Coventry City Council

8.4

Public report

Report to

Scrutiny Board 3
Cabinet 19 June 2007
Council 26 June 2007

Report of the Director of City Development

Title: Changes to Permitted Development

Consultation Paper 1: Permitted Development Rights for Householder Microgeneration.

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1 Purpose of the Report

1.1 The purpose of this report is to consider the document: Changes to Permitted Development: Consultation Paper 1: Permitted Development Rights for Householder Microgeneration published 4 April. The period of public consultation will last for 12 weeks, with responses required by 27 June 2007.

1.2 The consultation papers sets out the Government's proposals for changes to the planning system in relation to the installation of microgeneration equipment for domestic properties. The revised system would deliver a more permissive regime than exists at present and remove the need for a planning application for many householders. Changes will be delivered through amendments to the Town and Country Planning (General Permitted Development) Order 1995 (GPDO).

2 Recommendations

2.1 Scrutiny Board 3 is asked to consider the draft responses and forward any comments to cabinet for their consideration.

2.2 Cabinet is asked to consider draft responses set out in the appendix to this report together with any comments received from scrutiny board 3 and to make the necessary recommendations to Council to enable a response to the consultation paper to be made

2.3 Council is asked to consider the comments of cabinet and to agree to Councils response.

3 Information/Background

3.1 The Householder Development Consents Review (HDCR) was launched in January 2005 and looked at ways of reducing bureaucracy for neighbours, the wider community and the environment.

3.2 The review found that several categories of development require a planning application even though they have little or no impact. The review recommended that the system be reformed using an impact approach which would be based upon height of a proposal and its proximity to the plot boundary.

3.3 Ministers have made clear that three important principles must underpin these considerations:

- Clear and robust arrangements should be in place so that the interests of neighbours and the wider community and environment are sufficiently protected.
- Changes to current arrangements should be based on evidence and fully tested.
- There should be full consultation on detailed proposals for taking forward the Review's recommendations.

3.4 While the Government wants to encourage the widest possible take-up of microgeneration equipment by removing unnecessary regulatory barriers, it is concerned to ensure that the right levels of control are retained to protect the reasonable interests of neighbours, the environment and the wider community. There is then an acknowledgement that special protection is required in certain areas (e.g. conservation areas) and in respect of works that could affect a building listed as being of historic and/or architectural interest.

3.5 In terms of impacts the consultation document recognises that there can be noise issues in relation to wind turbines (especially mounted on buildings) and air source heat pumps is the noise that they might produce. The Government proposes to place limits on the levels of noise generated by wind turbines and air source heat pumps so that installation is unlikely to cause annoyance or sleep disturbance.

3.6 A general concern in relation to permitted development is that there is the danger that although the rights will generally be used in a way that is acceptable, it is sometimes possible to do something that can have significant effects on others, but be permitted.

3.7 In terms of visual impact the consultation document allies wind turbines with satellite antenna and indicates that other than in sensitive areas they are unlikely to be harmful subject to certain site constraints.

3.8 The consultation review recognised the need to consider how permitted development rights in relation to microgeneration might impact on sites that are protected because of their biodiversity and/or geological value. However, the issue of permitted development and its potential impact on protected sites and/or species is not unique to microgeneration.

3.9 The Government indicates that the existing legislative framework is satisfactory to ensure that areas protected by European legislation are not damaged by inappropriate development.

3.10 The Government intends to issue guidance for householders on permitted development rights for microgeneration. It will seek to provide a simple introduction for householders as to what is permitted and more general advice about how they should go about exercising their rights.

4 Proposal and Other Option(s) to be Considered

4.1 The consultation document debates the technical issues relating to microgeneration which are summarised in Appendix 1. It also proposes that the development set out in the table below be permitted development (i.e. they will not require an express planning permission).

