

***Proposed Amendments to the Exempted Development Provisions of the
Planning and Development Regulations 2001 in Respect of Renewable
Technologies for Industrial, Commercial and Agricultural Use***

***Summary Paper on Public Consultation Process held between October
2007-February 2008***

Overview

A total of 51 submissions were received from a wide variety of stakeholders, including Sustainable Energy Ireland, An Bord Pleanála, the ESB, the Irish Aviation Authority, and a number of Energy Agencies, individuals and companies during the 3-month consultation period. (A list of the organisations that were invited to make submissions on the consultation paper is appended to this document). The submissions were mainly supportive of the proposed exemptions. This document examines these issues in greater detail and outlines the rationale behind the final conditions and limitations.

The Department would like to take this opportunity to thank those individuals and organisations that made submissions, many of which were quite detailed and provided a broader perspective of the issues involved.

The details set out in the following document are for information only and do not purport to be a legal interpretation. The full Regulations are contained in the Planning and Development Regulations 2008 (S.I. No. 235 of 2008), copies of which are available on the Department's website or from the Government Publications Sale Office.

1. Key Points Raised in the Submissions

The majority of the submissions focused on the proposed exemptions for combined heat and power units, wind turbines and solar panels. Within these, a number of generic comments were made with regard to the terminology contained in the draft consultation document. On the basis of these comments, it was agreed that the existing definitions of “industrial building”, “light industrial building”, “business premises” and “habitable house” already provided for under Article 5 of the Planning and Development Regulations 2001, would be used. In addition, it was also agreed that the term “agricultural holding” should replace the term “agricultural structure” used in the draft to maintain consistency with the existing Regulations. Finally, in relation to solar panel technologies, a distinction is now being made between solar thermal collector panels and photo-voltaic panels.

Solar thermal collector panels refer to panels that absorb sunlight to heat water within a water heating system, while photo-voltaic panels, or PV for short, refer to panels which use technology that converts the sun's light, not its heat, directly into electricity.

2. Combined Heat and Power

CHP Floor Area

- *Consultation Document Recommendation*

The floor area conditions set out in the October Consultation Document provided for structures of up to 500 square metres in an industrial setting and up to 300 square metres in light industrial buildings, business premises and agricultural holdings for CHP units. This scale was calculated as being the most appropriate for most small- to medium-sized enterprises, and the generating capacity would be well below that level at which an IPPC licence or an Environmental Impact Statement would be required.

- *Submissions received*

A number of submissions suggested the use of the output capacity of the CHP plant as the determinant of the size of the structure. Others referred to distinctions between the scales required to meet the energy needs of different types of industry for which conditions for use with separate categories of industry and light industry may be warranted.

- *Final Regulations*

The proposed floor areas are sufficient to house CHP units of a size sufficient to meet a substantial proportion, if not all, of the energy needs of small- to medium-sized industrial units. It is considered that an exemption based on the generating capacity of the technology would ultimately limit the potential of the industry to develop smaller, more efficient units through technological innovation. However, it is accepted that the proposed scale may not be appropriate in smaller industrial estates or business premises that are in close proximity to residential areas. Accordingly, the Regulations now distinguish between the scales that would be applicable to industry (500 sq. m) separately from that applicable to light industry (300 sq. m). There is no change from the draft proposals in the size of the units for public buildings and for agricultural use.

CHP Unit Height

- *Consultation Document Recommendation*

The CHP Unit height conditions as set out in the October Consultation Document provided for higher units (10m) in an industrial setting compared to business premises, public buildings or agricultural settings (8m).

- *Submissions received*

While there were only a few submissions on this issue, it was argued that there would be no justification for such a differential, given that increased output would be met by extending the unit lengthways rather than upwards. It was also suggested that the height of 10 metres would have a detrimental impact on visual amenity.

- *Final Regulations*

Given that the size of the CHP unit required to supply power on an industrial site would be related to the energy needs and accordingly, the size, of the existing plant, it is considered that the impact on visual amenity of a unit of up to 10m in height would not be disproportionate. Furthermore, the current state of this technology would require a height of 9-10m to facilitate the housing of a unit of up to 5MW. The lower height of up to 8m for the light industrial, business and agricultural sectors is retained.

Distance from Nearest House or Road

Consultation Document Recommendation

The consultation document had proposed setting a minimum distance from a habitable house or from the nearest road of 200m and 50m, respectively, on the basis of visual amenity.

