



# Microgeneration in the Historic Environment



ENGLISH HERITAGE



English Heritage is the Government's adviser on the historic environment. Central to our role is the advice we give to local planning authorities and government departments on development proposals affecting historic buildings, archaeological sites, designated historic areas, designed landscapes and the historic aspects of the wider landscape. We also manage an estate of over 400 historic properties.

This guidance is intended for householders and other building owners considering installing microgeneration equipment on their property, which may affect the historic environment. It is also aimed at those, including local authority development control planners and building control staff and their historic environment advisers, involved in control of householder planning applications and building control approvals. We will use it to guide our own responses to consultations referred to us by local authorities.

Alongside this detailed statement, we have produced a wide range of practical guidance on installing renewable energy equipment and have committed to further research and publications on wider climate change issues, as well as a research project on improving energy-saving in traditional homes under the title *Hearth and Home*. More information is available at the *Historic Environment – Local Management HELM* website at [www.helm.org.uk/climatechange](http://www.helm.org.uk/climatechange) and on our main website at [www.english-heritage.org.uk/climatechange](http://www.english-heritage.org.uk/climatechange). There is also a website *Climate Change and your home* for householders offering information, advice and good practice at [www.climatechangeandyourhome.org.uk](http://www.climatechangeandyourhome.org.uk)

## CLIMATE CHANGE AND RENEWABLE ENERGY

The Code for Sustainable Homes, sets national voluntary standards, for energy efficiency for the sustainable design and construction of new homes. The Zero Carbon Homes initiative proposes a progressive tightening of energy efficiency standards in the Building Regulations, rising to a zero carbon target in 2016. Changes to permitted development for the installation of domestic microgeneration equipment (CLG, 2008B) make it easier for householders and businesses to install microgeneration equipment. *Planning Policy Statement: Planning for Climate Change: Supplement to Planning Policy Statement 1* (CLG, 2007) sets out how participants in the planning process should work towards reducing carbon emissions in the location, siting and design of new development.

Local authorities already have a series of targets to improve the energy efficiency of the existing housing stock. The Home Energy Conservation Act 1995 requires them to improve the energy efficiency of residential accommodation in their area, with

Government recommending a target of 30% improvement by 2011. The local government performance framework requires councils to use the Standard Assessment Procedure (SAP) to report on the average energy efficiency rating of the local authority-owned housing stock and the 2006 Local Government White Paper proposed they should report on the percentage annual reduction achieved in carbon dioxide emissions in both the local authority estate and across the community. By the end of 2007 Home Information Packs were required for most home sales and include *Energy Performance Certificates*.

## ENGLISH HERITAGE RESPONSE TO CLIMATE CHANGE

English Heritage recognises the urgent need to reduce greenhouse gas emissions and that our buildings need to be adapted to become more resilient to unavoidable climate change. We also recognise that some forms of adaptation and mitigation may harm the significance of historic buildings, sites and landscapes. This can diminish their contribution to our quality of life and the important social and economic contribution our cultural

heritage makes to society. English Heritage is committed to working with others to avoid or minimise any adverse impacts, while facilitating the changes necessary.

More information on energy efficiency and traditional buildings can be found in *Climate Change and the Historic Environment* (English Heritage, 2008), where there is a section on Energy Efficiency and Historic Buildings.

## ENGLISH HERITAGE POLICY AND GUIDANCE ON MICROGENERATION IN THE HISTORIC ENVIRONMENT

Those caring for our heritage have responsibilities not just for their individual asset but also to the wider environment, and they will have a considerable interest in minimising environmental harm. When installing renewable equipment, owners will need to balance the impact on their historic property against the contribution it will have in reducing their and the building's carbon footprint. Badly positioned equipment diminishes the special interest of historic buildings or sites.

### General Guidance

In assessing applications that English Heritage has been consulted upon, it will apply the following general considerations, which are underpinned by *Conservation Principles* (EH 2008). We would encourage local authorities to apply a similar approach.

