



Permitted development rights for small scale renewable and low carbon energy technologies, and electric vehicle charging infrastructure consultation:

## **Government response**



© Crown copyright, 2012

*Copyright in the typographical arrangement rests with the Crown.*

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit <http://www.nationalarchives.gov.uk/doc/open-government-licence/> or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk).

This document/publication is also available on our website at [www.communities.gov.uk](http://www.communities.gov.uk)

Any enquiries regarding this document/publication should be sent to us at:

Department for Communities and Local Government  
Eland House  
Bressenden Place  
London  
SW1E 5DU  
Telephone: 030 3444 0000

March 2012

ISBN: 978-1-4098-3887-1

# Contents

Section 1 : Introduction	2
Section 2 : Overview of responses and the way forward	4
Section 3 : Installations on domestic premises	8
Section 4 : Electric vehicle charging infrastructure	20
Section 5 : Installations on non-domestic premises	22
Section 6 : Impact assessments and other matters	28

## SECTION 1

# Introduction

- 1.1. This report sets out the Government's response to a consultation entitled "*Permitted development rights for small scale renewable and low carbon energy technologies, and electric vehicle charging infrastructure*" - <http://www.communities.gov.uk/documents/planningandbuilding/pdf/microgenelectriccars.pdf>.
- 1.2. The consultation was undertaken by the previous administration, between November 2009 and February 2010. Given the legal requirement in the Green Energy (Definition and Promotion) Act 2009 to bring forward some of these permitted development rights, as well as the important contribution these technologies can make towards meeting renewable and carbon reductions targets, the Government has opted to carry forward work on the basis of these consultation proposals rather than risk further delay.
- 1.3. "Permitted development" is development granted automatic planning permission by the Town and Country Planning (General Permitted Development) Order 1995, as amended. Such permission is usually granted subject to limitations and conditions which are designed to minimise impact. For developments which benefit from permitted development rights, specific planning permission from the local planning authority is not needed.
- 1.4. The consultation proposed granting permitted development rights for the following:

### **Installations on domestic premises:**

- building mounted and stand alone wind turbines
- air source heat pumps

### **Installations on non-domestic premises:**

- building mounted and stand alone wind turbines
- air source heat pumps
- ground source heat pumps
- water source heat pumps
- solar panels

- flues for biomass systems and combined heat and power (CHP) systems
- structures to house biomass boilers, anaerobic digestion systems, hydro turbines and associated waste and fuel stores (agricultural and forestry land only).

**Electric Vehicle Charging Infrastructure:**

- off-street charging points, in both public and private out-door parking areas
- on-street charging points, by local authorities
- the display of two name plates of the energy supplier/charging point provider on a charging point.

- 1.5. For each proposal, the consultation sets out the limitations and conditions that would need to be met for a development to be “permitted development”.
- 1.6. Permitted development rights already exist for domestic installations of some types of renewable technologies, including solar panels, ground source and water source heat pumps. At the time when these existing rights were introduced, unresolved technical issues meant that it was not possible to extend these rights to domestic installations of wind turbines and air source heat pumps. Further work was undertaken to address these issues, and revised proposals were put forward in the 2009 consultation.
- 1.7. This report has five further sections. Section 2 describes, in broad terms, the overall response to the consultation, and how the Government has decided to take forward the proposals. Section 3 concentrates on the proposals for domestic installations of wind turbines and air source heat pumps. It sets out the main issues raised by respondents and the Government’s view in response them. Section 4 focuses on the electric vehicle charging infrastructure proposals, and sets out the main issues raised by respondents and the Government’s view. Section 5 concentrates on the proposals for installations of microgeneration technologies on non-domestic premises. Section 6 responds to comments on the impact assessments.
- 1.8. A full summary of the responses to the consultation has been compiled by ARUP on behalf of the Department for Communities and Local Government, and is being published alongside this report.

## SECTION 2

# Overview of responses and the way forward

## Overview

- 2.1 Almost 200 responses were received. The detailed nature of the consultation, with limitations and conditions set out for each of the permitted development proposals, meant that a large number of issues were raised and that many of the responses were very detailed.
- 2.2 In general, respondents were supportive of the proposed permitted development rights. Where objections were raised these tended to focus more on the appropriateness of the limitations and conditions proposed, rather than the principle of whether permitted development rights should be introduced.

## The way forward

- 2.3 The Programme for Government<sup>1</sup> sets out the Government's policy priorities. It highlights the grave threat that climate change poses and the need to use a wide range of levers to cut carbon emissions, decarbonise the economy and support the creation of new green jobs and technologies. It also sets out the Government's commitment to making the transport sector greener and more sustainable, and is supportive of new transport technologies. It seeks to implement a national recharging network for electric and plug-in hybrid vehicles.
- 2.4 The Government is keen to fulfil the requirements of the Green Energy (Definition and Promotion) Act 2009 regarding the introduction of permitted development rights for microgeneration technologies. This Act commits the Government to introducing permitted development rights for domestic installations of wind turbines and air source heat pumps, and requires the

---

1

[http://www.direct.gov.uk/prod\\_consum\\_dg/groups/dg\\_digitalassets/@dg/@en/documents/digitalasset/dg\\_187876.pdf](http://www.direct.gov.uk/prod_consum_dg/groups/dg_digitalassets/@dg/@en/documents/digitalasset/dg_187876.pdf)

Government to consider introducing permitted development rights for microgeneration equipment on non-domestic premises. The Act also contains a commitment to review measures post introduction.