- *Submissions received*

No submissions were received in relation to the 200m distance from habitable houses, but a number of submissions were received suggesting that the proposed distances from the nearest road were too restrictive and would limit the potential of the technology.

- *Final Regulations*

The condition to maintain a 200m distance from the nearest habitable house (or residential building, etc) is retained unless the owner and occupier of such a house or building consent to the development, although the Regulations now make it clear that any house or residential building, etc of the owner or developer of the site can be excluded from that restriction. However, the condition requiring a 50 metre distance from the nearest road will be increased to 100 metres for CHP units that are over 8 metres in height and reduced to 10 metres for units of less than 8 metres in height – this is

consistent with existing conditions for exemptions in relation to agricultural structures.

Noise limits

- *Consultation Document Recommendation*

Noise provisions in the consultation document proposed a limit of 43db(A) during normal operation, or 5db(A) above background noise, as measured at the site boundary to the structure. The noise limits are required to address health and safety concerns at neighbouring properties. They are set at a slightly more onerous limit than the WHO guidelines for noise emissions in order to provide an additional degree of protection at neighbouring properties.

- *Submissions Received*

It was suggested that the requirement to have an enclosed structure should be removed.

- *Final Regulations*

The requirement to have an enclosed structure will be retained to assist with achieving noise reduction limits, while also helping to reduce the impact on visual amenity. The condition was also simplified by removing the 5db(A) sub-clause and providing for a 43db(A) limit at the site boundary only.

Number and Size of Flues

- *Consultation Document Recommendation*

The consultation document proposed facilitating 2 flues with heights of up to 20 metres, and diameters of up to 2 metres.

- *Submissions Received*

A number of submissions supported the retention of the flue height at 20 metres, or even up to 2.5 times the height of the unit, in order to facilitate dispersion of emissions, with a couple arguing for lower heights on the basis of visual amenity and impact of emissions on neighbouring properties. Others suggested reducing the width of the flues as the proposed size would be greater than was needed.

- *Final Regulations*

The Regulations now provide for up to 2 flues on a CHP unit, but the diameter is reduced to a maximum of 1 metre each. The maximum flue height for CHP

units in industrial buildings is now 20 metres, with a height of up to 16 metres allowed for light industrial buildings, business premises and agricultural holdings.

Other Issues Raised

- *Submissions received*

Some of the submissions received suggested that provision should be made to facilitate the development of district heating networks.

- *Final Regulations*

The Regulations now make it clear that the CHP unit should be used to prevent any other use of the structure. It is not intended that the CHP units should be used to provide an off-site heating supply, whether by way of a district heating system or otherwise, since any necessary connections and distribution lines, etc for such a network would need planning permission in themselves. Existing provisions under the Electricity Regulation Act 1999 prevent the distribution of electricity by anyone other than an authorised body, although this does not preclude excess capacity from being made available through Eirgrid to the national grid.

3. Wind Turbines

Turbine Height

- *Consultation Document Recommendation*

The tower height conditions set out in the October Consultation Document provided for a maximum turbine height of 20m on the basis of visual impact.

- *Submissions received*

A large number of the submissions called for the turbine height to be increased to raise electricity generating capacity and therefore make them more attractive to potential users, while a slightly smaller number looked for a reduced height, generally on the grounds of visual amenity.

- *Final Regulations*

A height of 20 metres is considered to be the maximum that should be allowed without planning permission in all sectors because of the visual impact of higher turbines at neighbouring properties. While it is acknowledged

that the potential electricity output from this height would be lower in proportion to the energy needs in a number of sectors, it is considered better to adopt a prudent approach to the introduction of this technology. The exemptions are therefore being retained at a maximum height of 20m in all locations. This condition will be kept under review in light of emerging trends and practice.

Rotor Diameter

Consultation Document Recommendation

It was proposed that maximum exempted blade length would be set at 8m.

- *Submissions Received*

Again, there were divergent views on the rotor diameter that should be exempted, with suggestions ranging from 6-12m, although this exemption was considered to be too restrictive by some of the respondents.

- *Final Regulations*

This condition will remain unchanged from the size (8m) outlined in the consultation document.