- 1 Policy guidance in PPS 22: Renewable Energy states in its key principles I(V) and (VIII) "*the wider environmental and economic benefits of all proposals for renewable projects, whatever their scale, are material considerations*" and "*development proposals should demonstrate any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures*".
- 2 Generation of power from renewable resources is only one part of the equation; reducing consumption and wastage are of at least equal importance, using energy conservation measures and reviewing how the building is lived in. It would be undesirable to install equipment on a designated asset without first improving overall energy efficiency in non-damaging ways. Detailed advice is available (English Heritage 2007b).

## ENGLISH HERITAGE POLICY

Proposals for microgeneration equipment **attached to scheduled monuments that are buildings, listed buildings or historic buildings in conservation areas** will generally be acceptable if all of the following criteria are met:

- 1 the change will not result in loss of special interest
- 2 the visual impact of the equipment is minor or can be accommodated without loss of special interest
- 3 in fixing the equipment to the building there is no damage to significant historic fabric and installation is reversible without significant long-term impact on historic fabric
- 4 the cabling, pipework, fuse boxes or other related equipment can be accommodated without loss of, or damage to, significant historic fabric
- 5 that as part of the justification, the applicant can demonstrate that other energy-saving measures or other locations with less impact on the historic fabric and the special interest have been considered and are not viable
- 6 the applicant can demonstrate that the proposal has net environmental benefit
- 7 the local authority imposes a condition requiring removal of the equipment, including cabling and boxes, and making good of the historic fabric as soon as it falls out of use

**For freestanding equipment within scheduled areas, close to listed buildings, sites included in the register of historic parks and gardens, and register of battlefields:**

- 8 the appearance or setting of the site or building is not compromised
  - 9 the ground disturbance caused by its installation is minimal and does not compromise the historic significance of the site
- 3 The proposed changes are part of the ongoing evolution of a building or site, which may already have accommodated a range of changes such as the introduction of services (water, gas, electricity), chimneys and flues, new roofing materials, TV aerials and satellite dishes.

01 36 Beaufort Gardens.

(Photograph courtesy of Royal Borough of Kensington and Chelsea.)

02 Evacuated-tube solar collector on the flat roof of Beaufort Gardens, a mid-Victorian terraced house in the Royal Borough of Kensington and Chelsea.

4 The general principles set out in PPGs15 and 16 apply to microgeneration applications just as they do to any other proposals. The local authority should *'have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses'* (PPG15 para 3.3). The proposals should demonstrate that the change has been accommodated *"without loss of special interest"* (paragraph 3.13 of PPG 15). Adding a wind turbine, or photo-voltaic panels does not necessarily result in loss of special interest.

5 We encourage early initial discussion with the local authority before even the type of microgeneration equipment has been decided upon and manufacturers and installers approached for designs and quotations. We also encourage further pre-application discussion once a chosen manufacturer/installer has begun to develop their proposals.

6 The applicant should provide the local planning authority with sufficient information to allow them to assess the impact of the proposal on the special interest (PPG15 para 3.4) In the case of microgeneration proposals this is likely to require details of how the equipment will be fitted to the building and the impact of any internal cabling or pipework and control boxes or meters etc.

7 The local authority should consider carefully whether the proposed installation would *'bring substantial benefits for the community, in particular by contributing to the economic regeneration or the enhancement of its environment (including other listed buildings)'* (PPG15 3.5 iv). It should also consider whether the impact on the fabric of the building or site is proportionate to the wider benefits gained by the installation.





**03** Dalehead Church (Bradford Diocese). The chapel and Heritage Centre are powered by wind turbine. The graveyard is a Biological Heritage Site with more than 130 species of upland meadow plants.  
© Mr John Parry

**04** The Colourhouse Children's Theatre, Merton Abbey Mills, with London's first ground-based new-generation wind turbine. © Green Energy UK



## GUIDANCE ON SPECIFIC ELEMENTS OF THE HISTORIC ENVIRONMENT

**For proposals not located in designated heritage sites,** where the majority of microgeneration proposals will be deemed permitted development on or within the curtilage of a detached dwelling, English Heritage is unlikely to have a remit unless the local planning authority has deemed that setting of a designated site needs to be protected by the issuing of an Article 4 direction to remove permitted development rights. English Heritage may make representations where proposals would have a major negative impact on the setting of important designated sites.