- 2.5 The Government considers that it is desirable, where possible, to achieve consistency between the freedoms that are available for domestic and non domestic property owners. As such, the Government wishes to act to bring the permitted development rights for non domestic premises into line with those that exist for domestic properties.
- 2.6 Given the large number of consultation responses and the complexity of the issues raised, the Government decided to divide the work programme up, to progress some of the proposals before others and to the following timetable:

### **Electric vehicle charging infrastructure: in force 1 October 2011**

- 2.7 The proposals for electric vehicle charging infrastructure raised relatively few issues that required resolution or further consideration. Accordingly, the Government has taken forward this work to amend the Town and Country Planning (General Permitted Development) Order 1995 to allow this development to be carried out as permitted development.
- 2.8 More specifically:
- two new classes are added to Schedule 2, Part 2 (minor operations) to grant permitted development rights for:
    - wall mounted electrical outlets for recharging electric vehicles within off-street parking areas (Class D); and
    - upstands for recharging electric vehicles within off street parking areas (Class E).
  - Schedule 2, Part 12 (development by local authorities) is amended to clarify that local authorities can install on-street charging points as permitted development.

- 2.9 The Government has also introduced a new **Class 17** to the Town and Country Planning (Control of Advertisements) (England) Regulations 2007, to grant deemed consent for the display of the nameplate of an electric vehicle charging point provider or energy supplier on an electric vehicle charging point.

### **Installations on domestic premises: wind turbines and air source heat pumps: in force 1 December 2011**

- 2.10 To fulfil a mandatory requirement of the Green Energy (Definition and Promotion) Act 2009, the Government prioritised the introduction of permitted development rights for domestic installations of wind turbines and air source heat pumps. The Town and Country Planning (General Permitted Development) Order 1995 is amended to introduce these new rights. More specifically, three new classes are added to Schedule 2, Part 40 (Installation of domestic microgeneration equipment) that grant permitted development rights for:

- air source heat pumps (Class G)
- building mounted wind turbines (Class H).
- stand alone wind turbines (Class I).

- 2.11 These rights are subject to limitations and conditions designed to minimise impacts on neighbours and the wider environment. The consultation responses raised several issues about the proposed limitations and conditions – these are considered in more detail in **Section 3**.

- 2.12 The Green Energy (Definition and Promotion) Act 2009 requires the Government to review the effect of this amendment to the Town and Country Planning (General Permitted Development) Order 1995 as soon as reasonably practicable after the amendment has been in force for 2 years. In addition, a check of the noise limit to be applied to these permitted development rights will be undertaken one year after the coming into force of these rights.



## **Installations on non-domestic premises : in force 6 April 2012**

- 2.13 The Green Energy (Definition and Promotion) Act 2009 requires consideration to be given to amending the Town and Country Planning (General Permitted Development) Order 1995 to facilitate the installation of equipment for microgeneration on non domestic land.
- 2.14 The Government has considered the consultation proposals for installations of microgeneration equipment on non-domestic premises and is keen to act to support further carbon reduction and boost economic growth. The Government also wishes to bring freedoms available for owners of non domestic premises into line with those that exist for domestic properties.
- 2.15 Accordingly the Government has made further amendments the Town and Country Planning (General Permitted Development) Order 1995 to allow the following development on non-domestic premises to be carried out as permitted development:
- solar panels
  - ground source heat pumps
  - water source heat pumps
  - flues for biomass systems
  - flues for combined heat and power systems
  - structures to house biomass boilers, anaerobic digestion systems, hydro turbines and associated waste and fuel stores (agricultural and forestry land only).
- 2.16 These rights are subject to limitations and conditions designed to minimise impacts on neighbours and the wider environment.
- 2.17 The consultation also proposed introducing permitted development rights for installations of wind turbines and air source heat pumps on non-domestic premises. The proposals for these technologies raised a number of technical issues that need to be considered further when the review outcomes of domestic permitted development rights for these technologies are known.
- 2.18 The proposals for non-domestic installations are considered further in **Section 5**.

## SECTION 3

# Installations on domestic premises - wind turbines and air source heat pumps

- 3.1 The proposals for installations of wind turbines and air source heat pumps on domestic premises drew the largest number of comments from respondents. This section considers the main issues raised and describes how the Government is responding.
- 3.2 Two issues, noise and the Microgeneration Certification Scheme, were raised in relation to both technologies and therefore are considered together below. Other issues relating to each technology are then considered separately.

## Comments relating to both wind turbines and air source heat pumps

### Noise

#### WHAT THE CONSULTATION PROPOSED

- 3.3 The consultation proposed a noise limit expressed as follows: *“the noise level from the installation must not exceed 45dB  $L_{Aeq, 5 min}$  at 1 metre from the window of a habitable room in the façade of any neighbouring residential property (but ignoring the effect of the facade)”*.

#### MAIN ISSUES

- 3.4 Views were divided between those who thought that a 45dB noise limit would be appropriate, and those who thought it would be too high.
- 3.5 Most support for a 45dB limit came from the renewable energy industry, who generally felt that this limit would encourage greater take up of these technologies and would therefore better support the renewables market. Industry respondents pointed to their own field research into existing installations, which suggests that many existing turbines and air source heat pumps are exposing neighbouring dwellings to noise levels above 45dB, without complaints resulting.