Taken together, the conditions for maximum turbine height and blade diameter will allow users to choose whatever combination of tower height and rotor diameter they wish provided it is below or equal to the maximum specifications for each, and allows sufficient safety clearance of 3 metres between the rotor blade at the lowest point on its arc and the ground.

Distances from Nearest House, etc

- *Consultation Document Recommendation*

The consultation document had proposed setting a minimum distance from a habitable house, the nearest road and overhead cables of 100m, 50m and 2 rotor diameters, respectively. These conditions were proposed on the basis of safety and visual amenity grounds.

- *Submissions received*

A range of submissions were received suggesting increases of up to 300m from the nearest house, with other querying the need for such a restriction at all. As with other technologies, other comments were received suggesting that the proposed distances from the nearest road were too restrictive and would

limit potential investment in the technology. Others queried the necessity for restricting the location of turbines from cables. Finally, the potential impact of the positioning of a turbine in proximity to an airfield or radar installation was raised.

- *Final Regulations*

The condition to maintain a 100m distance from the nearest habitable house is omitted, in order to maintain consistency with the existing Regulations for micro-turbines and the guidelines on wind energy development. The distance from the nearest party boundary will be increased to the total height plus 5 metres (i.e., 25m), principally on safety grounds, but in agricultural settings the distance will be increased to one and a half times the total turbine height, plus one metre (i.e., 31m), to take account of potentially greater impacts on visual amenity in a rural setting.

The 50m limit from the nearest road is being reduced to 10m for all technologies – however, as the condition specifying the distance that turbines should be from site boundaries already exceeds this distance, then such a condition would be redundant in this category. The distance from a non-electrical overhead cable is being increased slightly to a specific distance, namely turbine height plus 5m, while conditions for distances from electrical cables are being added. Essentially, turbines will have to be their own height plus 20 metres from 38kV distribution lines and their own height plus 30 metres from transmission lines of 110kV or above. These conditions were adopted following consultation with the ESB and address safety concerns in the event, however unlikely, of a turbine falling over and becoming entangled with, or accidentally severing, communication or power cables.

For safety reasons, and following consultation with the Irish Aviation Authority, turbines within 5 km of an airfield or aerodrome must obtain the written consent of the Authority, and install appropriate warning lighting, if necessary. While the Authority envisage few cases where permission may not be granted, this provision will enable them to record the location of all such development.

Noise limits

▪ *Consultation Document Recommendation*

Noise provisions in the consultation document proposed a limit of 43db(A) during normal operation, or 5db(A) above background noise, as measured at the site boundary to the structure.

▪ *Submissions received*

It was suggested that the sub-clause of allowing for 5db(A) above background noise was not necessary and therefore should be removed. It was also suggested that the noise conditions were restrictive and that they should distinguish between day-time and night-time levels.

▪ *Final Regulations*

The condition will be simplified by removing the 5db(A) sub-clause and providing for a 43db(A) limit at the site boundary, or at the nearest habitable house in agricultural settings. This condition will act as a de facto barrier against turbines being located too close to housing. Furthermore, and as with micro-turbines for domestic use, this condition will give manufacturers of such turbines an incentive to set this noise level as an operating industry standard, so the condition is also a means by which the quality of turbines available on the Irish market will be improved.

Other Considerations

▪ *Number of Turbines*

The number of turbines is limited to one per site despite suggestions that the number of turbines should be determined by the site/plot size. The potential impact on visual amenity from a mini wind energy development is considered inappropriate.

▪ *Absence of logos or advertising*

As with solar panels, this condition is proposed on the basis of concerns that wind turbines would be used as a means of advertising either the name of the manufacturer or indeed of any product or service and which could lead to inappropriate visual impacts, particularly if luminous signs or paint were used.

▪ *Building-Mounted Turbines*

The issue of exempting wind turbines attached or erected on buildings raised a couple of comments arguing that it is unnecessarily restrictive and that they

should be included as exempted development subject to conditions such as distance from neighbouring properties, inserting vibration absorbing brackets and proper grounding. Nevertheless, as with the exemptions for micro-turbines, it is considered that there are a number of considerations, particularly diminished performance caused by turbulence in proximity to buildings, which would support the decision to retain this exemption at this time.

