

## **EXECUTIVE NOTE**

### **THE TOWN AND COUNTRY PLANNING (GENERAL PERMITTED DEVELOPMENT) (DOMESTIC MICROGENERATION) (SCOTLAND) AMENDMENT ORDER 2010 S.S.I. 2010/27**

The above instrument was made in exercise of the powers conferred by sections 30 and 31 of the Town and Country Planning (Scotland) Act 1997. The instrument meets the obligations of section 70 of the Climate Change (Scotland) Act 2009. The instrument is subject to the negative resolution procedure.

#### **Policy Objectives**

The purpose of the instrument is to enable more microgeneration equipment to be installed at or on existing domestic buildings without the need to apply for planning permission. The Order will grant permitted development rights to the following classes of development: free-standing domestic micro wind turbines (MWT) and, separately, air-source heat pumps (ASHP). Where a developer does not wish to comply or cannot comply with the restrictions and conditions attached to these permitted development rights as described below, they would need to apply for planning permission.

The amendments aim to build upon previous amendments introduced in a 2009 Order (S.S.I. 2009 No. 34) and will encourage the installation of MWT and ASHP microgeneration equipment thereby contributing further to meeting the objectives of reducing Carbon dioxide emissions from buildings, achieving a secure and diverse supply of energy and supporting economic growth in the sector. It should be noted that rather than being the result of a policy initiative as was the case with the 2009 Order, the amendments are driven by the Climate Change (Scotland) Act 2009 and require to be laid in Parliament by the provisions of section 70 of that Act on 5 February 2010.

The instrument meets the timescale set by climate change legislation as an interim measure towards proposals to introduce wider permitted development rights for MWT and ASHP. It is interim for the following reasons.

The EC Technical Standards Directive (98/34/EC) requires draft final statutory instruments that contain technical standards to be notified to the European Commission for a period of three months which would not have been possible within the timetable imposed by the climate change legislation. Technical standards for MWT and ASHP typically concern the dimensions of the installations and their noise performance requirements in relation to their siting and location. The UK Government's Department for Energy and Climate Change supports the Microgeneration Certification Scheme (MCS). MCS sets technical standards which can be used to measure the suitability of sites for MWT and ASHP using noise-impact rather than fixed-distance criteria (subject to similar limitations or conditions as proposed by this instrument).

In order to meet the climate change legislation obligations by 5 February 2010 this instrument contains no technical standards requiring notification under the Directive. It is therefore subject to additional interim safety and amenity safeguards which are necessary until the MCS can be introduced within the Scottish Government's proposals for a replacement Order.

Consequently, upon laying the Order, the Government will simultaneously commence a further consultation on more optimal proposals that MWT and ASHP installation should be subject to technical standards including maximum dimensions and the MCS. Following analysis of the consultation responses a draft final instrument will be notified to the EC for the requisite period, following which it is proposed that the second Order will be introduced to Parliament subject to the negative resolution procedure. It is expected that the current S.S.I. would no longer be required and could be repealed.

The instrument allows for the installation in selected locations for MWT and ASHP technologies. In order to manage cumulative impact the instrument is subject to the condition that development is limited to the presence within the curtilage of a dwellinghouse of no more than one MWT or ASHP.

A range of locational restrictions apply to MWT to the extent that MWT development is not permitted in a conservation area; a world heritage site; a site of special scientific interest; or a site of archaeological interest. Furthermore, development is not permitted within the curtilage of a listed building.

An ASHP would be permitted within a conservation area subject to the limitation that it must not be visible from a road.

Further limitations apply in order to ensure that installations do not cause harm to amenity. The instrument does this in four ways.

First, it applies a test that the installation must be not less than 100 metres from the boundary of the curtilage of another dwellinghouse. The 100 metres criterion is consistent with the consultation that gave rise to the exclusion of MWT and ASHP from the 2009 Order until further research could be undertaken into their impacts. This test is likely to result in more proposals being excluded from permitted development rights than with the finer-tuned controls envisaged under the MCS. For most MWT and all ASHP installations it should be possible to remove this particular test once technical standards can be introduced, following the outcome of the Scottish Government's next consultation.

Second, the applicant must before beginning the development apply to the planning authority for the approval of the authority of the design and size of a proposed wind turbine. The authority would as a matter of good practice ensure that it consults with the necessary aviation authorities as it would for a planning application. The consultation process would then follow the same routine undertaken when the authority consults on a planning application and it would be incumbent upon the planning authority to do so.

Third, an applicant must before beginning the development apply to the planning authority for a determination as to whether the prior approval of the authority will be required in respect of the siting and external appearance of the proposed wind turbine. The application is to be accompanied by a written description of the proposed development including details of the design and size of the proposed wind turbine and a plan indicating the site.

Under the prior notification procedure, the development is not to be commenced before the applicant has received written approval from the planning authority in respect of the design and size of the wind turbine and the occurrence of one of the following:

- receipt by the applicant from the planning authority of a written notice of their determination that prior approval in respect of the siting and external appearance of the proposed wind turbine is not required;
- the 28 days following the date on which the application was received, has expired without the planning authority giving notice of their determination that such approval is required; or
- where notice has been given within a period of 28 days following the date of receiving their application of their determination that such prior approval is required, the giving of such approval.

Furthermore

- The development must, except to the extent that the planning authority otherwise agree in writing - be carried out - where prior approval is required, in accordance with the details approved; or
- where prior approval is not required, in accordance with the details submitted with the application.

Additionally

- The development is to be carried out where approval has been given by the planning authority within three years from the date on which approval is given; or
- in any other case, within three years from the date on which the application under these prior notification procedures was made.

Third, a general amenity test is applied that the installation (either MWT or ASHP) must, so far as reasonably practicable, be sited so as to minimise its effect on the amenity of the area.

Fourth, a condition applies requiring that the installation should be removed once it is no longer needed for or capable of microgeneration.

Those limitations and conditions provide a comprehensive range of safeguards without the application of technical standards and, as explained, consequential notification to the EC yet the instrument meets the climate change legislation by 5 February 2010. The Scottish Government believes it can go further to provide for more opportunities for the installation of MWT and ASHP once technical standards and the Microgeneration

Certification Scheme can be introduced as originally intended. A full and further consultation will also commence on 5 February 2010 to pave the way forward in that regard.

### Consultation

The following bodies have been consulted during the preparation of the instrument in accordance with the requirements of section 70(4) of the Climate Change (Scotland) Act 2009.