- 3.6 Many of those respondents who argued that the 45dB noise limit was too high considered that the noise limit proposed in a previous consultation in (2007)<sup>2</sup> to be more appropriate, this was the equivalent of 37dB. These respondents generally felt that a lower limit would better protect the living conditions of neighbours and minimise the risk of increased noise complaints to local authorities. A number of technical points were put forward, including the difficulties of setting an absolute noise level as this takes more limited account of background noise levels and potential issues around the impacts of cumulative noise where multiple installations are within close proximity of one another.
- 3.7 Concern was raised that a noise limit of 45dB would lead to an increase in noise complaints from neighbours. It was argued that this would put a strain on the resources of local authorities whose duty it is to investigate noise complaints, primarily under the statutory nuisance regime.

#### **THE GOVERNMENT'S VIEW**

- 3.8 Taking account of the views raised and the available technical evidence, the Government decided to set a maximum noise limit for a wind turbine or air source heat pump installed under permitted development of 42dB LAeq, 5 min, at 1 metre from a window or door opening of a habitable room in the façade of a neighbouring residential property (but ignoring the effect of that façade).
- 3.9 The Government believes that renewable and low carbon energy technologies are a high priority for the future and wishes to use permitted development to encourage their use where the impacts are likely to be acceptable. At the same time, it does not want to set a noise limit that might give rise to justifiable complaints and damage the reputation of these technologies. The Government considers that a noise limit of 42dB strikes a balance between encouraging the take up of these technologies (by removing the disincentive of having to submit a planning application) and preventing undue noise disturbance to neighbouring properties. A noise limit of 42dB represents a compromise position that has been reached, taking into account the polarity of views which emerged through the consultation in relation to higher and lower noise levels.

---

2

<http://www.communities.gov.uk/archived/publications/planningandbuilding/changespermitted>

- 3.10 The Government recognises that noise nuisance is a complex issue to guard against and one that raises difficult technical considerations, particularly with regard to such matters as background noise levels and cumulative impacts. The Government considers that an absolute noise level is the most appropriate approach, as setting a noise limit in relation to site-specific background noise would make the exercise of permitted development rights extremely complicated. It is important that permitted development rights remain as easy to apply as possible for all, including installers, homeowners, and local authority officers. The cumulative impacts which could result from multiple installations within close proximity will be addressed through the proposed limitations and conditions, particularly those limiting the number of installations per property and their siting.
- 3.11 For the purposes of determining whether permitted development rights would apply, compliance with the noise limit will be calculated on the basis of a prediction carried out prior to installation by an Microgeneration Certification Scheme certified installer (see sections 3.13 - 3.18 below). The noise prediction calculation methodologies have been prepared by microgeneration industry experts, with some input from other stakeholders.
- 3.12 The Government will check the operation of the noise limit one year after the permitted development rights have come into force to consider, in the light of practical experience, its appropriateness. The Government is prepared to revise the noise limit if the initial experience justifies a change. However, its expectation is that noise levels from equipment will reduce over time as improvements in these technologies are made.

## **The Microgeneration Certification Scheme**

### **WHAT THE CONSULTATION PROPOSED**

- 3.13 The Microgeneration Certification Scheme is a Government endorsed, independent scheme that certifies microgeneration products and installers in accordance with robust standards designed to ensure the quality and reliability of the equipment. The consultation proposed that permitted development rights for wind turbines and air source heat pumps would only apply where the product and the installer have been certificated through the Microgeneration Certification Scheme. Certified installers would be required, among other things, to ensure that a proposal meets the permitted development noise limit prior to installation.

### **MAIN ISSUES**

- 3.14 Mixed opinions were received about the need for certification. Some respondents considered the Microgeneration Certification Scheme to be vital to protect the consumer from poor quality installations and to determine whether the permitted development restrictions relating to noise would be met. Other respondents considered the requirement for certification to be in conflict with Government objectives of encouraging innovation in small businesses, particularly because of the cost of testing and accreditation.
- 3.15 Some local planning authorities proposed that the Microgeneration Certification Scheme process should include a provision requiring installers to notify them prior to undertaking an installation under permitted development in their area. This would enable authorities to intervene prior to an installation taking place if they felt it would not meet the requirements to be permitted development. Concerns were also raised about the enforceability of the requirement for an installer or product to be certified.

### **THE GOVERNMENT'S VIEW**

- 3.16 The Government considers it important for these permitted development rights to be linked to the Microgeneration Certification Scheme, so that robust industry standards are maintained and to ensure public safety and as well as public confidence in these technologies. Permitted development rights for wind turbines and air source heat pumps are therefore granted subject to compliance with the MCS Planning Standard.
- 3.17 The MCS Planning Standard requires technologies to be Microgeneration Certification Scheme certified products and to be installed by certified installers. The MCS Planning Standards also includes a noise prediction methodology, which certified installers will need to use prior to installation to ensure that the permitted development noise limit is complied with. The use of alternative standards will also be permitted where they would be of an equivalent to the MCS planning standards.
- 3.18 While the Government recognises that linking these rights to the Microgeneration Certification Scheme will result in additional costs to installers who will need to achieve certification, it believes that the overall benefits justify these costs. The level of such costs will vary depending on the product and the installer.

- 3.19 The Government considers that requiring installers to notify local planning authorities in advance of proceeding with an installation would be akin to a prior approval procedure, and this is not what was proposed in the consultation. It considers that the requirement for certification, along with appropriate limitations and conditions, will provide suitable safeguards.