	Normal Buildings	Buildings in Conservation Areas and World Heritage Sites
Solar on building	Permitted for the roof & walls unless it protrudes more than 150 mm above roof plane.	Permitted as normal, except on principal elevation fronting a highway.
Solar stand alone	Permitted if less than 4 metres height. At least 5 metres to any boundary. Area of array a maximum 9m^2.	Permitted as normal except in front of principal elevation.
Ground Source Heat Pumps	Permitted.	Permitted.
Air Source Heat Pumps	Permitted if - internal noise <30dB, external noise <40dB, "garden" noise <40dB.	Permitted as normal except on principal elevation fronting a highway.
Water Source Heat Pumps	Permitted.	Permitted.
Wind Turbines on building	Permitted if <3m above ridge (including the blade) and diameter of blades <2m. Also internal noise 30dB, external noise <40dB, "garden" noise <40dB. Up to 4 turbines on buildings >15m (as with antennas). Vibration <0.5mm/s.	Not Permitted.
Wind Turbines (Stand Alone)	Permitted if <11m (including the blade) high and diameter of blades <2m. At least 12m from a boundary. Also internal noise <30dB, external noise <40dB, "garden" noise <40dB. Vibration <0.5mm/s.	Permitted as normal except in front of principal elevation.
Bio Mass	Permitted - Limit of Flue height 1m above ridge.	Flues permitted as normal except on principal elevation fronting a highway.
Combined Heat and Power	Permitted - Limit of Flue height 1m above ridge.	Flues permitted as normal except on principal elevation fronting a highway.
Hydro	No change.	No change.

4.2 This consultation highlights the potentially conflicting issues that wind turbines in particular can raise, the City Council would wish to promote and support the use of renewables in line with our objective to tackle climate change and Government targets to reduce carbon dioxide emissions. However, there are also statutory duties in respect of complaints of a statutory nuisance. These conflicts led to the withdrawal of the first planning application for a micro wind turbine submitted earlier this year.

In addition, local information as to the suitability of micro wind turbines should be produced by local authorities. A sustainability Supplementary Planning Document is already draft and consideration will be given to the inclusion in that or a separate guidance to householders to assist them in their choice of renewable technologies.

A balance must be struck between the benefits and disbenefits, and the proposal for a specific noise level would achieve consistency. However, the environmental effect is that impact will vary depending on local circumstances. In common with other familiar plant and equipment, such as domestic gas boilers, it is recommended that a clear specification for manufacture and installation is provided by equipment manufacturers and suppliers. Such specification should deal with noise levels, vibration levels, safety and other relevant considerations such as siting, orientation, maintenance and operation. It is also considered important that any criteria adopted relates to manufacturers specifications so that the householder is not deterred from considering implementing sustainable techniques by the potential costs involved in having to employ noise consultants.

4.3 The suggested sound level of 40dB(A) 5 minute L_{Aeq} at 1 metre from any openable window façade may be appropriate for daytime noise. However night time noise around the City can be less than 35dB(A) L_{A90} in built up areas and possibly as low as 30dB(A). Internal noise levels in dwellings after 23.00 hrs in areas of Coventry would be below 30dB(A). With a wind turbine generating noise at 10dB(A) above this level of background noise there is a likelihood of a noise nuisance being caused. Planning legislation does enable a local planning authority to seek an Article 4 direction that has the effect of withdrawing permitted development rights where justified and therefore if it were established that in a particular area background was considerably lower than the prescribed level there would be a mechanism to respond. Similarly Local Development Orders are to be introduced that would enable a LPA to relax permitted development requirements further if appropriate in their area.

4.4 For these reasons it is suggested that new micro wind turbines should be required to meet a specification for noise emissions that will minimise the potential for noise nuisance, and which will produce a sound level of no more than 35dB(A) 5 minute L_{Aeq} at 1 metre from any openable window. This level applies to micro wind turbines producing noise which does not contain any discernable tones or other noises such as clicks, squeaks or whistles which might be likely to attract attention and exacerbate any nuisance effects, or which contains short periods of significantly higher noise levels

4.4 It is further recommended that the Government carry out research to establish the likely level of vibration produced by micro wind turbines on installation and throughout their lifetime. A clear specification for vibration should be produced to minimise the chance of vibration or structure-borne noise nuisance being caused to neighbouring properties.

4.5 Information to the public about the environmental and economic aspects of wind turbines could be improved. The contribution that a micro wind turbine makes to sustainable development, the power generated and the potential energy savings are not readily understandable. The very different average wind speed across the UK has a significant implication for the location of wind turbines and their efficiency. A Government supported

information source could address this and enable the public to make informed decisions about installing microgeneration systems.