**For conservation areas** microgeneration proposals are likely to require planning permission. English Heritage will only be consulted on the largest proposals (of which the microgeneration element is likely to be small). In general English Heritage believes that it should be possible to install microgeneration equipment on many buildings in conservation areas if carefully positioned.

The principal considerations are that:

- efforts should be made to minimise visual impact
- locating on principal elevations should normally be avoided
- equipment should not damage key views in, out or within the conservation area, and this may include some very visible secondary elevations
- there should be no loss in the overall character or historic interest of the conservation area
- the local planning authority should consider cumulative impacts of the installation of different types of equipment

**For proposals within National Parks, AONBs and World Heritage Sites** planning permission is likely to be required. The rules governing permitted development for microgeneration in these areas are set out in the General Permitted Development Amendment Order 2008 (CLG, 2008B)

**05 & 06** Ground-mounted solar collector at the Keeper's Cottage, Woolbeding, West Sussex, a timber-framed cottage dating back to the early 17th century, now owned by The National Trust.

**07** PVs integrated into glass (Photograph courtesy of Solar Century)

**For applications within Registered Historic Parks & Gardens and Registered Battlefield Sites**

applications on unlisted buildings will require planning permission, and the location within registered areas is a material consideration in determining the application. Early discussion with the local planning authority is essential and for the more important registered areas, English Heritage may become involved. In considering proposals the following should be taken into account:

- there are no reasonably practical alternatives
- where alternatives exist, the least damaging type of microrenewable technology should be chosen
- in siting equipment, the most sensitive areas should be avoided
- equipment should be hidden if possible
- a key test is that there is no loss of special interest
- proposals should not damage key views in, out or within the site

**For listed buildings of all grades** installation of microgeneration equipment attached to the building or within the curtilage of the buildings will require listed building consent and/or planning permission in most circumstances. Owners should:

- approach the local planning authority as early as possible
- consider non-intrusive alternatives first
- choose the least damaging type of technology in terms of damage to historic fabric
- ensure that equipment is not visible from important viewpoints and does not damage historic fabric

The key test of acceptability is that there should be no loss of special interest of the building (the reason why it was listed).

Similarly for proposals for microgeneration equipment on buildings adjacent to a listed building, the impact on the setting of the listed building needs to be determined.



For Grade I and II\* listed buildings though Listed Building Consent applications are made to the local planning authority, English Heritage will be consulted, and we would expect to see the points below properly considered for every acceptable application.

For Grade II listed buildings Listed Building Consent applications will be determined by the local planning authority. Although it is unlikely that English Heritage will be consulted on an application to install microgeneration equipment on a Grade II building, English Heritage believes that for a proposal to be acceptable on any grade of listed building it must show that:

- significant parts of the historic fabric will not be irreversibly damaged and any impact on it will be limited
- views of the building would not be compromised (views from public places are particularly important)
- no practical alternatives exist that would not require intervention in the historic fabric
- efforts have been made to lessen impact by design, location, choice of materials, colours etc

**For Scheduled Monuments** where the proposal is to install microgeneration equipment within the scheduled area, Scheduled Monument Consent is likely to be required from English Heritage, who should be involved at the earliest possible stage. In order to be acceptable, it must be shown that:

- there are no reasonable off site alternatives
- impact on important fabric will be limited and reversible
- the least damaging type of technology has been chosen
- there is no loss of special interest
- the impact on setting is considered where free-standing equipment is being proposed
- evaluation of impact has been carried out and necessary mitigation planned.