## Comments relating specifically to wind turbines

### Interference with radar and aircraft communications

#### WHAT THE CONSULTATION PROPOSED

- 3.20 The consultation proposed a web based checking tool to allow installers, local authorities and the public to check whether a proposed wind turbine would be sited within a location protected for aviation purposes. If a proposed turbine would be sited on safeguarded land, it would not benefit from permitted development rights.

#### MAIN ISSUES

- 3.21 Respondents generally accepted the need to protect aviation equipment and land from potential interference by wind turbines. Some respondents felt that the Government should not take an over cautious approach to safeguarding.

#### THE GOVERNMENT'S VIEW

- 3.22 Care must be taken to ensure that wind turbines are not installed in locations where they would interfere with aircraft communication technology or obstruct the take off or landing of aircraft.
- 3.23 The Government has worked closely with the Airport Operators Association, the Civil Aviation Authority, the National Air Traffic Service and the Ministry of Defence on the web-based safeguarding tool that is accessible through the Planning Portal<sup>3</sup> website and came into operation on 1 December 2011.

---

<sup>3</sup> The Planning Portal is the Government's online planning service: [www.planningportal.gov.uk](http://www.planningportal.gov.uk). The safeguarding tool is available at <http://aviationtool.planningportal.gov.uk/>.

## **Maximum height**

### **WHAT THE CONSULTATION PROPOSED**

- 3.24 For building mounted wind turbines, it was proposed to limit the height to 3 metres above the highest part of the roof, up to a maximum overall height (including building, hub and blade) of 15 metres. For stand alone turbines, it was proposed to limit the maximum overall height (including hub and blade) to 11.1 metres.

### **MAIN ISSUES**

- 3.25 Some respondents raised concerns about the visual impact that would result from turbines at the proposed height limits. Other respondents argued that the 15 metre maximum height for building mounted turbines would exclude turbines on buildings higher than this.

### **THE GOVERNMENT'S VIEW**

- 3.26 Evidence demonstrates that the height of a wind turbine determines the amount of energy that can be produced - a higher hub will generally generate more energy. However, larger and higher turbines also have more potential for a negative visual impact. The Government considers that the consultation proposals provide a suitable balance between performance and minimising visual harm, and therefore will proceed on the basis of the height limits proposed.

## **Swept area of the blade**

### **WHAT THE CONSULTATION PROPOSED**

- 3.27 The consultation proposed limiting the swept area of a turbine blade for both building mounted and free standing wind turbines to a maximum of 3.8 square metres.

### **MAIN ISSUES**

- 3.28 Some local planning authorities felt that the concept of 'swept area' is too complicated. Other respondents thought that the permitted development rights should differentiate between vertical and horizontal axis technologies.

### **THE GOVERNMENT'S VIEW**

- 3.29 Limiting the swept area of the blade is important because of the potential visual impacts of wind turbines and because of the potential for interference with aircraft communications. Details of how to calculate the swept area were included in the consultation and local planning authorities should find them easily workable. It is unnecessary to differentiate between vertical and

horizontal technologies as the limitations and conditions of the permitted development rights and the swept area calculation can be applied to both.

## **Setback from the boundary**

### **WHAT THE CONSULTATION PROPOSED**

- 3.30 The consultation did not propose a setback from property boundaries for building mounted turbines. For stand alone wind turbines, it proposed a setback from the curtilage of the property boundary equal in distance to the total height of the installation plus 10%.

### **MAIN ISSUES**

- 3.31 Some respondents raised concern that the consultation proposals did not provide a minimum setback from the property boundary for building mounted turbines.

### **THE GOVERNMENT'S VIEW**

- 3.32 The Government agrees that set backs from property boundaries for wind turbines provide safeguards in terms of visual impact and safety. The Government has therefore included a requirement for a 5 metre set-back from a property boundary for all building mounted turbines. The set-back for stand alone turbines is the equivalent of the height of the turbine (including blades) plus 10%.

## **Number of wind turbines**

### **WHAT THE CONSULTATION PROPOSED**

- 3.33 The consultation proposed limiting the number of permitted development installations to the first wind turbine or air source heat pump only within the curtilage of a property.

### **MAIN ISSUES**

- 3.34 Some respondents raised concern that there could be cumulative noise impacts from large numbers of wind turbines on closely sited properties. Others felt that the proposed limit of one permitted development wind turbine / air source heat pump per property was too restrictive.

### **THE GOVERNMENT'S VIEW**

- 3.35 Limiting the number of wind turbines and air source heat pump technologies to one per dwellinghouse/block of flats will restrict the density at which it would be possible to install them as permitted development. In the case of a block of flats, only the first installation may be permitted development regardless of the



number of flats in the building. These measures lower the risk of noise disturbance from the cumulative impact of a number of installations.

## **Materials**

### **What the consultation proposed**

- 3.36 The consultation proposed a condition preventing the use of reflective materials to avoid potential nuisance from shadow or reflection flicker

### **MAIN ISSUES**

- 3.37 A few respondents felt that the requirement for non-reflective materials is unnecessary and questioned how reflectivity should be measured.

### **THE GOVERNMENT'S VIEW**

- 3.38 The Government considers that the limitations and conditions applied will limit the overall visual impact of the wind turbines, and therefore that allowing local authorities to decide turbine colours and finishes would be unnecessary.
- 3.39 Reflective materials can be distracting and visually intrusive which means they should not be used. Installers and local planning authorities should be able to determine whether materials are reflective or not.