5 Other specific implications

5.1

	Implications (See below)	No Implications
Area Co-ordination		✓
Best Value		✓
Children and Young People		✓
Comparable Benchmark Data		✓
Corporate Parenting		✓
Coventry Community Plan		✓
Crime and Disorder		✓
Equal Opportunities		✓
Finance	✓	
Health and Safety		✓
Human Resources		✓
Human Rights Act		✓
Impact on Partner Organisations		✓
Information and Communications Technology		✓
Legal Implications		✓
Property Implications		✓
Race Equality Scheme		✓
Risk Management		✓
Sustainable Development		✓
Trade Union Consultation		✓
Voluntary Sector – The Coventry Compact		✓

6 Finance

6.1 Whilst the introduction of more permitted development rights will potentially lead to a reduction in fee income, it is very difficult to access the financial impact at this stage as its introduction is likely to coincide with other proposals in the Planning White Paper including changes to fee structures.

6.2 Whilst fee income may reduce, the work associated with such schemes may not change in line with this reduction as enforcement of the revised guidelines will still be required.

6.3 A review of the financial impact will be undertaken as the situation becomes clearer.

7 Monitoring

The document does not indicate how monitoring will be undertaken.

8 Timescale and expected outcomes

8.1 The Government has asked for responses to the consultation paper by 27 June 2007 It seems likely that implementation would be linked with the other proposals coming forward for change in the Planning White Paper.

	Yes	No
Key Decision		✓
Scrutiny Consideration (if yes, which Scrutiny meeting and date)	✓ **20th June 2007**	
Council Consideration (if yes, date of Council meeting)	✓ **26th June 2007**	

List of background papers

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Papers open to Public Inspection

Description of paper	**Location**
None	

Annex A

Solar - Background

.1 Solar microgeneration technology is by far the most common form of microgeneration equipment currently in use in England. Solar systems will be one of two types, a solar water heating system or a solar photovoltaic system (which produces electricity).

.2 The installation of solar equipment is one of the existing grey areas with regard to permitted development.

Solar – Issues and Recommendations

.3 Solar water heating and photovoltaic systems are identified as sharing many characteristics that could have a potential planning impact.

.4 The review highlighted the following factors as affecting the degree and significance of the impact:

- Projection above the roof
- Positioning and coverage on the roof/walls.
- Cumulative impact.

.5 Although solar equipment will generally be mounted on a building it is possible for it to be mounted as a stand-alone unit. In respect of stand-alone equipment, distance to neighbouring properties and overshadowing also needs to be considered in terms of the visual impact as should safety in the event of the unit toppling over.

.6 Drawing on evidence and views from local planning authorities and other stakeholders, that there is little evidence of likely demonstrable visual harm being caused by solar equipment, other than perhaps on the principal elevations in protected areas,it is suggested that there should be a general presumption in favour of the domestic installation of solar microgeneration equipment, subject to a limited degree of control to ensure that what impacts there are, are acceptable.

.7 The principal restriction would relate to both solar on building and solar stand-alone technologies and reflect the potential visual impact that could occur in a conservation area of a World Heritage Site. The Government proposes that the installation of solar technology should not be permitted where it would face onto and be visible from a highway in such an area.

.8 The Review recommended that solar technologies should be permitted subject to them projecting no more than 150mm from the existing roof place or standing – off no more than 150mm from a wall. In addition, no part of the installation should be higher than the highest part of the roof.

.9 In terms of stand alone units, this type of development, so as not to cause overshadowing on neighbours properties, it should be no nearer than 3-4m from the boundary. The existing permitted development rights with regard to the front of properties was deemed acceptable. To be set back 20m from the highway.

.10 The Government, however, is keen to seek the views of consultee's on a different approach that would be more permissive in terms of development close to a highway, but less permissive in terms of distance to other boundaries. This consultation proposes a single separation distance of 5m to a boundary.