ACTIV-AIR	Proven Energy
Ampair Wind Turbines	NIBE
Archial Sustainable Futures	Renewable Devices Swift Turbines
Association of Scottish Community Councils	Renewables Connection
Bat Conservation Trust	RMP Acoustics
Blue Planning Department	Robert Gordon University
British Wind Energy Association	Royal Environmental Health Institute of Scotland
Carbon Trust	Royal Institution of Chartered Surveyors
Changeworks	Royal Society for the Protection of Birds
Construction Licensing Executive	Royal Town Planning Institute Scotland
COSLA	Sanyo
Daikin	Scottish and Southern Energy
Danfoss Randall Ltd	Scottish Association of Building Standards Managers
Department of Environment Northern Ireland	Scottish Building Federation
Dimplex	Scottish Construction Centre
DODS Monitoring	Scottish Enterprise
Earth Energy / Ground Source Heat Pump Association	Scottish Environment Protection Agency
Eco Air pump	Scottish Federation of Housing Associations
Ecoliving	Scottish Natural Heritage
EDF Energy	Scottish Property Federation
Edinburgh Napier University	Scottish Renewables
Energy Renewed	Select
Energy Saving Trust	SgurrEnergy
Environmental Protection UK	Small Business Service
Go Greener	SNIPEF
HeatKing	Socialist Environment Resource Association
Heating and Ventilating Contractors'	Solar and Wind Applications

Association	
Historic Scotland	Solar Trade Association
Hitachi Europe Limited	Summit Skills
Homes for Scotland	Sustainable Development Commission
ICS Heat Pumps	The Architectural Heritage Society of Scotland
Institute of Historic Building Conservation	Trianco
Legal Aid	Transport Scotland
Local Authority Chief Executives	Turcan Connell
Local Authority Heads of Planning	TUV-NEL
McKenzie Professional Services Ltd	Vokera Limited
Micropower Council	Windsave Limited
Mitsubishi	Worcester Bosch Group
Nick Forrest Associates Limited	World Wildlife Fund Scotland
Office of Fair Trading	

The Scottish Government also has an e-alert system for all consultations and in the Directorate for the Built Environment an e-newsletter system is used. Stakeholders who had registered for either of these would have been notified of the publication of this consultation.

Additionally and prior to the above requirements it should be noted that the following organisations participated in the stakeholder engagement process carried out during 2009 on the research which has informed this process and our second consultation.

Aberdeen City Council- (Research & Grants Department)	Nick Forrest Associates Limited
Aberdeen City Council- (Planning)	North Ayrshire Council (Noise)
Ampair Wind Turbines	North Lanarkshire Council (Noise)
Angus Council- (Planning)	Orkney Council (Noise)
Angus Council	Proven Energy
Argyll & Bute Council	Renewable Devices Swift Turbines
Archial Sustainable Futures	Renewables Connection
Bat Conservation Trust	Renfrewshire Council (Planning)
Blue Planning & Development	RMP Acoustics
British Wind Energy Association	Robert Gordon University
Broughty Ferry Community Council	Royal Environmental Health Institute of Scotland
Cairngorms National Park Authority	Royal Institution of Chartered Surveyors (RICS)
Carbon Trust	Royal Society of the Protection of Birds (RSPB)
Changeworks	Royal Town Planning Institute Scotland (RTPI)
City of Edinburgh Council Planning &	Salford University

Transportation	
City of Edinburgh Council	Scottish and Southern Energy
Construction Licensing Executive	Scottish Association of Building Standards Managers
Craiglockhart Community Council	Scottish Borders Council
Dumfries & Galloway Council	Scottish Borders Council- environment Health Section
Dundee City Council	Scottish Building Federation
Earth Energy / Ground Source Heat Pump Association	Scottish Construction Centre
East Ayrshire Council	Scottish Enterprise
East Dunbartonshire Council	Scottish Environment Protection Agency
Energy Saving Trust	Scottish Federation of Housing Associations
East Lothian Council	Scottish Natural Heritage ( SNH)
East Renfrewshire Council	Scottish Renewables
Ecoliving	Scottish Sustainable Energy Federation
EDF Energy	Select
Edinburgh Napier University	SgurrEnergy
Eilean Siar Council	Socialist Environment and Resource Association ( SERA)
Energy Renewed	Solar and Wind Applications
Glasgow Council	Solar Trade Association
Go Greener	South Ayrshire Council (Planning)
Highlands & Islands Community Energy Council	South Lanarkshire Council (Planning)
Highland Council	Stirling Council (Planning)
Highlands & Islands Enterprise	Strategic Development Planning Authority for Edinburgh and South East Scotland
Institute of Historic Building Conservation	Sustainable Development Commission
Inverclyde Council (Noise)	Taylor Wimpey Limited
Larbert Stenhousemuir & Torwood Community	The Architectural Heritage Society of Scotland
Loch Lomond & Trossachs National Park	TUV- NEL
Micropower Council	Vokera Limited
Midlothian Council	West Dunbartonshire Council (Planning)
Mitsubishi Electric	West Lothian Council (Planning)
Moray Council (Noise)	Windsave Limited
Moray Council	World Wildlife Fund Scotland

### Guidance

It is intended that guidance on the provisions of the statutory instrument will be issued on or before the date of the instrument coming into force.

### **Financial Effects**

The instrument does not place an additional financial burden on the Scottish Executive, local government or on business. However some businesses and planning authorities are likely to experience a loss of income as a result. The issues are set out in the attached Regulatory Impact Assessment.

## **REGULATORY IMPACT ASSESSMENT**

### **1. Title of Proposal**

1.1 Regulatory Impact Assessment (RIA) of proposals to amend the Town and Country Planning (General Permitted Development Order) 1992 (the GPDO) to give permitted development rights to categories of microgeneration equipment for domestic properties.

1.2 This RIA assesses the likely impacts of amendments to the GPDO.

### **2. Purpose and Intended Effect**

#### **Objectives**

2.1 The aim of the amendments to the GPDO is to provide for permitted development rights (subject to a prior notification procedure) for air source heat pumps and micro wind turbines for domestic properties in accordance with the statutory obligation set out in section 70 of the Climate Change (Scotland) Act 2009. The amendments will enable more microgeneration equipment to be installed on existing domestic buildings and within the curtilage of existing domestic properties without the need to apply for planning permission. The amendments will contribute to the Government's objective of reducing green house gas emissions by 80% by 2050. In reducing the regulatory burden around the installation of such equipment the amendments will help to stimulate the market for the technology leading to a more diverse energy supply for domestic properties.