## **Protection of sensitive areas, listed buildings and scheduled monuments**

### **WHAT THE CONSULTATION PROPOSED**

- 3.40 The consultation proposed that a wind turbine within the curtilage of a listed building or scheduled monument would not be permitted development. In World Heritage Sites and conservation areas, the consultation proposed that a wind turbine would not be permitted development if it would be visible from any highway bounding the curtilage of the property.

### **MAIN ISSUES**

- 3.41 Respondents considered that more protection should be afforded to areas of particular environmental or historical value, such as National Parks, Areas of Outstanding Natural Beauty, Conservation Areas, World Heritage sites, historic battlefields and green belts. It was also felt that protection should be provided for protected species like bats, for example by excluding properties suitable for bat roosts from these permitted development rights. Concern was also raised that listed buildings and scheduled monuments would not be protected.

3.42 Respondents were concerned about using visibility from the highway as a test for whether permitted development rights would apply or not, given that this can be variable (e.g. a wind turbine might not be visible in the summer when leaf foliage is covering the view from the highway, but might be clearly visible in winter). The wider visual impacts beyond those related to visibility from an adjacent highway should also be considered. Clarification was sought on what is meant by the term visible from the highway.

#### **THE GOVERNMENT'S VIEW**

3.43 The Government agrees that sensitive areas should be afforded greater protection. Accordingly, these permitted development rights will not be granted for sites designated as scheduled monuments, within the curtilage of listed buildings, or on article 1(5) land (other than within conservation areas, where other safeguards afford protection).

3.44 The Government has considered the issue of linking a restriction on the location of a wind turbine to its visibility from the highway, and decided to amend this requirement in the interests of providing greater clarity. Therefore, in conservation areas:

- A building mounted wind turbine will not be permitted development if it would be installed on a wall or roof slope that fronts a highway
- A stand alone wind turbine will not benefit from permitted development rights if it would be nearer to any highway bounding the curtilage than the dwellinghouse / block of flats itself. These provisions are in addition to other conditions and limitations designed to limit the visual impact of an installation.

3.45 For European Sites, such as Special Areas of Conservation and Special Protection Areas, existing provisions within the Town and Country Planning (General Permitted Development) Order 1995 and the Conservation of Habitats and Species Regulations 2010 are designed to ensure that permitted developments likely to have a significant effect on a European Site cannot go ahead unless the local planning authority has determined, after consultation with Natural England, that the development would not affect its integrity. These provisions will apply equally to the wind turbine permitted development rights.

- 3.46 All bats and their roosts are given protection under the Conservation of Habitats and Species Regulations 2010 and the Wildlife and Countryside Act 1981 (as amended). The Government considers that this affords sufficient protection.

## **Decommissioning**

### **WHAT THE CONSULTATION PROPOSED**

- 3.47 The consultation proposed a condition requiring that wind turbines should be removed as soon as reasonably practicable when no longer needed for microgeneration.

### **MAIN ISSUES**

- 3.48 A few local authority respondents queried how they would determine if a turbine is no longer for needed for microgeneration. Comments were also made about the use of wind turbines in locations where they have little or no energy benefits.

### **THE GOVERNMENT'S VIEW**

- 3.49 The Government has proceeded on the basis of a condition that requires an installation to be removed as soon as reasonably practicable when it is no longer needed for microgeneration. Local planning authorities should be able to determine whether equipment is still needed for microgeneration on a case by case basis by reference to fact and degree.
- 3.50 With regard to technical performance, planning authorities should not make assumptions about the technical and commercial feasibility of renewable energy projects (e.g. identifying generalised locations for development based on mean wind speeds). Technological change can mean that sites currently excluded as locations for particular types of renewable energy development may in future be suitable. This principle applies equally to permitted development rights.

## Comments relating specifically to air source heat pumps

### Siting

#### WHAT THE CONSULTATION PROPOSED

- 3.51 The consultation proposed that an air source heat pump should not be permitted development if it would be visible from and sited on an elevation which fronts a highway.

#### MAIN ISSUES

- 3.52 Some respondents said that there should not be a restriction limiting the siting of air source heat pumps to places which are not visible from a highway, as they thought visibility was an important factor in raising awareness of the technology. Others felt that more protection was required in conservation areas, and on the upper storeys of buildings. Some said that the term 'fronting a highway' needed clarification.

#### THE GOVERNMENT'S VIEW

- 3.53 The Government considers that careful siting to avoid undue visual impact is an important consideration, particularly in conservation areas. Raising awareness of this technology can be achieved effectively in a variety of other ways.
- 3.54 The Government has proceeded with siting restrictions on air source heat pumps, so as to limit visual and amenity impacts. More specifically, an air source heat pump will not be permitted development if:
- it would be installed on a pitched roof
  - it would be installed within 1 metre of the external edge of a flat roof;
  - it would be installed on a wall or roof fronting a highway in a Conservation Area or World Heritage Site or
  - other than land within a Conservation Area or World Heritage Site, it would be installed on a wall of a dwellinghouse/block of flats which fronts a highway if sited above the ground storey level.

## **Number of air source heat pumps**

### **WHAT THE CONSULTATION PROPOSED**

- 3.55 The consultation proposed limiting the number of permitted development installations to the first wind turbine or air source heat pump only within the curtilage of a property.

### **MAIN ISSUES**

- 3.56 Some respondents raised concern that there could be cumulative noise impacts from multiple air source heat pumps on closely sited properties. Others felt that the proposed limit of one permitted development wind turbine / air source heat pump per property was too restrictive.