Solar on Roof/Wall	**Limitation**
Height above roof/from wall	150mm and not higher than the highest part of the roof
Restriction in conservation areas and World Heritage Sites	Development facing on to and visible from a highway
Solar Stand Alone	**Limitation**
Height of unit	4m
Distance to the boundary of a highway or a neighbour's property	5m
Size of array	No more than 3m deep or wide – equating to a maximum surface area of 9m2
Restriction in conservation areas and World Heritage Sites	Development facing on to and visible from a highway

Heat Pumps – Background

.11 There are 3 main types of heat pumps, ground source heat pumps (GSHPs), water source heat pumps (WSHPs) and air source heat pumps (ASHPs).

.12 For all types of heat pumps, due to the excavation of trenches or bores, it is important to consider whether archaeological remains exist on the site and if this has any implications for the works involved.

.13 In respect of ASHPs, the visual impact also has to be considered. ASHPs are most commonly mounted at ground level or on a wall of the building in question.

.14 ASHP can make some noise and if possible should be situated away from windows and adjacent buildings in order t minimise distraction. (Appendix 2).

Wind Turbines – Background

.15 Wind turbines are probably the third biggest form of domestic microgeneration in term so potential, are far less common than solar and can be made at almost any size.

.16 The power produced by a turbine depends of the "swept area" of the rotor.

Wind Turbines – Issues and Recommendations

.17 From a planning perspective, domestic wind turbines have a greater number of characteristics that have a potential planning impact when compared with other microgeneration technologies. 4 key areas for consideration: size and scale; safety; nuisance and the impact on bats.

.18 The visual impact of wind turbines on the local landscape could be considered small if they were relatively small in size. In relation to stand-alone turbines, the height of the pole on which the turbine is mounted is a key consideration.

.19 The Government proposes that wind microgeneration is permitted subject to: -

Wind on Building	**Limitation**
Height (including blade) above highest part of roof	3m
Blade Diameter	2m
Noise	Annex 2
Vibration	Annex 2
Number of turbines	One on a building 15m or less in height. Four on buildings above 15,
Restriction in conservation areas and World Heritage Sites	No permitted development
Wind Stand Alone	
Height (including blade)	11m
Blade Diameter	2m
Noise	Annex 2
Vibration	Annex 2
Restriction in conservation areas and World Heritage Sites	Development facing on to and visible from a highway

Biomass – Background

.20 The term biomass covers all plant and animal material, although in domestic applications it most commonly refers to wood.

.21 Biomass has the advantage that it can be grown, stored and transported and although it emits carbon dioxide when burnt, it is considered close to carbon-neutral because the amount of carbon emitted when it is burnt is the same as that which is absorbed during growth.

Issues and Recommendations

.22 The installation of biomass into a home is internal, however 2 issues did arise.

.23 First, many biomass schemes may also require construction of a small extension, lean to or an outhouse because they need a reasonable amount of storage space for the fuel and appropriate access for service vehicles.

.24 The Review recommended that an additional allowance in GPDO be provided. The recommendation was for an additional 10m3, with further restrictions. However the Government believes that this would not be appropriate.

.25 The second issue is around the need for an external flue for the release of combustion gases.

Biomass	**Limitation**
Flues	No more than 1m above the ridge line of the highest part of the roof
Restriction in conservation areas and World Heritage Sites	Development facing on to and visible from a highway

Combined Heat and Power

.26 A combined heat and power (CHP) device simultaneously generates both heat and power and, when the device is an internal combustion engine, it is a mature technology widely used in industry.

.27 Biomass CHP units are available but are more difficult to scale from community size units down to individual household size and on a domestic scale it is generally more effective to use biomass for direct heating to maximise the efficiency and minimise cost.

Issues and Recommendations

.28 The Review recognised there were few planning considerations in relation to CHP. The report recommended that a permitted development allowance be provided, but again the Government believes that this should not be proposed at this stage.

.29 As with biomass, the issues of flues is as relevant.

CHP	**Limitation**
Flues	No more than 1m above the ridge line of the highest part of the roof
Restriction in conservation areas and World Heritage Sites	Development facing on to and visible from a highway

Hydro – Background

.30 Hydroelectricity generation operates by converting the potential energy stored in water to turn a turbine that then produces electricity.

