

# **Permitted Development Rights: Non-Domestic Solar Panels and Domestic Air Source Heat Pumps Consultation**

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## Introduction

1. The Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (as updated) provides for a range of buildings, technologies and other 'developments' to go ahead without the need for planning permission. Other permissions, such as a building warrant or listed building consent may still be required. The removal of the planning application step means there is no planning application fee to be paid and there would be no cost arising paid from the preparation of information supporting the application. It also removes uncertainty because those things that are permitted development are already acceptable in planning terms.
2. Permitted development rights work by identifying the conditions the proposal must meet in order for the rights to apply. Proposals that do not meet the conditions are not permitted development and therefore require planning permission before they can go ahead. Any planning application will be considered against the policies of the relevant development plan and other relevant matters known as 'material considerations'.
3. Permitted development rights work best for small scale, low impact developments that can be constructed or installed in a similar manner regardless of the location of the property where the development happens. Impacts can be predicted and managed through a single set of conditions that is applied in all instances. Thresholds can be established, beyond which the rights do not apply, allowing more significant impacts to be considered case by case, through the planning application process by the relevant planning authority for the area.
4. Permitted development rights for air source heat pumps and solar panels are being reviewed to ensure that those wishing to install the technology in Scotland and those manufacturing the technology have similar conditions to England and Wales. For solar panels this is also an opportunity to provide similar permitted development rights across residential (domestic) and non-domestic (any building that isn't a home) buildings. This can help support the market for air source heat pumps and solar panels, whilst also reducing the reliance of individual properties on fossil fuel heat and power sources.
5. At this time our proposals relate to solar panels on non-domestic buildings and air source heat pumps on domestic properties.
6. While we consider there may be demand for air source heat pumps on non-domestic properties the range and scale of heat demand in these properties can vary significantly. Standard measures to control the level of noise emitted from an air source heat pump available for the United Kingdom, in the form of the Microgeneration Certification Scheme Planning Standards, currently apply only to domestic properties.
7. For solar panels on domestic properties the installation is not limited by the potential output of the panels and installation falls within the 'one meter bubble'

concept where by development that does not add to the floor space of the house or flat and projects by less than one meter from the external wall of the building is considered to be permitted development. This presents the concept and there are some restrictions which can be read at: <http://www.gov.scot/Topics/Built-Environment/planning/Development-Management/Householder-Permitted-Development>.

8. Similar rights do not apply to the non-domestic sector. We want to ensure that for solar panels the technology can benefit from permitted development rights whether the panels are attached to domestic or non-domestic buildings.

## Responding to the Consultation

9. We are launching this consultation on **22 June**, seeking responses by **27 August 2015**. This is a 9 week consultation, a slight reduction on the standard 12 week period as we consider the changes to be limited and many of the issues have already been established in previous consultations on this topic.
10. We invite you to comment on any aspect of our proposals but have also provided consultation questions on which we would appreciate your response.
11. The consultation questions refer to impact assessments which have informed these proposals. Those assessments have been published separately but at the same time as this consultation. Comments on those impact assessments should be received by **27 August 2015**, using the same details as given below. A Respondent Information Form is provided at the end of this document to return with your comments.
12. This is an internet based consultation so **please respond to** the questions via the Scottish Government's Citizen Space website:  
<https://consult.scotland.gov.uk/development-rights/permitted-development-rights>
13. You can also make your comments known in writing to:

Air Source Heat Pumps and Solar Panels Permitted Development Rights  
Consultation  
Scottish Government  
FAO Simon Bonsall  
Victoria Quay  
Leith  
Edinburgh  
EH6 6QQ

e-mail: [PermittedDevelopmentRightsConsultation@scotland.gsi.gov.uk](mailto:PermittedDevelopmentRightsConsultation@scotland.gsi.gov.uk)

## Contact for Questions

14. This consultation paper sets out the Scottish Government's proposed changes to the permitted development rights followed by a Question and Answer section which deals with a variety of different questions that may be prompted by the proposals.
15. However, if you have questions that are not answered by the Question and Answer section please e-mail your question to: [PermittedDevelopmentRightsConsultation@scotland.gsi.gov.uk](mailto:PermittedDevelopmentRightsConsultation@scotland.gsi.gov.uk). Alternatively you can telephone the Scottish Government on 0131 244 4888 and ask to speak to a member of the National Planning Policy Team.