### **THE GOVERNMENT'S VIEW**

- 3.57 Limiting the number of wind turbines and air source heat pump technologies to one per dwellinghouse/block of flats will restrict the density at which it would be possible to install them as permitted development. This will lower the risk of noise disturbance from the cumulative impact of a number of installations.

## **Cubic volume**

### **WHAT THE CONSULTATION PROPOSED**

- 3.58 The consultation proposed a maximum volume for an air source heat pump of 1 cubic metre.

### **MAIN ISSUES**

- 3.59 Some respondents said that for domestic purposes, air source heat pumps are typically much smaller than the volume proposed, and recommended that the maximum permitted be reduced. Others argued that a one cubic metre limit was too restrictive. Some respondents queried which parts of an air source heat pump would be included within the volume calculation.

### **THE GOVERNMENT'S VIEW**

- 3.60 The Government has clarified in the legislation that it is an air source heat pump's outdoor compressor unit (including any housing) that should be taken into account for volume calculation purposes. Having considered the cubic volume allowance further and some of the issues raised in the consultation about sizes for domestic installations the Government considers that a smaller volume allowance of 0.6 cubic metres to be more appropriate.

## SECTION 4

# Electric vehicle charging infrastructure

## What the consultation proposed

- 4.1 The consultation proposed the following in relation to electric vehicle charging infrastructure:
- the introduction of new permitted development rights for the erection of an electrical outlet mounted on an external wall for the recharging of vehicles off-street, and the erection of an upstand on which to mount a charging point and associated feeder pillar within outdoor off-street parking areas
  - the amendment of existing permitted development rights to clarify that local authorities can install electric vehicle charging points and any associated infrastructure on-street as permitted development.
- 4.2 The consultation also proposed the introduction of a new Class in the Town and Country Planning (Control of Advertisements) (England) Regulations 2007, to grant deemed consent to display nameplates of the charging point provider / energy supplier on an electric vehicle charging point.

## Main issues

- 4.3 There was strong overall support, with 90% of respondents in agreement with to the proposals. Many respondents recognised that adequate charging points are an important part of encouraging the uptake of electric vehicles and the establishment of a strong electric vehicle charging point network. Some respondents said that electric vehicle charging infrastructure should be planned as part of wider local, sub-regional and regional infrastructure planning and be integrated with transport and housing developments.
- 4.4 Some concerns were raised about the potential implications of the proposals on the environment in relation to additional street clutter that could be particularly intrusive in areas such as conservation areas and National Parks and possible dangers to the public from trailing wires (e.g. across footpaths/highways).

- 4.5 Some charging point providers criticised the proposals for being too restrictive in terms of dimensions, and some were concerned that proposed setbacks off the boundary were excessive.
- 4.6 With regard to the advertisement proposals, some industry respondents considered them to be too restrictive, and sought deemed consent for larger signs. Some local authority respondents considered the advertising proposals to be overly generous.

### The Government's view

- 4.7 The Government considers that the proposals which were consulted on generally achieve a balance between the needs of electric vehicle charging providers and the importance of protecting environmental amenity. Electric vehicle charging points will inevitably lead to some additional equipment installed both on and off street. However, subject to a reduction in the volume of a wall mounted electrical outlet (to reduce visual impact), the Government believes that the proposed constraints on height, size and siting of the charging points will keep this to manageable levels. Furthermore, the requirement to decommission charging points which are no longer needed for charging purposes will ensure unnecessary equipment does not proliferate.
- 4.8 The Government has not granted permitted development rights for charging infrastructure within the curtilage of listed buildings or upon a site designated as a scheduled monument. The Government considers the dimensions of charging infrastructure to be sufficiently modest so as not to require further specific restrictions in conservation areas and National Parks.
- 4.9 The detailed restrictions on the siting of off-street charging points aim to safeguard the public as far as it is possible against the problems of trailing wires. Charging point manufacturers may also wish to consider what actions they can take to increase safety (e.g. manufacturing wires in bright colours to ensure they are easily visible).
- 4.10 The Government considers that the advertisement proposals on which it consulted draw a good balance between the needs of electric vehicle charging providers and the importance of protecting environmental amenity.

## SECTION 5

# Installations on non-domestic premises

## What the consultation proposed

5.1 The consultation proposed making amendments the Town and Country Planning (General Permitted Development) Order 1995 to allow the following development on non-domestic premises to be carried out as permitted development:

- wind turbines
- air source heat pumps
- solar panels
- ground source heat pumps
- water source heat pumps
- flues for biomass systems
- flues for combined heat and power systems
- structures to house biomass boilers, anaerobic digestion systems, hydro turbines and associated waste and fuel stores (agricultural and forestry land only).

subject to limitations and conditions designed to minimise impacts on neighbours and the wider environment.

5.2 There was strong overall support for the proposals for permitted developments for non-domestic premises. Where comments were raised these tended to focus on the detailed limitations and conditions proposed for individual technologies. The main issues and the Government response to them are considered below.



## Wind turbines and air source heat pumps

### MAIN ISSUES

- 5.3 In general, respondents to the consultation repeated comments made in respect of installations of wind turbines and air source heat pumps on domestic properties. These detailed points are considered in **section 3**.