Issues and Recommendation

.31 The Review recognises that these schemes are rare in a domestic context and very few would be sited with the cartilage of a dwelling house.

Annex 2

Detailed Noise and Vibration Proposals

1. The design and installation of a MWT should cause the internal noise level, due to noise from the MWT alone, in any mode of operation not to exceed a level of 30Db L AEQ, 5 min when measured 1m from any dwelling within the same structure upon which the MWT is mounted;

2. The design and installation of a MWT should cause an external noise level, due to noise from the MWT alone, in any mode of operation not to exceed 40Db L AEQ, 5 min measured 1m from the façade at the window to a habitable room of any neighbouring residential property;

3. The design and installation of a MWT should cause the external noise level due to noise from the MWT alone, in any mode of operation not to exceed 40Db L AEQ, 5 min outdoor space not solely associated with the host dwelling; and

4. The design and installation of a MWT should cause the vibration level from the MWT alone, in any mode of operation, not to exceed a level of 0.5mms-1 (PPV), in the vertical (z-axis) direction, when measured on the floor towards the centre of any habitable room of any dwelling within the same structure upon which the MWT is mounted.

SUMMARY OF QUESTIONS

QUESTION	YES	NO	COMMENTS
Question 1 – Do you agree with the principle of an impact approach for permitted development?	√		
Question 2 - Do you agree with a restriction on development facing onto and visible from a highway in conservation areas and in World Heritage Sites?	√		
Question 3 - Should the restriction apply in the same way to the other types of designated area?	√		
Question 4 - Do you agree that the impact of noise should be dealt with by specific noise restrictions based on decibel levels at/in neighbouring dwellings in the way proposed in Annex 2?		√	This will be unduly onerous on the householder because to satisfy themselves (or the LPA) that their proposal constituted permitted development they would need to commission a noise consultant to carry out surveys
Question 5 - If not, what alternative approach would best address this issue?			There should be specific noise levels based on the manufacturers specification
Question 6 - Do you support a general restriction on permitted development (as proposed at paragraph 50 above) so as to require that visual impact is minimised in exercising the rights?	√		
Question 7 - Do you agree that local planning authorities should be able to restrict permitted development rights for microgeneration where the benefit from the technology is outweighed by its impact?	√		
Question 8 - Do you agree that	√		

the existing protection is adequate?			
Question 9 - Is guidance sufficient to address the potential impact on archaeologically sensitive areas?			
Question 10 - In addition to providing advice as to the scope of the changes to the GPDO, what could guidance also usefully cover?			Advice on the relative effectiveness of various products and the climate they are most effective in
Question 11 - Do you agree with the recommendations for solar microgeneration?	√		
Question 12 - Do you agree that there should be no restriction in terms of the coverage of roofs and walls by solar panels? If not, what would be an acceptable percentage?	√		Subject to the caveats on the permitted upstand and to restrictions in conservations areas etc
Question 13 - Generally, should the same level of permissiveness apply to solar panels on a wall as on a roof?	√		Provided that in a conservation areas and listed buildings greater controls are maintained particular when the wall is visible from a public space
Question 14 - Do you agree with a minimum separation distance of 5m to the boundary of a highway or neighbouring property for a stand-alone solar unit?	√		
Question 15 - Do you agree with the recommendations for heat pumps?	√		
Question 16 - Do you agree that the likely impact of noise from ASHPs should be dealt with by specific noise restrictions in the same way as proposed for domestic wind turbines?	√		Provided that an appropriate noise level is set
Question 17 - Do you agree with the recommendations for wind turbines?		√	The principle of wind turbines being permitted development is supported but the criterion advocated would not provide an appropriate balance with amenity

			considerations
Question 18 - Do you agree that the likely impact of noise from turbines should be dealt with by specific noise restrictions in the way proposed?		√	It is considered that the permitted development should relate to manufacturers specifications and should be such that the likely noise level at the boundary would not exceed 45 dB.
Question 19 - Do you agree with the recommendations for biomass?	√		
Question 20 - Do you agree with the recommendations for CHP?	√		
Question 21 - Do you agree there should be no additional permitted development rights for hydro?	√		