2.2 The amendments seek to strike a positive balance between managing adverse impacts on neighbouring properties and the quality of residential areas and the more general environmental, social and economic benefits as well as meeting the Scottish Government's legal duty to comply with section 70 of the Climate Change (Scotland) 2009 Act by 5 February 2010.

2.3 The following effects are intended:

- reduction or elimination of time and financial cost to householders of obtaining planning permission for air source heat pumps and micro wind turbines falling within defined thresholds (a perceived barrier to uptake);
- potential long term cost savings to householders from use of installed equipment;
- contribution to green house gas emissions reduction targets from the increased uptake of renewable sources of energy and more efficient heat generation.
- stimulation of the market demand for the technologies.
- contribution towards the national target for renewable energy; and

- reduction in the workload of planning authorities on minor planning applications.

## Background

2.4 Microgeneration technologies are those which have a less than 45 kilowatt capacity for the production of heat or a less than 50 kilowatt capacity for the production of electricity. Under the planning hierarchy<sup>1</sup> such installations would be considered as local developments. Micro Wind Turbines produce electricity utilising the force of the wind. Air source heat pumps are more accurately defined as energy efficient devices as they are powered by electricity but extract up to 3 times as much energy as heat<sup>2</sup>. Within this RIA, microgeneration will refer to both micro wind turbines and air source heat pumps.

2.5 The Scottish Government has set ambitious greenhouse gas emissions reductions targets, 42% by 2020 and 80% by 2050, in the Climate Change (Scotland) Act 2009. The Scottish Government is also committed to achieve a headline target of 20% of total energy use from renewable sources by 2020. Of that target, 50% of electricity and 11% heat should be met from renewable sources. The use of microgeneration equipment reduces the demand placed on more centralised supplies for gas (heating) and electricity.

2.6 The Scottish Government is also committed to sustainable economic growth. With indigenous manufacturers of micro wind turbine and air source heat pump equipment, microgeneration has the potential to create wealth in Scotland. The Scottish Government wants to stimulate the microgeneration technology market and one way of achieving this is the removal of barriers to installation.

2.7 A study by the Energy Savings Trust on behalf of the UK Department for Trade and Industry in 2005<sup>3</sup> reported on a survey undertaken to identify barriers to uptake of microgeneration technology. The study suggests that 43% of respondents to the survey identified legislation and regulation as the second most important barrier to uptake after the cost of the technology.

2.8 In March 2009 amendments were made to the GPDO to provide for solar panel, solar thermal and flues for biomass technology to be installed on domestic properties. However, the impacts of micro wind turbines and air source heat pumps were not sufficiently understood at that time and further research was

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<sup>1</sup> Circular 5 2009, Hierarchy of developments; <http://www.scotland.gov.uk/Publications/2009/07/03153122/0>

<sup>2</sup> Permitted Development Rights: Domestic Wind Turbines and Air Source Heat Pumps, <http://www.scotland.gov.uk/Publications/2009/12/16092021/0>

<sup>3</sup> Potential for Microgeneration Study and Analysis, <http://www.berr.gov.uk/files/file27558.pdf>

required. That research has now been completed<sup>4</sup> and it is possible to consider further amendments to the GPDO.

### **Rationale for Government Intervention**

2.9 Climate Change and Energy – Section 70 of the Climate Change (Scotland) Act 2009 requires Scottish Ministers to make permitted development rights for air source heat pumps and micro wind turbines. The more efficiently Scotland's homes can be heated with renewable heat and provided with renewable electricity, the greater the contribution the domestic sector can make to reducing emissions.

2.10 Businesses and Consumers – Stimulating the market for microgeneration equipment will support the development of the industry in Scotland for research, design and manufacture of the technology. Greater uptake of the equipment could lead to improved economies of scale, reducing the cost of individual units in the long term. For consumers the technology will assist in providing secure and affordable electricity and heating.

2.11 Certainty in the Planning System – The technology is relatively new and planning authorities may not have the expertise to fully assess its impacts (although the visual impacts of air source heat pumps are not dissimilar to those of air-conditioning units). In addition, the GPDO is presently unclear as to its application to micro wind turbines and air source heat pumps. The fee for a planning application is currently £145. However, in order to submit a planning application there is generally a need for technical drawings to be prepared and professional advice sought. Many applicants choose to employ professionals which creates additional cost. There is also a time cost for negotiations once the planning application is submitted. These costs do not guarantee a positive outcome and could be a deterrent to the uptake of the technology. The amendments would remove this uncertainty for equipment falling within the specified thresholds.

2.12 Deregulation – The Government is committed to providing an effective, proportionate and fit-for-purpose planning system. These amendments would remove an unnecessary regulatory step for low impact developments within the curtilage of households. However, this step alone is unlikely to overcome all of the legislative or regulatory barriers to uptake of the technology. In addition, as of April 2010, Section 72 of the Climate Change (Scotland) Act 2009 will place an additional legislative requirement for the use of low and zero-carbon generating technologies on new buildings to be applied through local development plan policies. In that sense, the legislation is now encouraging the use of microgeneration technologies.

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<sup>4</sup> Permitted Development Rights: Domestic Wind Turbines and Air Source Heat Pumps, <http://www.scotland.gov.uk/Publications/2009/12/16092021/0>

2.13 Status Quo – If these amendments are not made, households will continue to be faced by burdensome time and financial costs for planning permission before being able to install microgeneration technology. This makes the payback of that equipment longer, reducing the likelihood that the technology will be installed. This has ramifications for the Scottish Government’s achievement of Climate Change and electricity generation commitments and ultimately UK commitments at an EU level to climate change targets.

### **3. Consultation**

#### **Within Government**

3.1 The consultation on the scope of the permitted development rights for micro wind technology and air source heat pumps has been considered by the Scottish Government’s Economy, Education, Environment and Justice & Communities Directorates.

#### **Public Consultation**

3.2 This is a final RIA following public consultation in January 2010. The proposed amendments to the GPDO have been developed through a research programme which built on consultation undertaken in advance of amendments made to the GPDO in March 2009. The research included a questionnaire open to all parties who responded to the consultation for the previous amendments. The questionnaire was followed up by two workshops held in Edinburgh and Aberdeen over the summer of 2009.