### THE GOVERNMENT'S VIEW

- 5.4. Proposed measures for controlling noise from wind turbines and air source heat pumps divided respondents between those who thought that it was too precautionary and those who thought that the approach would result in harmful impacts. The Government has considered these responses carefully and has decided to initially introduce permitted development rights for installations of wind turbines and air source heat pumps for domestic premises – a mandatory requirement under the Green Energy (Definition and Promotion) Act 2009 – and not to introduce permitted development rights for installations on non-domestic premises at this time. The domestic permitted development rights will be reviewed and the approach to noise will be reconsidered in light of experience. The Government will look again at installations of wind turbines and air source heat pumps on non-domestic premises at a later date.

## Solar panels

### MAIN ISSUES

- 5.5 Comments were received about the proposed limitations and conditions that would govern the location, size, projection, and visibility of solar panels on or within the curtilage of a property. These views were generally divided between those who felt that the requirements were too permissive and those who felt that they were too restrictive. Support was offered for the additional protections proposed for Conservations Areas but comments were raised that appropriate additional protection was not offered to other sensitive areas.
- 5.6 Some local authorities raised concerns that the proposals did not offer enough protection for birds/bats and their roosts, particularly in respect of roof mounted solar panels.

### THE GOVERNMENT'S VIEW

- 5.7 The Government has considered the detailed limitations and conditions that will govern the location, size, and projection, and visibility of solar panels. The consultation proposals have been amended to take account of these

comments and also bring the requirements for non domestic premises into line with those for domestic properties. Changes include:

- a 200mm maximum projection for wall mounted panels.
- no building mounted panels to be located within 1 metre of the edge of the wall or roof.
- conditions requiring panels to, so far as reasonably practicable, be sited so as to minimise its effect on the external appearance of the building (for building mounted and stand alone) and the amenity of the area (for building mounted).
- no stand alone panels to be located within 5 metres of the boundary.

5.8 Changes have also been made to the “visible from a highway” requirement to refer instead to position of equipment in relation to the highway. This responds to general comments received on this issue, primarily in relation to wind turbines and explained at paragraph 3.44.

5.9 The Government recognises the need for appropriate protections for sensitive areas of the country and has decided to extend the protections proposed in the consultation for conservation areas and World Heritage Sites to also cover other article 1.5 land (e.g. National Parks, Areas of Outstanding Natural Beauty). These requirements, coupled with other conditions and limitations that are designed to limit the impact of development, are felt to offer appropriate protection. The Government decided not to proceed with a restriction linked to town centres in conservation areas. It is considered that this requirement would provide difficult to implement in practice and that other requirements offer appropriate protection.

5.10 All bats and their roosts are given protection under the Conservation of Habitats and Species Regulations 2010 and the Wildlife and Countryside Act 1981 (as amended). The Government considers that this affords sufficient protection.

## **Ground and water source heat pumps**

### **MAIN ISSUES**

5.11 Some respondents felt that the proposals did not take account of the potential impact on archaeology, ecology and trees and that the proposed requirement

for ground source heat pumps that land should be made good following installation could be strengthened.

#### **THE GOVERNMENT'S VIEW**

- 5.12 For heat pump development in European Sites, such as Special Areas of Conservation and Special Protection Areas, existing provisions within the Town and Country Planning (General Permitted Development) Order 1995 and the Conservation of Habitats and Species Regulations 2010 are designed to ensure that permitted developments likely to have a significant effect on a European Site cannot go ahead unless the local planning authority has determined, after consultation with Natural England, that the development would not affect its integrity. These provisions will apply equally to the heat pump permitted development rights.
- 5.13 Permitted development rights do not allow works that affect protected trees. Works to protected trees that are the subject of a Tree Preservation Order may require additional consents. Works to unprotected trees in Conservation Areas are likely to require notification to the local council. The local council has powers to introduce Tree Preservation Orders with immediate effect to protect any trees of amenity value that are threatened by development. The Government considers that these existing powers offer appropriate protection.
- 5.14 Local planning authorities are able to withdraw permitted development rights using Article 4 directions where they consider that the exercise of the rights would undermine the aims for the historic environment, including archaeology. Article 4 directions can be used to ensure that any development is given due consideration via a planning application.
- 5.15 The Government has responded to consultation comments by strengthening the requirement to make good to the land following ground source heat pump development by introducing a requirement that is consistent with other restoration conditions contained in the General Permitted Development Order.
- 5.16 Air quality was the main issue arising from the proposals for flues for biomass and combined heat and power systems – particularly with local authority respondents. Some felt that permitted development rights should not be available in designated areas such as Air Quality Management Areas. Other respondents felt that non-planning regimes adequately deal with the issue of air quality.

- 5.17 Views were divided on the number and height of flues permitted under permitted development rights between those who felt that a greater number of flues should be permitted and those who felt that the proposals would harm visual amenity.

#### **THE GOVERNMENT'S VIEW**

- 5.18 Experience from permitted development rights for biomass and combined heat and power systems on domestic properties has not presented substantial issues with air quality. Given the small scale of development allowed under the permitted development rights, any impact on air quality is likely to be as a result of the cumulative impact of a number of sources – rather than from flues installed under permitted development. In areas of poor air quality, including Air Quality Management Areas, local planning authorities have powers available to them to withdraw permitted development rights using Article 4 directions.
- 5.19 The consultation document proposed taking forward these permitted development rights subject to the same height criteria that currently exists for domestic installations. Additional controls were also suggested for non domestic installations limiting the numbers of flues and development within Conservation Areas, World Heritage Sites, Listed Buildings, and Scheduled Ancient monuments. The Government feels that these controls are necessary to safeguard visual amenity and has decided to extend these safeguards to cover other article 1(5) land including National Parks and Areas of Outstanding Natural Beauty.