# Permitted Development Rights Proposals

## Non-Domestic Solar Panels

### Current Situation

16. Legislation: The Town and Country Planning (General Permitted Development) (Non-Domestic Microgeneration) (Scotland) Amendment Order 2011:  
<http://www.legislation.gov.uk/ssi/2011/136/contents/made>

- Allows for solar photovoltaic (PV) and solar thermal equipment

#### Limitations:

- Microgeneration output thresholds (50 kilowatts electricity, 45 kilowatts thermal). This is the total for all solar panels installed on the building
- Permitted development rights do not apply within 3 kilometres of the perimeter of an aerodrome or technical site

Permitted development rights do not apply in the following areas:

- A site of archaeological interest
- The curtilage of a listed building
- A National Scenic Area
- A Historic Garden or designed landscape
- A Conservation area
- A National Park

#### Pitched roof limits:

- 200 millimetre protrusion from the roof
- Equipment not to exceed the height of the roof ridge
- Equipment not to go beyond the edge of the roof

#### Flat roof limits:

- The roof must have a parapet wall
- Equipment not to exceed the height of the parapet wall
- Equipment must not to go beyond the edge of the roof

#### Wall limits:

- 200 millimetre protrusion from the wall
- Equipment not to go beyond the boundary of the site on which the building is located
- Equipment not to be within 200 millimetres of the edge of a wall

## Proposal

17. The proposal amends some of the existing permitted development rights to allow solar panels to be installed on more non-domestic buildings without the need for a planning application to be approved. The proposal allows for solar photovoltaic (PV) and solar thermal equipment. New proposals are shown underlined. The microgeneration output limit, aerodrome and technical site limitations are removed.

- Allows for Solar photovoltaic (PV) and solar thermal equipment

Limitations:

Permitted development rights do not apply in the following areas:

- A site of archaeological interest
- The curtilage of a listed building
- A National Scenic Area
- A Historic Garden or designed landscape
- A Conservation area
- A National Park
- A World Heritage Site

Pitched roof limits:

- 200 millimetre protrusion from the roof
- Equipment not to exceed the height of the roof ridge
- Equipment not to go beyond the edge of the roof

Flat roof limits:

- Equipment not to exceed 1 meter from the roof (excluding chimneys or other roof features)
- Equipment not to be located on the roof closer to the edge of the roof than the height of the installed equipment

Wall limits:

- 200 millimetre protrusion from the wall
- Equipment not to go beyond the boundary of the site on which the building is located
- Equipment not to be within 200 millimetres of the edge of a wall

## Anticipated Outcomes of the Proposed Changes

18. Non-domestic properties could fit larger arrays of solar panels without the need to make a planning application. This is more in line with the existing permitted development rights for domestic properties and reflects the move to permitted development rights for roof mounted solar arrays on non-domestic buildings in England of up to 1 megawatt.

## Domestic Air Source Heat Pumps

### Current Situation

19. Legislation: The Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Amendment Order 2010:  
<http://www.legislation.gov.uk/ssi/2010/27/contents/made>

- Allows for one air source heat pump within the land of a domestic building

#### Limitations:

- Only one air source heat pump can be considered to be permitted development, further air source heat pumps do not benefit from permitted development rights
- Equipment not to be less than 100 metres from the boundary of another domestic property
- Equipment within a conservation area not to be visible from a road within that conservation area
- Prior approval to be sought from the planning authority 28 days before installation happens
- Development to happen within three years of the date from which prior approval was sought or where prior approval was needed, from the date the prior approval was given
- Equipment to be sited to minimise the effect on the amenity of the area
- Equipment to only be used for domestic microgeneration
- Equipment to be removed when no longer needed for or capable of domestic microgeneration

Permitted development rights do not apply in the following areas:

- A World Heritage Site
- The curtilage of a listed building



## Proposal

20. The proposal amends some of the existing permitted development rights to allow air source heat pumps to be installed on more domestic buildings without the need for a planning application to be approved. New proposals are shown underlined. The 100 metre distance limitation and prior approval elements are removed. The domestic microgeneration criterion is removed as the proposal is clear this is about residential properties and the installation would be subject to the microgeneration certification scheme.

- Allows for one air source heat pump on a dwelling or within the land of a domestic building

### Limitations:

- The installation should not result in more than one air source heat pump on the property (whether or not an existing air source heat pump was approved following a planning application)
- Equipment within a conservation area or National Park to only be sited on the ground floor level on the rear of the building
- Where the building contains one or more flats the equipment should be sited at ground floor level
- For houses the equipment should be at ground floor level when at the front (or principal) or side of the building
- The equipment should not extend further than 1 meter away from the external roof or wall surface
- The equipment should comply with Microgeneration Certification Scheme Planning Standards or equivalent standards
- Equipment to be used for domestic heating only
- Equipment to be sited to minimise the effect on amenity
- Equipment to be removed when no longer needed for or capable of domestic microgeneration

Permitted development rights do not apply in the following areas:

- A World Heritage Site
- The curtilage of a listed building

## Anticipated Outcomes of the Proposed Changes

21. Many houses and some flats would be able to install air source heat pumps without the need for planning permission.

22. Air source heat pumps that were not accredited by and installed under the standards of the microgeneration certification scheme, or equivalent standards that have been approved, would need a planning application to be made and approved before the equipment is installed.