### **4. Options**

#### **Option 1 – Do Nothing Scenario**

4.1 The permitted development rights for householders to install micro wind turbines and air source heat pumps are not expressly defined, though such rights do already exist for other microgeneration technologies. The Annex to Planning Advice Note (PAN) 45: Planning for Micro Renewables<sup>5</sup> notes that while under the existing arrangements most micro wind turbines are likely to require planning permission, it is for planning authorities to decide if planning permission is required case by case. Under this scenario, uncertainty in the application of existing permitted development rights would continue. This scenario also fails to meet the objectives or intended effects as set out in Section 2, above. No changes to the GPDO would be required.

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<sup>5</sup> Planning for Micro Renewables; Annex to Planning Advice Note 45  
<http://www.scotland.gov.uk/Publications/2006/10/03093936/14>

## **Option 2 – Grant Absolute Permitted Development Rights**

4.2 All air source heat pumps and micro wind turbines which do not exceed the output for microgeneration technology are granted permitted development rights without restriction. All time and financial costs associated with gaining planning permission would be removed. The objectives identified in Section 2 would be achieved but at the expense of the quality and amenity of residential areas, and potentially the natural and historic environment. Changes to the GPDO would be required.

## **Option 3 – Grant Restricted Permitted Development Rights**

4.3 Permitted development rights would be given for micro wind turbine and air source heat pump technology meeting certain locational criteria and subject to prior notification to the planning authority procedure and general amenity condition. Notification to the planning authority should be based on the design and size of the micro wind turbine and as per existing good practice guidance the planning authority should consult the necessary aviation authorities. These criteria would be based on the likely impacts associated with the technology. This is a precautionary approach, with greater restrictions applied where necessary to manage environmental and quality of place issues. This option achieves the objectives and effects identified in Section 2, above, whilst mitigating the likely impacts of the technology. The level of uptake of the technology is likely to be less than that of Option 2 but protects the industry against negative public reaction to technology inappropriately sited. The prior notification procedure ensures that permitted development rights can be confirmed (or otherwise) in advance of installation proceeding. An amendment to the GPDO would be required to implement the proposals.

4.4 A further enhancement of Option 3 would be to introduce thresholds based on noise and size criteria (technical standards). That option is not being pursued under this Amendment Order due to the necessity to notify the European Commission of the introduction of new technical standards. That notification cannot be achieved in time to also meet the Climate Change (Scotland) Act 2009 requirement to lay an Amendment Order in the Scottish parliament by 5 February 2010. The Scottish Government will consult on proposals to further extend permitted development rights for air source heat pumps and micro wind turbines.

## **5. Costs and Benefits**

### **Sectors and Groups Affected**

5.1 The sectors and groups most likely to be affected by the amendments are:

- planning authorities, who will gain greater certainty in interpreting the GPDO and will have to deal with a prior notification and approval procedure;
- householders, who will benefit from reduced up-front costs and greater confidence in the lawfulness of the installation;
- neighbours, who will have greater certainty over what technology can be expected in residential areas without the need for a planning application to be made but who may experience noise, vibration or visual impacts;
- manufacturers and installers of air source heat pumps and micro wind turbines, who will experience greater demand for products and services;
- Environmental Health Authorities, which may have to deal with additional demands to monitor installations;
- Non-renewable energy suppliers, who may observe a reduction in demand for their energy; and
- Airport operators and Air Navigation Service Providers, who will be consulted with regard to the installation of micro wind turbines in safeguarded Aerodrome areas, Technical Sites and Military Explosive Storage areas.

### **Costs and Benefits**

5.2 Option 1 – Do Nothing Scenario – There will be no additional benefits as the planning system would remain a disincentive to the installation of the technology. The key cost is likely to be a slower uptake of the technology than if the disincentive were removed or reduced.

5.3 Option 2 – Grant Absolute Permitted Development Rights – The benefits of offering absolute permitted development rights would be that all the fees associated with making a planning application (the disincentive) would be removed; there would be stimulation of the market for the technology which would lead to more efficient production, investment in design development, provide economies of scale and lead to reductions in the cost of the technology. Householders would benefit in the long term from reduced fuel bills and reducing pay-back periods for the installed technology. Greater energy security would also be provided. Planning authorities would have to deal with fewer applications, freeing up some staff time.

5.4 The costs of this approach relate to the intrusive impacts of noise, vibration and appearance of a residential area. These impacts may be happily borne by the householder installing the equipment but be considered very detrimental by neighbouring householders. There would also be significant uncertainty for society in terms of the scale of the technology they could expect to encounter in residential settings without prior notification and there would be no recourse through the planning system to regulate this. Up-front costs of equipment purchase and installation are borne by the consumer. Planning authorities would lose all revenue from air source heat pumps and micro wind

turbines but may still face questions around the interpretation of the GPDO. More work could also be generated for planning authorities in dealing with applications for certificates of lawful development, particularly when properties come up for sale. Environmental Health Authorities would face increased pressure to monitor and take action against installations causing harm or nuisance.

5.5 The costs and benefits can be given a monetary value to a certain extent. Where this is possible the relevant values are set out later in this section.

5.6 An amendment to the GPDO would be required to implement this option.

5.7 Option 3 – Grant Restricted Permitted Development Rights – This option offers similar but significantly more muted benefits than that of Option 2. The market for technology falling within the thresholds for permitted development will be stimulated, there would be certainty for neighbours and planning authorities around the technology which would require prior notification and potentially approval.

5.8 The costs associated with this option remain focused on the fees for householders in making a prior notification to the planning authority; and noise, vibration and visual impacts for neighbours but these attributes (for noise and appearance) are more controlled than under Option 2. The stimulation of the market for microgeneration technology would be less than under Option 2. Planning authorities would lose a limited amount of revenue from planning application fees for micro wind turbine and air source heat pump installations and would experience staff and processing costs in dealing with installations notified to them. Operators of airports, technical sites and Air Navigation Service Providers will experience a workload cost related to the consideration of proposed installations of micro wind turbines on which they are consulted. However, the workload will be similar to conditions under Option 1 as planning applications for wind turbines can include consultation with the aviation industry. That workload may increase if the permitted development rights lead to an increase in the number of installations being proposed. Some planning authority resource would be required around interpretation of the GPDO. Environmental Health Authorities could face a limited amount of increased pressure to monitor and take action against installations causing harm or nuisance.

5.9 The costs and benefits can be given a monetary value to a certain extent. Where possible the relevant values are set out later in this section.