In particular, and as with the considerations for the micro-wind turbines, industry experts including Sustainable Energy Ireland and a number of regional wind energy agencies and manufacturers expressed very serious concerns in relation to risks associated with the conduction of harmonics and vibrations through wall fabric. They also cited questionable performance and high noise emissions as further reasons for not extending the exemption to building-mounted turbines. In the circumstances, it is considered that these turbines be subject to some degree of assessment or control. Furthermore, in the absence of directly applicable building standards, the most appropriate means of achieving this is through the planning code, i.e., by making a planning application.

As with the other technologies, these exemptions will be kept under review. In that context, the Department will pursue the examination of issues relating to building mounted turbines in consultation with all relevant sections within the Department, including Planning, Building Standards Section, and the Building Inspectorate.

4. Temporary Met Masts

Height

- *Consultation Document Recommendation*

The consultation document had proposed a height of up to 50m for these wind measuring masts. These masts are used to determine the suitability of the wind regime in a particular area and are useful as an approximate indicator of what a turbine would look like in that location.

- *Submissions received*

A number of submissions that referred to this issue sought an increase in the proposed height to assist in getting more representative and accurate readings on wind speed. There were no submissions advocating or seeking a lower height threshold.

- *Final Regulations*

In light of the submissions received it is accepted that a height of up to 80m would be appropriate for these masts to facilitate the recording of relevant data. On the basis that these would be temporary structures, this height will provide the public with a visual indication of the potential visual impact of any subsequent application for a wind energy development.

Time Period

- *Consultation Document Recommendation*

The proposal in the consultation document was to allow such masts to be erected for a period of up to nine months in any 18 month period.

- *Submissions received*

A relatively large number of submissions were received on this issue, all of which sought an increase in the length of time to be allowed – many mentioned that at least 12 months data is required by industry and financial institutions on which to base their conclusions as to the viability of a particular site.

- *Final Regulations*

The time period is being extended to allow temporary masts to be erected for up to 15 months in any 24 month period.

Distances from Nearest House, etc

- *Consultation Document Recommendation*

The consultation document had not proposed setting any minimum distances as the exemption is for a temporary structure only.

- *Submissions received*

A submission by the Irish Aviation Authority raised the potential impact of a turbine on a nearby airfield or radar installation.

- *Final Regulations*

For safety reasons, to ensure that there are no adverse impacts on air traffic, a new condition is inserted that will require the consent in writing of the Irish Aviation Authority for any turbine that is located within 5kms of an airfield, aerodrome or radar installation, etc. As with turbines, and also with safety in mind, the distance from a non-electrical overhead cable must be at least 20 metres. Similar conditions with regard to distances from electrical cables are being added; essentially, masts will have to be their own height plus 20 metres from 38kV distribution lines and their own height plus 30 metres from transmission lines of 110kV or above. These conditions were adopted following consultation with the ESB and address safety concerns in the event, however unlikely, of a mast falling over and becoming entangled with, or accidentally severing, communications or power cables. Finally, for safety reasons, a mast must now be a distance of its own height plus 5m from any party boundary.

Other Issues

A new condition requiring that met masts are made of material that does not deflect telecommunications materials was inserted, to keep this exemption consistent with the other exemptions for turbines.

5. Solar Technologies

Area

- *Consultation Document Recommendation*

The October consultation paper had proposed that there should not be any limit on the total surface area of solar panels on a roof of an industrial building, while other buildings covered by the exemptions could install panels of up to 50 square metres or 50% of the total roof area. Wall panels and free-standing arrays were subject to limits of 50 square metres and 25 square metres, respectively, for industrial buildings and for business premises and agricultural holdings.

- *Submissions received*

A number of submissions suggested that the limits should be increased, and proposed either no limit or a limit of up to 300 square metres for light industrial buildings, business premises and agricultural holdings. It was also suggested

that the limits for photo-voltaic¹ panels on walls should be increased, although another suggested that thermal collector panels should not be allowed on walls, due to the impact on visual amenity.

- *Final Regulations*

The only change made to this condition in the final Regulations is to apply the lower limit of 50 square metres or 50% of the total roof area (whichever is the lesser) to light industrial buildings, on the basis of visual amenity. A related change is to exclude solar thermal collector panels from being fitted to walls on light industrial buildings, business premises and agricultural buildings.

Distances from Walls and Roofs

- *Consultation Document Recommendation*

The consultation document had proposed that the distances of a panel from a wall or a pitched roof should be up to 1 metre, with a distance of up to 2 metres allowed from a flat roof, for all proposed categories of building or premises. The purpose of this condition is to limit the visual impacts of the panels.

