a greater extent. This should result in an overarching framework to allow planning and design in a holistic and integrated way.

Benefits

108. Due to the local nature of planning decisions, it is difficult to predict with any certainty where new development will be located and what measures will be taken to adapt that development to future effects of climate change. However, it is likely that the greater consideration of adaptation measures across all development when taken with existing measures in other planning policy will lead to:
- A greater proportion of new development being sited away from high risk flood areas and, where this is not the case, measures being taken to ensure any flooding would cause minimal damage to property;
 - A greater proportion of new development being designed that better meets the need to manage high temperatures through incorporating green infrastructure or adopts an appropriate layout to maximise cooling and minimise solar gain; and
 - A greater proportion of new development being designed and located in order not to place greater stress on scarce water resources.
109. These outcomes will contribute to minimising the impacts of climate change, and the costs associated with those impacts. This should lead to the following benefits:
- Reduced damage to property and infrastructure from flooding. Costs of flooding fall on individuals and communities, businesses and local authorities. The costs of the 2007 floods were estimated by the Pitt Review to run into billions of pounds⁴⁸;
 - Reduced risk to health from flooding and high temperatures. There is evidence that the higher night time temperatures experienced in urban areas due to heat island effects lead to increased mortality. The effect of heat on mortality is first apparent when the daily mean temperature is between 20°C and 23°C⁴⁹. Research for the GLA quotes figures which suggest there were 600 all-age extra deaths in London during the 2003 heatwave, many of which may be attributable to the urban heat island effect. There are also other health impacts, some of which may be serious such as heat stroke, physiological disruption or organ damage⁵⁰.
 - Better use of scarce water resources in drought areas.

⁴⁸ The Pitt Review, Learning Lessons from the 2007 Floods, Cabinet Office (2008)

⁴⁹ London's Urban Heat Island: A Summary for Decision Makers, GLA (2006) Available from: http://www.london.gov.uk/mayor/environment/climate-change/docs/UHI_summary_report.pdf

⁵⁰ As above

110. Additionally, there is some evidence that vulnerable groups may be more affected by some of the effects of climate change. For example, the elderly or those in poor or overcrowded housing may be particularly affected by high temperatures, as they may be less able to access green spaces or afford to install air conditioning.

Monitoring and review

111. As a part of its general oversight of the planning system in England, CLG will monitor the effectiveness of the climate change PPS. This is in line with the approach adopted for other planning policies, guidance and practice. It is likely that the policy will be reviewed two years after it is implemented as Government's climate change policy continues to develop.
112. In addition, regions and local authorities are already required to submit annual monitoring reports to the Secretary of State. Among the matters which these reports should cover is performance against defined core output indicators, which includes the amount of renewable energy generation, measured in installed capacity. Guidance on monitoring is set out in LDF and RSS monitoring good practice guidance. The Government will continue to monitor and evaluate the impact and effectiveness of this policy, drawing upon annual monitoring reports and other quantitative and qualitative evidence.

Specific impact tests

Competition assessment

113. Option 2 has been assessed against the four questions identified by the Office of Fair Trading to ensure that a proposed regulation does not have a negative or positive impact on some firms and not others.

In any affected market, would option 2:	Yes/No
Directly limit the number or range of suppliers?	No
Indirectly limit the number or range of suppliers?	No
Limit the ability of suppliers to compete?	No
Reduce suppliers' incentives to compete vigorously?	No

114. Option 2 is not expected to have any impact on the number and range of suppliers, or their ability to compete.

Small firms impact test

115. Small firms often find it more difficult to comply with new regulations than larger firms, which have greater resources for implementation. Option 2 proposes a streamlined and clearer policy document which will mean that policy expectations are easier to understand and comply with. The benefits identified above regarding improved clarity within the planning system apply in particular to small developers. Additionally, applicants should be able to submit better quality planning applications which have a greater chance of success. This is likely to benefit small firms in particular since they are more likely to submit planning applications themselves than larger firms (which are more likely to employ consultants or have in-house specialist expertise).
116. However, it may be disproportionately more costly for smaller developers to submit applications which demonstrate compliance with the criteria outlined in the policy, if there is a need to submit information with a large amount of technical expertise.

Legal Aid

117. There will be no legal aid impact.

Sustainable development, carbon assessment, other environmental

118. The PPS will have positive impacts in these areas. The PPS is intended to encourage planning to make a full contribution to securing progress against the UK's targets to cut greenhouse gas emissions and carbon, and deliver substantially more renewable and low carbon energy whilst continuing to sustain biodiversity, conserve the countryside and protect historic and natural environments of national or international significance. However, it is recognised that there may be trade-offs between the various elements of sustainable development, where planning decisions must adjudicate between competing concerns. It is also expected to shape places to minimise vulnerability to climate change.

Health impacts

119. The original PPS identified that there were likely to be positive health impacts associated with the policy because it encouraged planning to minimise new development's vulnerability to the impacts of climate change, specifically the impact of rising summer temperatures. The revised PPS includes a stronger focus on adaptation, with a clear policy objective and explicit policies relating to planning's role in adaptation. These changes should improve the resilience of areas to the impacts of climate change, which should bring an increase in the positive health impacts described in the impact assessment for the 2007 PPS 1 supplement on climate change.