5.10 An amendment to the GPDO would be required to implement this option.

### **Estimating Microgeneration uptake**

5.11 In order to add values to the costs and benefits, an estimate of the uptake of technology is required. In 1998 the UK Department for Business, Enterprise

and Regulatory Reform commissioned research which assessed the growth potential for microgeneration in England, Wales and Scotland<sup>6</sup>. That research found no particular disparity between uptake across the three nations and set out projections for uptake of the various technologies, including micro wind turbines and air source heat pumps. The predicted level of uptake outlined in that research is set out in Figure 1. That research assumed that those who wished to install the equipment would not be prevented from doing so by the planning system. As such the prediction can be considered to be marginally optimistic as some applications for planning permission will in reality be refused. However, evidence to suggest what the refusal rate might be is not available and so the figures have not been adjusted.

Year	Air Source Heat Pump	Micro Wind Turbine	Total
2007 (Actual)	150	1,100	1,250
2020	49,400	7,400	56,800
2030	155,800	15,700	171,500
2050	423,500	22,800	446,300

5.12 In the RIA for the 2009 amendments of the GPDO for other microgeneration technologies in Scotland<sup>7</sup> the proportion of households in Scotland was considered to be 9% (as per the 2001 census). That household data remains valid. On that basis, the predicted level of uptake has been adjusted to apply in a Scottish context and is set out in Figure 2.

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<sup>6</sup> The Growth Potential for Microgeneration in England, Wales and Scotland, Department for Business, Enterprise and Regulatory Reform, June 2008 <http://www.berr.gov.uk/files/file46003.pdf>

<sup>7</sup> Regulatory impact Assessment of Proposals to amend the Town and Country Planning (General Permitted Development) (Scotland) Order; <http://www.scotland.gov.uk/Resource/Doc/212607/0077365.pdf>

Figure 2 – Predicted level of uptake, Scotland <sup>8</sup>			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2007	14	99	113
2020	4,446	666	5,112
2030	14,022	1,413	15,435
2050	38,115	2,052	40,167

5.13 Given the nature of the impacts of air source heat pumps and micro wind turbines and their external application to property, it is not considered that even with the uncertainty within the current GPDO (and even less likely since the March 2009 amendment for other microgeneration technologies, which expressly did not address micro wind turbines or air source heat pumps) these technologies would benefit from permitted development rights. Therefore, it is considered that these technologies would always have been subject to planning application procedures.

5.14 There is no information available to suggest what proportion of the micro wind turbines and air source heat pumps would fall within the thresholds being proposed. Given that the thresholds require a 100m separation distance between the installation and the neighbouring residential curtilage it is likely that the permitted development rights will apply to mainly rural settings. According to the 2001 census<sup>9</sup>, of the 2,192,246 households with residents in Scotland, 205,702 were in areas classified as rural (9.4%).

5.15 The overall level of uptake in Scottish rural settings (based on the baseline set out in Figure 2) is set out in Figure 3. However, not all households in areas classified as rural will be able to take advantage of the proposed permitted development rights. There is no exact figure for the number of households which will be able to take advantage of the proposed permitted development rights. Figures 4 and 5 present low (25%) and high (50%) uptake scenarios from the baseline in Figure 3.

<sup>8</sup> It should be noted that in research undertaken for the Scottish Government ‘Permitted Development Rights: Domestic Wind Turbines and Air Source heat pumps (<http://www.scotland.gov.uk/Publications/2009/12/16092021/0>) it was noted that in the UK the number of installed small wind systems (up to 10 kilowatts) was higher in 2007 than suggested in the Department for Business, Enterprise and Regulatory Reform (BERR) report of 2008. These figures are based on the 2009 BWEA ‘Small Wind Systems UK Market Report’. However, the figures are not predicted further than 2010 so for the purposes of this RIA the BERR figures continue to be utilised.

<sup>9</sup> 2001 Census:  
<http://www.scotland.gov.uk/scrol/browser/profile.jsp?profile=Household&mainArea=rural&mainLevel=Locality>

Figure 3 – Predicted level of uptake, Rural Scotland (rounded to the nearest whole number)			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2007	1	9	10
2020	418	63	481
2030	1,318	133	1,451
2050	3,583	193	3,776

Figure 4 – Predicted level of uptake, Rural Scotland low uptake (25%) Scenario (rounded to the nearest whole number)			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2020	105	16	121
2030	330	33	363
2050	896	48	944

Figure 5 – Predicted level of uptake, Rural Scotland high uptake (50%) Scenario (rounded to the nearest whole number)			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2020	209	32	481
2030	659	67	726
2050	1,792	97	1,889

## Savings for Householders

5.16 The cost of a householder planning application in Scotland is £145. The cost of professional fees is approximately £725<sup>10</sup>. The monetary cost of the householder application is therefore approximately £870. The prior notification procedure attracts a fee of £55. The prior notification form must be accompanied by a location plan to a scale of 1:2500 or 1:1250. Some householders may be able to prepare this location plan themselves. Otherwise, the current cost of location plans on the Scottish Government's e-planning website ranges from £13.81 to £33.31. If only the prior notification fee and the location plan fee were required a household would spend a maximum of £88.31 on the notification, a saving of £781.69 for their first installation of an air source heat pump and / or micro wind turbine. Should householders require to submit further information they may incur professional fees and the cost of the process would be around £813.31, making a saving of £56.69.

<sup>10</sup> Based on the Price Waterhouse Coopers Administrative Burdens Measurement project. The transaction cost of a minor application was calculated as £1,450. It was assumed that a householder consent would cost half of this, £725.

5.17 Figures 6 and 7 set out the savings based on a low scenario of 25% and a high scenario of 50% of rural household uptake of the technology through permitted development rights based on householders providing the prior notification form and a location plan only. Figures 8 and 9 set out the savings in low and high scenarios where professional fees are also incurred. No estimate has been made as to the potential growth in installations as a result in the provision of permitted development rights above the baseline set out in Figure 3.