- *Submissions received*

A number of submissions referred to this issue, some of which sought increases in the distance, particularly with regard to the height on a flat roof, while others sought a decrease in the height.

- *Final Regulations*

The changes made to the final Regulations reflect the distinctions being made between the different types of buildings and premises covered by the Regulations, as well as between solar thermal collector panels and photo-voltaic ones.

For industrial buildings, the distance limits remain unchanged at 1m for solar panels, either thermal collector or photo-voltaic, on a wall or pitched roof and 2m for a flat roof, but a number of adjustments have been made for other types of buildings and the type of panel used. Distinctions are now made between the distances from flat roofs and pitched ones for light industrial buildings and agricultural structures, and business premises. Essentially, for

¹ A photo-voltaic panel, or PV for short, is one which uses technology that converts the sun's light, not its heat, directly into electricity.

light industrial buildings and agricultural structures the panels must be 50cms from a pitched roof and 2m from a flat roof, whereas for business premises the distances are 15cms and 1m respectively. Furthermore, only photo-voltaic panels may be placed on the walls of buildings in the light industrial and business sectors, and they may project out from the wall to which they are attached by up to 15cm.

The purpose of these conditions is to allow users to angle their solar panel installations to maximise sun “take”, provided the higher edge of the panel does not exceed the specified height from the plane of the roof or wall in each sector. The different distances are aimed at taking account of the potential impacts on visual amenity in each setting.

Other Issues

- *Visual Amenity*

For the purposes of clarity, a new condition was inserted which requires all equipment associated with the panels to be located within the roof, i.e., that wiring, piping and water storage tanks, etc, should not be visible. Similarly, new conditions aimed at preserving visual amenity are included which prevents unnecessary advertising from being placed on the panels and restricting the location of free-standing arrays to the side or rear of a building or premises other than an industrial building. Finally, all panels are now required to be 2 metres away from the edge of a flat roof.

6. Heat Pumps

Distance to Party Boundaries

- *Consultation Document Recommendation*

No recommendation on this issue was included in the consultation document.

- *Submissions received*

A suggestion was made that ground source heat pump systems should be set back a certain distance from any party boundary, or the foundations of any building or structure, to prevent structural damage and to avoid technical operational problems if pumps in neighbouring properties are laid too close to each other.

- *Final Regulations*

The final Regulations now require that ground source heat pumps shall be installed at distances from party boundaries and from the foundations of any structure or building in line with the Sustainable Energy Ireland Renewable Energy Information Office Procurement Guidelines on Heat Pump Systems. This condition is being applied to buildings and premises in all sectors – industrial, business and agricultural.

Other Issues

- *Size Limits*

The Regulations have been amended to clarify that the restriction on the size of a heat pump to 15 square metres (10m for light industrial buildings, building premises and agricultural holdings) applies to an air source heat pump only – ground source heat pumps have no such limits.

7. Biomass

Storage capacity

- *Consultation Paper Recommendation*

The consultation paper had proposed that the capacity of the fuel storage area shall not exceed 50,000 litres.

- *Submissions received*

A number of submissions were received in relation to biomass, with the issue of storage capacity being common to all. It was considered by all that the recommended storage area was inadequate and would necessitate very frequent deliveries of materials which would increase carbon emissions in other ways.

- *Final Regulations*

The capacity of such a fuel storage tank or structure is being increased to up to 75 cubic metres. On the basis that the capacity of a typical delivery vehicle amounts to about 50 cubic metres, then this size would facilitate the storage of the residue of a previous delivery when the next load arrives.

Distance from Nearest House or Road

▪ *Consultation Document Recommendation*

The consultation document had proposed setting a minimum distance from a habitable house or from the nearest road of 100m and 50m, respectively, on the basis of visual amenity.

▪ *Submissions received*

As with some of the other technologies, a number of submissions were received suggesting that the proposed distances were too restrictive and would limit the potential of the technology.

▪ *Final Regulations*

The condition to maintain a 100 metre distance from the nearest habitable house is being retained, but the 50 metre limit from the nearest road is being reduced to 10 metres. This maintains consistency with existing conditions in relation to agricultural structures and with the exemptions in relation to CHP units.