Race, disability, gender and other equality impacts

120. The PPS will impact equally across members of the community and will not discriminate on the grounds of race, age, faith and belief, disability, sexual orientation or gender. However, the impact assessment to the 2007 climate change supplement identified that there were a number of groups within society who were likely to be more vulnerable to the impacts of climate change. These groups included low income households, elderly people, individuals with poor health, and residents of housing in areas liable to flood. The increased focus of the revised PPS on adaptation, and the need for LPAs to recognise that the impacts of climate change will affect parts of the community differently, means that the PPS may have some additional positive benefits for these vulnerable communities. The PPS also includes an objective on giving communities opportunities to take positive action on climate change, particularly with regard to community led renewable energy, which by encouraging communities to get involved should result in the benefits of renewable energy being shared with communities. However, the degree of difference is likely to be minor and for the purpose of the impact assessment, the key finding is that there will not be any significant impact on any of the equality strands.

Human rights

121. There will be no human rights impact.

Rural impacts

122. The changes to the policy proposed under option 2 will have little or no rural-specific effect. Rural residents are expected to experience the costs and benefits of the PPS in the same way of urban residents and it is not expected to have any impact on the amount of development that is brought forward.

123. Impacts have been assessed against Defra's rural-proofing checklist:

Defra Checklist	Yes/No
Will the policy affect the availability of public and private services?	No
Will the policy rely on existing service outlets, such as schools, libraries and GP surgeries?	No
Will the policy rely on the private sector or a public-private partnership?	No
Will the cost of delivery be higher in rural areas where clients are more widely dispersed and economies of scale can be harder to achieve?	No. Both rural and urban authorities will be expected to prepare an evidence base and this should reflect the characteristics of the authority's area. For instance, a rural authority may have more land to assess for potential for some technologies, such as wind turbines, but may undertake less work on other parts of the evidence base, such as heat mapping, because it is inappropriate for the local circumstances. For both rural and urban areas, the evidence base should build on the work done at the regional level.
Will the policy rely on local institutions for delivery?	No
Will the policy affect travel needs or the ease/cost of travel?	No
Does the policy rely on infrastructure (e.g. broadband ICT, main roads, utilities) for delivery?	No

Defra Checklist	Yes/No
Will delivery of the policy be challenging at the 'edges' of administrative areas?	No
Is the policy dependant on new buildings or development sites?	Yes – the policy encourages greater identification of sites for renewable energy. The policy does not distinguish between rural and urban authorities in terms of the need to identify sites. The nature of the sites identified may vary reflecting the characteristics of the local area
Does the policy rely on communicating information to clients?	No
Will the policy impact on rural businesses, including the self employed?	No
Will the policy affect land-based industries and, perhaps, rural economies and environments?	No
Will the policy affect people on low wages or in part-time or seasonal employment?	No
Will the policy target disadvantaged people or places?	No

Conclusions and recommendations

124. The Stern review found that there were potentially very significant costs associated with climate change and its impacts. Through its ability to shape the location and nature of development, planning has a significant role to play in contributing to tackling climate change through reducing emissions and ensuring adaptation to the effects of climate change. However, although planning helps to facilitate the delivery of sustainable development in line with local and regional visions and strategies, it is not possible to assess its impacts in isolation from other policies.
125. The revision to the PPS on climate change is responding to the changes in policy agenda since the original supplement and PPS 22 was published in 2007 and 2004 respectively. The preferred option for this has been to merge and revise PPS22 and the supplement to PPS1 on climate change into one document, as maintaining separate documents, or leaving them unchanged, would not deliver the commitment in the planning white paper to streamline national policy, or the benefits associated with the preferred option.

126. The primary changes made in the proposed revision to the PPS are the provision of a streamlined and more strategic framework for planning for renewable energy and climate change; providing clarity about the objectives and requirements of the policy; and clarifying planning's relationship with other regimes, such as changing building regulations.
127. The streamlining and revision to the policy is expected to create a number of benefits for local authorities, developers of residential and commercial land, and developers of renewable energy, and local communities. These benefits include the ability to better target resources, greater certainty of outcomes, and wider societal benefits, such as increased renewable energy provision with its commensurate reduction in carbon emissions, and new development being better prepared for the effects of climate change, such as increased temperatures. These benefits have not been quantified.
128. This Impact Assessment has also identified non-monetised costs but the proposal is expected to have an overall benefit to society as planning's ability to contribute to delivering renewable energy, reducing emissions and adapting to the effects of a changing climate improves.

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	Results in Evidence Base?	Results annexed?
Competition Assessment	Yes	No
Small Firms Impact Test	Yes	No
Legal Aid	Yes	No
Sustainable Development	Yes	No
Carbon Assessment	Yes	No
Other Environment	Yes	No
Health Impact Assessment	Yes	No
Race Equality	Yes	No
Disability Equality	Yes	No
Gender Equality	Yes	No
Human Rights	Yes	No
Rural Proofing	Yes	No

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