Figure 6 – Householder savings as a result of fewer planning applications in Scotland based on fee for Prior Notification and location plan (low uptake scenario)				
Year	Air Source Heat Pump	Heat	Micro Wind Turbine	Total
2020	£82,077.45		£12,507.04	£94,584.49
2030	£257,957.70		£25,795.77	£283,753.47
2050	£700,394.24		£37,521.12	£737,915.36

Figure 7 – Householder savings as a result of fewer planning applications in Scotland based on fee for Prior Notification and location plan (high uptake scenario)			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2020	£163,373.21	£25,014.08	£188,387.29
2030	£515,133.71	£52,373.23	£567,506.94
2050	£1,400,788.40	£75,823.93	£1,476,612.30

Figure 8 – Householder savings as a result of fewer planning applications in Scotland based on fee for Prior Notification, location plan and professional fees (low uptake scenario)				
Year	Air Source Heat Pump	Heat	Micro Wind Turbine	Total
2020	£5,952.45		£907.04	£6,859.49
2030	£18,707.70		£1,870.77	£20,578.47
2050	£50,794.24		£2,721.12	£53,515.36

Figure 9 – Householder savings as a result of fewer planning applications in Scotland based on fee for Prior Notification, location plan and professional fees (high uptake scenario)				
Year	Air Source Heat Pump	Heat	Micro Wind Turbine	Total
2020	£11,848.21		£1,814.08	£13,662.29
2030	£37,358.71		£3,798.23	£41,156.94
2050	£101,588.48		£5,498.93	107,087.41

### Lost Revenue for Planning Authorities

5.18 Figures 10 and 11 set out the potential lost revenue for planning authorities (in a low and high uptake scenarios) when planning application fees (£145) would be replaced by prior notification fees (£55) resulting in lost revenue of £90 for each installation. No estimate has been made of the potential growth in installations as a result in the provision of permitted development rights above the baseline set out in Figure 3.

Figure 10 – Predicted revenue losses for planning authorities as a result of a prior notification system for air source heat pumps and micro wind turbines in Scotland (low uptake scenario)			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2020	£9,450	£1,440	£10,890
2030	£29,700	£2,970	£32,670
2050	£80,640	£4,320	£84,960

Figure 11 – Predicted revenue losses for planning authorities as a result of a prior notification system for air source heat pumps and micro wind turbines in Scotland (high uptake scenario)			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2020	£18,810	£2,880	£21,690
2030	£59,310	£6,030	£65,340
2050	£161,280	£8,730	£170,010

### Lost Revenue for Companies providing Professional Support for Applicants

5.19 Figures 12 and 13 set out the potential lost revenue for those businesses currently providing professional support to householders submitting planning applications (£725 per application<sup>11</sup>) in the situation where householders submit only a prior notification form and location plan to the local authority. No estimate has been made of the potential growth in installations as a result in the provision of permitted development rights above the baseline set out in Figure 3. Some householders would still require professional services in order to provide additional information to planning authorities, however it is not known what proportion of prior notifications would result in additional information being required.

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<sup>11</sup> See paragraph 5.16.

Figure 12 – Revenue lost to businesses providing professional support for applicants as a result households no longer requiring such services. (low uptake scenario)			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2020	£76,125	£11,600	£87,725
2030	£239,250	£23,925	£263,175
2050	£649,600	£34,800	£684,400

Figure 13 – Revenue lost to businesses providing professional support for applicants as a result of households no longer requiring such services. (high uptake scenario)			
Year	Air Source Heat Pump	Micro Wind Turbine	Total
2020	£151,525	£23,200	£174,725
2030	£477,775	£48,575	£526,350
2050	£1,299,200	£70,325	£1,369,525

## Household Emissions Savings

5.20 Microgeneration technology can make a useful contribution to the achievement of the emissions targets in the Climate Change (Scotland) Act. That contribution will increase as more of the technologies are installed and operated.

5.21 Using the technology reduces a household's requirement for centralised energy, or provides an income from selling electricity back to the grid. This either reduces the household's use of energy and thus energy bills decrease, or it provides the household with an additional means by which to meet its energy costs.

5.22 Air source heat pumps use electricity but are much more efficient in converting electricity to heat than other forms of domestic heating. Therefore less energy is required overall. Micro wind turbines can provide the opportunity to sell electricity back to the grid, cumulatively creating an alternative electricity source and improving the resilience of Scotland's electricity supplies.

5.23 It is not possible to measure all of the emissions savings households will make by using these microgeneration technologies. However, research undertaken for the Scottish Government<sup>12</sup> suggests that air source heat pumps will generate Carbon Dioxide savings when they are used instead of electric or solid fuel heating sources. The amount of saving was considered to be 5,000kg and 4,500kg (per year) respectively for each individual air source heat pump installed.

<sup>12</sup> Permitted Development Rights: Domestic Wind Turbines and Air Source Heat Pumps, <http://www.scotland.gov.uk/Publications/2009/12/16092021/0>

5.24 According to a study undertaken in 2007<sup>13</sup>, the average UK house consumes 22,000 kilowatt hours of electricity and gas per year. The study reported that micro wind turbines could provide around 15-20% of an average household's electricity needs (although this could increase to as much as 50% in a windy location). Heat pumps (the reporting does not distinguish between ground source heat pumps and air source heat pumps) were considered to provide 100% of heating needs. An air source heat pump is capable of providing for this level of heating.

5.25 The GPDO amendments technically allow air source heat pumps which can also run in reverse as air conditioning units. The use of the units in this mode would be more energy and emissions intensive, however the extent of this would depend on the individual specification of the units and cannot be considered further here. Given the climatic conditions in Scotland, the use of air source heat pumps as air conditioning units is likely to be low.

### **Other Costs to Neighbours**

5.26 Neighbouring householders will have no route for objection to technology which falls within the permitted development thresholds to a deciding authority. However, where it is suspected that the technology has been installed in a way which breaches the thresholds there is recourse to the local authority for enforcement action.

5.27 Neighbours may experience increased levels of noise and/or vibration, depending on the technology involved and the method and location of installation. However, the proposed locational criteria in Option 3 are designed to mitigate such impacts and the prior notification procedure provides scope for adding conditions.

### **Savings due to improved air quality**

5.28 The use of micro wind turbines facilitates a shift away from reliance on fossil fuel based sources of electricity. However, the impact on air quality of this action alone is likely to be marginal.

### **Costs to households relating to the installation and running of air source heat pumps and micro wind turbines**

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<sup>13</sup>Domestic Installation of Microgeneration Equipment, Communities and Local Government 2007, <http://www.communities.gov.uk/documents/planningandbuilding/pdf/320327.pdf>

5.29 Research<sup>14</sup> suggests that the cost of purchase and installation of an air source heat pump can cost up to approximately £10,000 (ex VAT). However, it is possible to install an air source heat pump for much less. Running costs (per year) are estimated at £790. Similar costs for wind turbines have not been provided by the research. Purchase costs for freestanding wind turbines up to 50 kilowatts vary considerably and can run to tens of thousands of pounds. Running costs are dependant on the model.

### **Costs relating to visual impact / appearance**

5.30 These costs have not been monetised. However, the locational criteria and prior notification procedure provided under Option 3 seek to minimise these costs.