23. Although not within the same legislative provision which provides for the one metre bubble concept (see paragraph 7) the proposed rights move towards a similar approach. It is more restrictive than the bubble concept in that the equipment installed above ground level would not be possible on the principal or side wall (elevation) of the building, a planning application would be needed to consider such applications.
24. We do not see the need to make provision for heat pumps to be installed further than 1 meter from the wall of the building as we understand that in most situations it is most efficient to install the equipment as close to the building as possible to minimise heat losses from the associated pipework.
25. Other siting requirements for the operational efficiency of the equipment and to safeguard neighbours from excessive noise would be managed through the application of the microgeneration certification scheme planning standards or other equivalent approved standards.
26. Noise is a complex matter. It affects different people in different ways, depending on how they perceive and respond to noise (the same noise could be stressful for one person and acceptable to another). The microgeneration certification scheme does not establish a threshold whereby a noise nuisance is caused. Noise nuisance is a statutory matter controlled by the Environmental Protection Act 1990. This is not replaced by the microgeneration certification scheme and equipment installed under that scheme could be found to be a statutory nuisance under that act but decisions around that will be made on a case by case basis.
27. Available evidence from England suggests that there has not been a general upsurge in complaints following the introduction of permitted development rights allied to the microgeneration certification scheme<sup>1</sup>.

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<sup>1</sup> <http://www.microgenerationcertification.org/about-us/news-and-events/192-pdrwtashpreview>

## Consultation Questions

- 1 - Do you agree with the proposal for non-domestic solar panels? Yes, No, In Part
- 2 - Please provide other comments on the proposal for non-domestic solar panels
- 3 - Do you agree with the proposal for domestic air source heat pumps? Yes, No, In Part
- 4 - Please provide other comments on the proposal for domestic air source heat pumps
- 5 – Please provide comments on the potential cost or other business impacts on small businesses as a result of extending the permitted development rights.
- 6 – Please provide general comments on the Business and Regulatory Impact Assessment.
- 7 – Please provide comments on the potential impacts of the technology on those people, in particular disabled older people, disabled children and young people, and other people who may be likely to spend long periods of time at home including older people, children and young people, women and minority ethnic communities.
- 8 – Please provide information that would assist in providing data to help inform further Equalities Impact Assessment or Child Rights and Wellbeing Impact Assessment.

## Impact Assessments

28. The reporting of impact assessments that have informed this consultation can be found in the accompanying document 'Permitted Development Rights: non-domestic solar panels and domestic air source heat pumps consultation – Impact Assessments', available online at: <https://consult.scotland.gov.uk/development-rights/permitted-development-rights>.

## **Some Questions Answered – Managing Impacts**

### Electrical or heat output of air source heat pumps or solar panels

#### **Question – Why is an output limit not being applied to air source heat pumps or solar panels?**

In planning terms our primary concern for the technology is that it does not significantly harm the appearance or other good characteristic (amenity) of an area. An appropriately located system with a large energy output may have no harmful impacts and a poorly located system with a small energy output may have harmful impacts. However, it is generally impossible to tell for either technology what the output of the system is likely to be by looking at it. Therefore the output of the system is not always the best threshold by which to limit a development of air source heat pumps or solar panels under permitted development rights.

### Non-Domestic solar panels

#### **Question – Why limit wall and pitched roof solar panels to 200mm protrusion?**

Walls and pitched roofs are likely to be the most visible surfaces of a building (when viewed from the adjacent street level). The proposed limit keeps the technology closely aligned to the existing building in visual terms. This is thought to be important as non-domestic buildings can be very large.

#### **Question – What about glint, glare, dazzle and reflections?**

We are aware that solar photovoltaic panels can reflect sunlight, sometimes known as glint, glare or dazzle when seen by people. We don't believe such reflections are caused by tubular solar thermal installations. Reflections from solar panels are not significantly different to those caused by other structures or installations containing glass panels or even from water. People will experience the reflections on sunny days and only when the angle of the sun, the solar panel and the position of the person coincide so that the person sees the reflected sunlight. As the position of the sun changes in the sky or the person moves position the reflection will no longer be experienced as glare or dazzle but may still be seen.