### **Structures to house biomass boilers, anaerobic digestion systems, hydro turbines and associated waste and fuel stores (agricultural and forestry land only)**

#### **MAIN ISSUES**

- 5.20 Respondents were supportive of the proposals to clarify that Class A of Parts 6 and 7 of the General Permitted Development Order permits structures to house biomass boilers, anaerobic digestion systems, hydro turbines and associated waste and fuel stores, subject to conditions and a prior notification procedure as for other agricultural and forestry developments.

- 5.21 On the proposals for structures to house biomass boilers, anaerobic digestion systems and associated waste and fuel stores, respondents to the consultation raised concerns that there were no restrictions on erecting structures in designated areas.
- 5.22 Views were expressed on the proposal to limit the source of fuel or waste to only that generated on the farm or forestry holding. Some felt that this condition would be too restrictive while others felt that it could be tightened by imposing a maximum distance from which material should be brought for disposal.
- 5.23 On the proposals for structures to house hydro turbines concern was raised that the proposal would allow development in flood risk areas that would trigger a requirement to consult with the Environment Agency.

#### **THE GOVERNMENT'S VIEW**

- 5.24 The Government is of the view that the prior approval procedure that the provisions will be subject to will allow for appropriate consideration of impacts on designated areas. The prior notification process also allows for consultation with interested bodies such as the Environment Agency.
- 5.25 The Government is of the view that the proposal to limit the source of fuel or waste for biomass and anaerobic digestion systems to only that generated on the farm or forestry holding will strike a balance between allowing such development and ensuring that its scale is consistent with the agricultural and forestry use.

## SECTION 6

# Impact assessments and other matters

## What the consultation proposed

- 6.1 The consultation proposals were accompanied by three separate impact assessments:
- permitted development rights for installations of wind turbines and air source heat pumps on domestic premises
  - permitted development rights for installations of a range of renewable energy and low carbon technologies on non-domestic premises
  - permitted development rights and advertisement regulations proposals relating to electric vehicle charging infrastructure.
- 6.2 Each of these impact assessments compared the costs of Government intervention against the costs of doing nothing. The assessment found that implementing the proposals for these permitted development rights would have net positive benefits. Respondents were asked to provide comments on:
- whether the impact assessments provide an accurate assessment of the likely costs and benefits of the preferred policy options
  - for the impact assessments which include policy proposals on wind turbines and air source heat pumps, whether they agree with the estimates of possible costs to local authorities in relation to investigating noise complaints; and
  - whether the assumptions made about the degree to which the process of obtaining planning permission acts as a disincentive to the take up of renewable energy are reasonable.

## **Main issues**

- 6.3 In terms of the accuracy of the impact assessments, respondents indicated a number of areas where they felt costs had been ignored or were underestimated. These included:
- embodied energy costs
  - non-monetary costs (eg impacts on the landscape)
  - costs to local planning authorities of monitoring noise impacts
  - lack of familiarity with the new technologies on the part of planning authorities
  - unfamiliarity with the system, which would add to local planning authority costs in handling applications for lawful development certificates.
- 6.4 Respondents had differing views about potential additional costs to local authorities in investigating noise complaints. Local planning authorities thought that the proposals would lead to more noise complaints, at least initially, because of a lack of familiarity with equipment and the implications of the new permitted development rights.
- 6.5 Most respondents answering the question about the requirement for planning consent being a disincentive to the take up of renewable technologies agreed with the proposition. However, some local authorities disagreed with the proposition, suggesting a bigger incentive for the growth of the industry would be feed-in tariffs or the renewable heat incentive. Some local authorities suggested that householders would still go through the regulatory process by applying for a certificate of lawfulness to confirm that their installation was permitted development.

## **The Government's view**

- 6.6 The impact assessments take account of both monetised and non-monetised costs. Non-monetised costs are difficult to attach monetary value to, and the absence of information about the scale of these costs and benefits makes it impractical to build them into a cost benefit analysis.

- 6.7 The absence of conclusive evidence makes it difficult to predict whether the proposals for wind turbines and air source heat pumps will increase the work burden on local authorities in terms of investigating noise complaints. This issue needs to be considered further in the light of practical experience once the new permitted development rights have come into effect. A 1 year check of the noise limit for domestic installations of wind turbines and air source heat pumps will be a useful arena in which to consider this. The 2 year review, as required by the Green Energy (Definition and Promotion) Act 2009, will also provide an opportunity for this issue to be considered.
- 6.8 The microgeneration industry has made extensive representations to the Government regarding the uncertainties, inconsistencies, costs and delays of securing the planning permission required for domestic microgeneration technologies. The Government accepts that removing the requirement for specific planning permission for these technologies will make it easier for people to install them. However, the extent of the stimulus that permitted development rights give to the domestic wind turbine and air source heat pump industry will only really be known once the permitted development rights are in force.
- 6.9 The impact assessments have been updated and finalised to accompany the legislation. The final versions are annexed to the Explanatory Memorandum that accompanies the legislation available online at: [www.legislation.gov.uk](http://www.legislation.gov.uk).
- 6.10 No comments were received on the proposal to extend compensation provisions in section 189 Town and Country Planning Act 1990 (as amended) to the proposals.