### **Other Local Authority Costs and Benefits**

5.31 Under Option 2 local authorities may find that there is an increase in the number of enforcement cases related to the requirement for planning permission, noise and/or vibration impacts. This cost will be less significant under Option 3, as clear locational criteria will be defined and the prior notification procedure allows details to be considered and conditions to be attached to the installation of technology, where necessary. Enforcement cases under Option 3 would be related to the application of conditions. All options could result in complaints to the Environmental Health departments of local authorities regarding noise and vibration.

### **Environment and Biodiversity**

5.32 Option 2 removes all of the controls regarding the natural and built environment and quality of place which are present in the planning system. Given the different nature of micro wind turbines and air source heat pumps, the environmental issues (save for noise) are focused on micro wind turbines. Option 3 removes some of the existing controls for installations made under the Planning Act<sup>15</sup> (i.e. the likely need for planning permission). However, research<sup>16</sup> suggests that wind turbines are unlikely to cause bird mortality. Landscape impacts are mitigated by the scale of technology promoted through the permitted development right thresholds. This option establishes some generally acceptable thresholds, although this does not prevent planning applications being made for technology outwith these thresholds which may be demonstrated to be acceptable in relation to the circumstances of the site.

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<sup>14</sup> Permitted Development Rights: Domestic Wind Turbines and Air Source Heat Pumps, <http://www.scotland.gov.uk/Publications/2009/12/16092021/0>

<sup>15</sup> The Planning etc. (Scotland) Act 2006: [http://www.opsi.gov.uk/legislation/scotland/acts2006/pdf/asp\\_20060017\\_en.pdf](http://www.opsi.gov.uk/legislation/scotland/acts2006/pdf/asp_20060017_en.pdf)

<sup>16</sup> Permitted Development Rights: Domestic Wind Turbines and Air Source Heat Pumps, <http://www.scotland.gov.uk/Publications/2009/12/16092021/0>

## **Renewable Heat Incentive and Feed In Tariffs**

5.33 The existing GPDO is not the only disincentive to uptake of the microgeneration technology. Feed In Tariffs<sup>17</sup> are due to commence in April 2010 and will provide a subsidy payment based on the unit of energy generated. For the purposes of this RIA, the Feed In Tariff would only apply to micro wind turbines. This will help to further remove the financial barrier to uptake of micro wind turbines and would therefore increase the number of planning applications submitted for the technology under Option 1. The costs and benefits indicated for Options 2 and 3 would be intensified proportionately to the number of units installed over the base case scenario outlined in Figure 2. The maximum annual growth rate identified in the consultation on Feed In Tariffs for wind generation is 50%, with an initial glut of installations in the first year of the scheme being operational. With such significant growth, the mitigation provided by Option 3 would be likely to be welcomed by neighbours who may be subject to sudden and significant change to their local environment, which under Option 2 would not be regulated at all through the planning system.

5.34 It is likely that in coming years a scheme to incentivise the uptake of renewable heat will be put in place. The details of the scheme are not yet known and existing estimates of the growth in renewable heat units (air source heat pumps included) as a result of the initiative have not been separated into domestic and non domestic uses. The presumption is that any such initiative will increase the uptake of air source heat pumps compared with the base case (Figure 2). The potential also exists for a peak of installations in the first year of operation of the initiative. The issues around noise and vibration, which in Option 3 are addressed by locational criteria and potentially the application of conditions, would not be controlled under Option 2, which could lead to additional work for planning authorities through enforcement action.

## **6. Small / Micro Firms Impact Test**

6.1 It is not considered that the microgeneration industry in Scotland has altered significantly in the last year. The industry still tends to be made up of smaller firms. However, no information is available about the impact of these proposals on small businesses. In general terms the removal of perceived barriers and provision of procedural certainty will be beneficial to companies developing and refining the technology.

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<sup>17</sup> Further information about Feed In Tariffs can be found in the consultation documents on Renewable Electricity Financial Incentives:

[http://www.decc.gov.uk/en/content/cms/consultations/elec\\_financial/elec\\_financial.aspx](http://www.decc.gov.uk/en/content/cms/consultations/elec_financial/elec_financial.aspx)

6.2 Option 3 would result in potentially less business than Option 2. However, the definition of thresholds under Option 3 will provide confidence regarding the locational requirements products should achieve.

6.3 Any option which provides permitted development rights will remove business from the professional advisors (surveyors, agents/consultants, drafting firms), previously assisting applicants in taking applications through the planning process. However, installations which exceed the criteria will still require to be considered via a planning application. In Scotland the number of householder applications decided in 2006/07 was 54,597<sup>18</sup>. Taking the baseline approximate number of air source heat pump and wind turbine installations in rural areas in 2007 set out in Figure 3 (maintaining the assumption that all of these would have required planning permission), the microgeneration technologies accounted for approximately 0.02% of total planning applications. The impact on these businesses is therefore likely to be small. The prior notification procedure will cause some householders to seek professional advice and assistance if additional information regarding their proposed installation is required by the planning authority.

## **7. Legal Aid Impact Test**

7.1 The additional clarity provided by the thresholds for permitted development and the operation of the certification system should not create an additional burden for the Legal Aid fund.

## **8. 'Test Run' of Business Forms**

8.1 The amendments to the GPDO do not contain new business forms.

## **9. Competition Assessment**

9.1 Key areas for the consideration of competition impacts are:

- The introduction of air source heat pumps and micro wind turbines will enable households to use energy more efficiently, generate some of their own electricity and potentially sell some energy to the national grid. Large scale energy providers currently dominate the market in Scotland, additional competition would emerge from the household scale generation of off-grid electricity and the potential selling of electricity to the national grid.

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<sup>18</sup> Planning Performance Statistics 2004-2007,  
<http://www.scotland.gov.uk/Resource/Doc/210804/0055721.pdf>

9.2 Impacts of the competition are:

- Competition between providers may lead to changes in energy prices as conventional fossil fuel sources reduce and prices for energy from microgeneration become more competitive.

9.3 The introduction of the permitted development rights for air source heat pumps and micro wind turbines may result in some increase in competition for sources of energy for households. However, the impact is likely to be very small, given the potential range of households likely to be able to take advantage of the permitted development rights as set out in paragraph 5.15, Figures 3, 4 and 5.