#### **Question – Are there significant issues with existing solar panels?**

Currently permitted development rights for solar panels on both domestic and non-domestic properties do not seek to reduce reflections. We are not aware that reflections from solar panels are causing a general problem. We do not intend that the permitted development rights should deal with reflection of light.

### **Question – What about aviation safety?**

When we last consulted on permitted development rights for solar panels the Civil Aviation Authority raised potential concerns about the risk of dazzle to pilots. The Civil Aviation Authority interim guidance on solar panels (which pre-dates our previous consultation) highlights a concern around confusion of aeronautical lights (which are those used to inform aircraft pilots) and other lights (which could be caused by reflections).

The Civil Aviation Authority encourages developers and planning authorities to comply with the Air Navigation Order (ANO) 2009. That addresses lights and is clear that if a the glare of a light is liable to endanger aircraft taking off or landing or could be mistaken for an aeronautical ground light and is liable to endanger an aircraft, the Civil Aviation Authority can direct the owner of the light (or the person otherwise in charge of it) to put out or screen it and prevent the light occurring again<sup>2</sup>.

In our previous consultation, BAA commented that glare should be managed within the aerodrome safeguarding area where as Infratil found that a 3km exclusion zone around the aerodrome was an appropriate starting point. That approach was also supported by the Ministry of Defence. However, since then domestic permitted development rights have allowed for solar panels across walls and roofs within 3km of aerodromes without planning applications being required. We are not aware that this has caused significant adverse impacts for airport operators.

### **Question – What about driver distraction?**

Sunlight reflections may also have an impact on the road network.

### **Question – Are you addressing this in the proposals?**

In both the aviation and road network instances we have not identified a standard level of reflectivity that would fully address the matter. Even if a level of reflectivity could be identified, enforcement through the planning system could be difficult as in a complaint situation it will not be possible to tell by looking at a solar panel whether it meets the reflectivity standard.

### **Question – How significant is the issue of glare and reflection?**

Given that the sunlight reflections from solar panels will change over the course of a day and across the year, the impacts are temporary. This reduces their impact in general, whilst noting that an experience of glare can happen.

We have not been alerted to problems caused by sunlight reflections from solar panels installed on homes using permitted development rights within the

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<sup>2</sup> <http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=226>

safeguarded area of airports. Nor have we been alerted to problems for the road network caused by sunlight reflections from solar panels installed on homes under permitted development rights.

**Question – Do the proposals address sunlight reflection?**

We do not intend to restrict by location or reflectivity the installation of non-domestic solar panels through permitted development rights. Installers working in the vicinity of an aerodrome should be aware of the Air Navigation Order and discuss their proposal with the airport operator in advance to avoid post-installation action by the airport operator.

**Question – What about radar interference from solar panels reflecting the radar electromagnetic waves?**

The concern here is that the radar system for aircraft and air traffic control becomes less effective. Responses to the previous consultation indicate that BAA and Infratil considered radar interference to be an issue with BAA seeking consultation and Infratil considering an exclusion on permitted development rights of 3km area around the airport to be appropriate as a starting point. In contrast the Civil Aviation Authority did not raise this as a problem, nor did the UK's en-route Air Traffic Control provider (NATS En Route plc or NERL). The Ministry of Defence provided explanatory information around radar operation focusing their comments on the effects of wind turbines.

As with sunlight reflection we have not been alerted to radar interference being a significant problem following the introduction of permitted development rights for solar panels on homes, which are not restricted close to airports or other sites where radar is operated.

**Question - Will the additional height of a building after solar panels have been installed be a problem?**

We propose that the solar panel should be set back from the edge of the roof by a distance at least equal to the height of the solar panel (when installed). This set back means that the additional height of the building is not as apparent from the area immediately adjacent to the building, thereby lessening the impact. In previous consultations, the potential for aircraft striking a solar panel mounted on a flat roof has been raised. However we are not aware that this has been a problem following the introduction of permitted development rights for solar panels on homes. The set-back distance of the panel from the edge of the roof also reduces the risk as aircraft will already be avoiding getting too close to existing buildings.

### **Question – Won't the height of the solar panels on a flat roof significantly alter the appearance of the building?**

An alteration of the appearance of the building could occur but this could be no different in terms of overall impact than changing the style of the windows or painting the building a different colour. The change could be felt to be significant by some people, others will disagree. The set-back proposal means that views of the solar panels will be restricted from ground level and close to the building. Further away and from elevated locations, the solar panels will be more visible. However, distance from a building helps ensure that the building can be seen more as a whole and in relation to its surroundings, allowing the solar panels to be seen as part of the building rather than as a distinctive feature in their own right.