English Heritage may also be involved in proposals for microgeneration equipment that would affect the setting of a Scheduled Monument. In such cases, similar requirements will apply.

## HELPING LOCAL PLANNING AUTHORITIES RESPOND TO MICROGENERATION IN THEIR HISTORIC ENVIRONMENT

English Heritage provides advice on all aspects of the historic environment, including Climate Change, see [www.english-heritage.org.uk](http://www.english-heritage.org.uk). Our HELM (Historic Environment Local Management) website [www.helm.org.uk](http://www.helm.org.uk) has all our policy position statements, guidance and additional advice, and we intend to make available good practice examples of microgeneration installation. Through HELM we run a training programme aimed at local authority officers and Heritage Champions.

As with every element of sustainable development, local planning authorities will need to strike a balance between visual and physical damage against the benefits of increasing the production of renewable energy. Authorities should consider whether a Supplementary Planning Document might be appropriate to deal with the issue of microgeneration and in particular how it can be installed in environmentally sensitive areas.

## KEY SOURCES

Communities and Local Government 2007 *Planning Policy Statement: Planning for Climate Change Supplement to PPS1*, CLG

Communities and Local Government 2008a *Planning: A Guide for Householders what you need to know about the planning system*, CLG

Communities and Local Government 2008b *Statutory Instrument 2008 No675 Town and Country Planning (General Permitted Development) (Amendment) (England) Order 2008*, CLG

Department for Environment, Food and Rural Affairs 2007a *Climate Change Strategic Framework*, Defra

Department for Environment, Food and Rural Affairs 2007b *UK Climate Change Programme: Annual Report to Parliament*, July 2007, Defra

Department of Trade and Industry 2007 *Meeting the Energy Challenge: A White Paper on Energy May 2007*, The Stationery Office

English Heritage 2002 *Building Regulations and Historic Buildings*, English Heritage (Product Code 50675)

English Heritage 2005a *Wind Energy and the Historic Environment*, English Heritage (Product Code 51099)

English Heritage 2005b *Discovering the Past: Shaping the Future, Research Strategy 2005-2010*, English Heritage (Product Code 51136)

English Heritage 2006 *Biomass Energy and the Historic Environment*, English Heritage (Product Code 51100)

English Heritage 2008a *Climate Change and the Historic Environment (2nd edition)*, English Heritage (Product Code 51392)

English Heritage 2008b *Energy Conservation in Traditional Buildings*, English Heritage (Product Code 51367)

English Heritage 2008c *Micro Wind Generation and Traditional Buildings*, English Heritage (Product Code 51366)

English Heritage 2008d *Small-scale solar thermal energy and traditional buildings*, English Heritage (Product Code 51368)

English Heritage 2008e *Small-scale solar electric (photovoltaics) energy and traditional buildings*, English Heritage (Product Code 51370)

English Heritage 2008f *Conservation Principles: policies and guidance for the sustainable management of the historic environment*, English Heritage (Product Code 51393)

English Heritage 2008g *English Heritage Advisory Services for Planning & Development*, English Heritage (Product Code 51399)

HM Government 2006 *Climate Change: The UK Programme 2006*, The Stationery Office

Office of the Deputy Prime Minister 2005 *Planning Policy Statement 1: Delivering Sustainable Development*, ODPM

Office of the Deputy Prime Minister 2006 *Planning Policy Statement 22: Renewable Energy*, ODPM



At Aske Hall, near Richmond in North Yorkshire, wood-chip boilers are being progressively installed as more efficient and environmentally friendly replacements for traditional heating systems. 08: Aske Hall stableyard, 09: wood-chip boiler; 10: traditional building used as a hopper for the wood chip. © Historic House Association

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Most of the the English Heritage publications listed above can be obtained free of charge from the same address or downloaded from [www.helm.org.uk](http://www.helm.org.uk) or [www.english-heritage.org.uk](http://www.english-heritage.org.uk). Published by English Heritage June 2008, Product Code: 51391.