Noise limits

▪ *Consultation Document Recommendation*

Noise provisions in the consultation document proposed a limit of 43db(A) during normal operation, or 5db(A) above background noise, as measured at the site boundary to the structure.

▪ *Submissions Received*

It was suggested that the sub-clause of allowing for 5db(A) above background noise would be difficult to enforce and therefore should be removed.

▪ *Final Regulations*

The condition will be simplified by removing the 5db(A) sub-clause and providing for a 43db(A) limit at the site boundary only.

Height of Flue

▪ *Consultation Paper Recommendation*

The Consultation Paper recommended that the height of a flue mounted on a biomass unit shall not exceed 15 metres, measured from ground level, and with a flue diameter of up to 2 metres.

- *Submission received*

It was suggested that a higher flue would disperse emissions at a higher level in the atmosphere. As with CHP units, some submissions suggested reducing the width of the flues as the proposed size would be greater than would be necessary.

- *Final Regulations*

The revised Regulations propose that the height of a flue mounted on a biomass unit shall not exceed 16 metres, measured from ground level, other than on agricultural holdings where the maximum height will be 20 metres. This is to facilitate the dispersal of emissions from the burning of animal wastes, if necessary. As with flues on CHP units, the maximum diameter of such flues is being reduced to 1 metre.

Odour from Storage of Biomass

- *Consultation Paper Recommendation*

There were no conditions on this issue in the consultation paper.

- *Submission received*

It was suggested that the fuel for use in boilers for use with industrial and light industrial buildings, and business premises, should not include products derived from animal and animal wastes.

- *Final regulations*

A new condition was inserted requiring that the fuel shall not include products derived from animals or animal wastes for biomass boilers other than those in agricultural holdings. Similarly, the use of wood containing dangerous substances as a fuel is excluded from the exemption.

Other Issues

- *Underground storage*

The consultation paper had not proposed any exemptions for an underground storage facility. While a number of submissions looked for such an exemption, this situation remains unchanged. This is on the basis that the works necessary to install such a facility would be substantial and are potentially of a nature which would need to be considered through the planning system.

8. Hydroelectricity

There was only one submission regarding this technology, which pointed out the technological advances made in this area. As was the case with the earlier proposals in relation to micro-renewable technologies, the demand for this technology would be low and it is still considered that the planning process is the best way to handle such applications. Therefore, it is not intended to amend the proposed Regulation.

9. Anaerobic Digesters

During the research phase, the Department considered the application of an appropriate exemption for anaerobic digesters but decided that this technology should remain subject to the provisions of the planning system.

The research revealed that there would be little or no advantage to providing an exemption unless it was at a scale that would have a potentially significant impact on the area. For example, anaerobic digesters require a shed to hold a combined heat and power (CHP) unit and tanks for effluent and these would need to be quite large to provide an economic return. There are proposals in relation to exemptions for CHP units elsewhere in this paper. In addition, cattle generate by far the largest proportion of farm waste, but the very high water content in the manure would require the input of other organic waste streams to make it viable, thereby increasing the potential traffic flows to the site. The process also needs other technologies to give environmental improvements to the resulting waste, i.e., to separate the constituent elements of the waste. The final contributing factor was that installation costs are quite significant and an exemption from the planning fee would not be a factor in deciding the viability of a proposal.

Therefore, in the circumstances, it is considered that the current requirements are not an impediment to take-up of this technology in the agricultural sector.

**List of Organisations to which
a copy of the Consultation Paper was Issued.**

AirEn Services
Airtricity
An Bord Pleanala
An Taisce
Andy Wilson & Associates
Association of Irish Energy Agencies
B & Q
Bat Conservation Ireland
Ecologics
ESB Group
Failte Ireland
Geothermal Association of Ireland
Gordon Chisholm Architects Ltd
GRIAN
Irish Aviation Authority
Irish Wind Energy Association
Jezzar Design & Management
Marsh Environmental
Mid West Regional Authority
National Standards Authority of
Ireland
RVR Ltd.
SAV Energies Ltd
Scott Tallon Walker Architects
Sustainable Energy Ireland
Surface Power Technologies
TM Printing Ltd
Warren Consultants Ltd
WestWind
Wind Save Limited
Waterford Institute of Technology

The consultation paper was also circulated to all planning authorities and to a number of individuals who made submissions on the micro-renewables consultation paper in 2006.