For new buildings where, in the view of the planning authority, the design and appearance could be adversely impacted by the installation of solar panels, the planning authority could apply a condition to the planning permission which removes the permitted development rights. We expect that this is unlikely to be necessary in most instances.

The Scottish Government more generally is promoting renewable energy in a variety of forms through legislation and policy. The permitted development rights help to make the technology a normal part of place and our environment, something which could help increase their acceptability to more people over time.

### Domestic Air Source Heat Pumps

#### **Question – Are air source heat pumps noisy?**

Everyone perceives sounds differently. Some people find some levels of sound more acceptable than others. Some people find some types of sound more acceptable than others. In England, where permitted development rights based on the microgeneration scheme have been introduced, complaints about the sound of air source heat pumps have not been significant<sup>3</sup>.

Making use of the microgeneration certification scheme in the permitted development rights should provide a threshold for sound that neighbours of air source heat pumps will find acceptable.

Many air source heat pump installations financially benefit from the Renewable Heat Incentive scheme. That scheme is subject to the microgeneration certification scheme and so it is appropriate that the permitted development rights make use of it as well.

With the installation of an air source heat pump the sounds experienced in an area will change. The planning system, either by permitted development rights or planning permission, is not designed to prevent change, but to ensure that changes proposed are generally acceptable. Properties using air source heat pumps generally won't also use gas boilers for heating and hot water purposes. Gas boilers are not silent in operation and have an impact on the sounds experienced in an area.

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<sup>3</sup> <http://www.microgenerationcertification.org/about-us/news-and-events/192-pdrwtashpreview>

The sounds made by air source heat pumps and gas boilers are different and we do not suggest one is more acceptable than another, we only make the point that neither are silent in operation. Where gas boiler flues are not generally controlled through the planning system, air source heat pumps are and will need to conform to the standards within it.

**Question – If I am bothered by an air source heat pump, can I complain?**

Yes. Initially you should contact the planning enforcement team to understand if the air source heat pump has either met the terms of its planning permission or permitted development rights. If it has, you can contact the council's environmental health team who can discuss what action might be appropriate.

**Question – If one air source heat pump is found to cause a statutory noise nuisance, aren't all of them nuisances?**

No. The particular circumstances of an installation may mean that the sounds generated by an air source heat pump are causing a noise nuisance for a neighbour. This is site specific and may even be to do with maintenance of a heat pump. It does not mean that all other air source heat pump installations will cause a nuisance.

**Question – What about the visual impacts of air source heat pumps?**

Air source heat pumps for domestic situations tend not to be large pieces of equipment. Generally, the visible parts of the unit will be a metal box casing, with ventilation slots plus an inlet for electrical cable and, pipework connecting the unit to the house. Visually, air source heat pumps are not any different to a multitude of other small additions a home owner may make to their property. With the 1 meter bubble concept for additions that don't increase the floor space of a dwelling, the Scottish Government has broadly determined that small additions are acceptable.

We do not anticipate that visual impacts will be significant. However our proposals do seek to protect principal and side elevations from installations above ground floor level.



## Respondent Information Form

### Permitted Development Rights: non-domestic solar panels and domestic air source heat pumps - consultation



#### RESPONDENT INFORMATION FORM

**Please Note** this form **must** be returned with your response to ensure that we handle your response appropriately

#### 1. Name/Organisation

Organisation Name

Title Mr  Ms  Mrs  Miss  Dr  Please tick as appropriate

Surname

Forename

#### 2. Postal Address

<input type="text"/>		
<input type="text"/>		
<input type="text"/>		
<input type="text"/>		
<b>Postcode</b>	<b>Phone</b>	<b>Email</b>

Continues on next page...

### 3. Permissions - I am responding as...

**Individual** / **Group/Organisation**

Please tick as appropriate

**(a)** Do you agree to your response being made available to the public (in Scottish Government library and/or on the Scottish Government web site)?

Please tick as appropriate

Yes  No

**(b)** Where confidentiality is not requested, we will make your responses available to the public on the following basis

Please tick **ONE** of the following boxes

Yes, make my response, name and address all available

or

Yes, make my response available, but not my name and address

or

Yes, make my response and name available, but not my address

**(c)** The name and address of your organisation **will be** made available to the public (in the Scottish Government library and/or on the Scottish Government web site).

Are you content for your **response** to be made available?

Please tick as appropriate

Yes  No

**(d)** We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Please tick as appropriate

Yes

No



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