## **10. Enforcement, Sanctions and Monitoring**

### **Planning Authorities**

10.1 Planning authorities, as at present, will provide the authoritative interpretation of any amendments made to the GPDO. Where development subject to regulation through the planning system has not been implemented correctly, planning authorities remain responsible for taking enforcement action.

### **The Courts**

10.2 Precedents set by the courts will assist with interpretation over time as challenges are settled.

### **Differences between the options**

10.3 Maintaining the status quo (Option 1) could, over time, lead to increased levels of enforcement action if the demand for installation grows but clarity is not given on what is permissible without the need for planning permission. Giving an absolute right of development (Option 2) could erode the quality of places, which may cause more monitoring and enforcement by Environmental Health Authorities. Option 3 provides certainty for those wishing to install air source heat pumps or micro wind turbines, for neighbours, manufacturers and for installers, as to the extent of permitted development rights.

### **Sanctions**

10.4 Where development requires planning permission and does not have it the ultimate sanction following enforcement action would be the removal of the unauthorised development. In the case of Options 2 and 3 noise can only be controlled (after installation) through the Environmental Protection Act 1990 or the Antisocial Behaviour (Scotland) Act 2004. Fixed penalty notices are available for use under both said Acts. In Option 1 the planning consent could apply conditions relating to noise. However, the locational thresholds set out in the proposed amendments to the GPDO and the requirement for prior notification to

the planning authority are designed to mitigate impacts for neighbouring residents.

### **Monitoring**

10.5 The operation of the amended order will be monitored to ensure the objectives are being met.

## **11. Implementation and delivery plan**

11.1 Implementation will be undertaken by those seeking to install micro wind turbines or air source heat pumps and local authorities in Scotland who will enforce the permitted development rights through the planning regime and will take action against statutory noise nuisance through the Environmental Protection Act 1990 or the Antisocial Behaviour (Scotland) Act 2004. Guidance on the implications of the Amendment Order will be issued in a Circular.

11.2 The changes to the existing legislation will be brought about when the Amendment Order comes into force. Whilst this is dependent on the Scottish Parliament confirming the Order, the earliest date for enactment would be 8 March 2010.

## **12. Post-implementation review**

12.1 This amendment to the Town and Country Planning (General Permitted Development) (Scotland) Order 1992 is a requirement of the Climate Change (Scotland) Act 2009. We will review the Amendment order within 12 months of it coming into force to ensure it is delivering the intended benefits. We will continue to monitor its effectiveness.

12.2 In addition to the standard 10 year review we would also seek to review the impact of the Amendment Order at the same time as a review of Section 72 of the Climate Change (Scotland) Act 2009 is undertaken in 2014. That allows for a consideration of the impacts to be made against the impacts of more policy-focused requirements for all new buildings to make a contribution to emissions reduction through the installation of low and zero carbon generating technology.

12.3 A long-term review should focus on the records of the number of prior notification applications for micro wind turbines or air source heat pumps. There may be a requirement to investigate, through case studies, what the financial costs to applicants and work load costs to local authorities were.

### 13. Summary and Recommendation

13.1 There were a range of responses to the Options. The narrow range of permitted development rights offered caused some respondents to question the benefit of the approach proposed in Option 3. Some representatives of the renewables industry wished to see Option 2 (absolute permitted development rights) brought forward. There was also support for the measures put in place under Option 3. Much of the issue around Option 3 related to the fact that the benefits were most likely to be felt by those households in rural areas to the exclusion of households in urban areas. The issues around the limited nature of the options presented and the exclusion of more urban households is addressed in a further consultation on the topic. Amendments to the order regarding consideration of the size of domestic wind turbines was made to ensure that aviation interests can be safeguarded.

13.2 Option 3 allows the provisions of Section 70 of the Climate Change (Scotland) Act 2009 to be achieved, whilst providing protection for the amenity of residential areas, in advance of the introduction of technical standards for equipment installed.

13.3 It is recommended that an amendment to the General Permitted Development Order be implemented as outlined in Option 3.

Option	Total <b>benefit</b> per annum: economic, environmental, social	Total <b>cost</b> per annum: A - economic, environmental, social B - policy and administrative
1	No change.	A - Uptake of the technology could be reduced, limiting the likelihood of additional research and development investment and job creation in the microgeneration industry. Home owners continue to be disincentivised from installing the equipment owing to cost and remain reliant on non-renewable centralised sources of fuel for electricity and heat. B – Planning Authorities continue to determine what could generally be fairly innocuous developments in the same way as far more significant developments with greater impacts. This represents an unnecessary time and workload burden.
2	Homeowners could collectively save up to £4,965,960 by 2050.	A - By 2050 the collective fee income lost by local authorities could be as high as

	<p>Environmental benefits would occur if the technology was widely taken up resulting in less reliance on non-renewable centralised sources of energy. There may be additional investment in research and development and jobs as a result of a freer market place.</p>	<p>£827,660. Businesses providing professional advice in support of planning applications could collectively lose £4,138,300 by 2050. The environmental impacts would be focused around visual intrusion, particularly in designated scenic areas. Disamenity in residential areas could result from wind turbines of an inappropriate scale sited in close proximity to neighbouring dwellings.</p> <p>B – A backlash against inappropriately sited technology could place a high burden on local Environmental Health Authorities and damage the reputation of the technology leading to uncertainty about what could be installed and where.</p>
3	<p>Homeowners could collectively save between £80,953.32 and £161,906.64 on application and professional fees by 2050. The market becomes somewhat more free giving investor confidence in the technology. The prior notification procedure provides an element of safeguarding for the aviation and defence industry as well as safeguarding against inappropriate siting of technology.</p>	<p>Planning authorities could collectively lose between £128,520 and £194,310 of fee income by 2050. Businesses providing professional services to applicants for planning permission could collectively lose between £1,035,300 and £2,070,600 by 2050. The number of planning applications made for microgeneration equipment is small. The environmental costs are minimised through the use of the prior notification procedure.</p> <p>Householders in rural areas have more opportunity to install microgeneration equipment with reduced fees for the planning aspect.</p> <p>B – The policy costs are around a potentially more constrained roll-out of the technology than under option 2 which may have an impact on the achievement of emissions targets. Administrative costs are focused on local authorities who will process prior notification applications for installations of the technology. The aviation and defence industry will continue to be consulted regarding the installations of micro wind turbines in many cases.</p>

**14. Declaration**

14.1 I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Minister for Transport, Infrastructure and Climate Change:

A handwritten signature in black ink, appearing to read "Stuart Steven". The signature is written in a cursive style with a long horizontal stroke at the end.

Date: February 2010