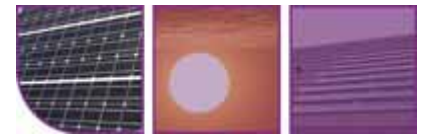


Review of Permitted Development Regulations Relating to Domestic Installation of Microgeneration Equipment

Entec for DCLG / PINS / WAG

James Hall, Director

The Aim & Brief



- **aim to remove regulatory barriers to take-up of microgeneration technologies consistent with the protection of residential amenity;**
- **review permitted development rights for householders in England & Wales to install microgeneration equipment within the curtilage of a dwelling house (i.e. home, garden or yard);**
- **make recommendations for improving these development orders, their ease of use and consistency of interpretation by all users.**



- **Current GPDO can be arbitrary when setting out the limits for ‘permitted development’**
 - a classic example is proposals for solar panels where the current test relates to whether the panel(s) project(s) significantly above the plane of a roof, but in reality it often comes down to locally variable guidelines or even officer’s opinion;
 - currently there is provision for oil storage tanks but no other fuel source
 - TV aerials and satellite dishes are often pd but it can be complicated
 - Flats have much reduced pd rights than other dwelling types
- **Need to relate technology to its context, size & position within dwelling’s curtilage & relationship to boundaries with adjoining properties**

Technologies



● Solar

- Hot Water
- Photovoltaics

● Heat Pumps

- Ground Source
- Water Source
- Air Source

● Micro Wind

● Biomass

● Micro CHP

● Hydro



Our Approach



- **Stage 1 – Scoping, stakeholder workshops, LA case studies & questionnaire**
- **Stage 2 – Issues, focus on & test evidence**
- **Stage 3 – Debate recommendations & report**
- **Stage 4 – Plain English Summary**
- **Using an ‘*impacts based approach*’ Entec are developing detailed recommendations as to how the GPDO could be amended.**



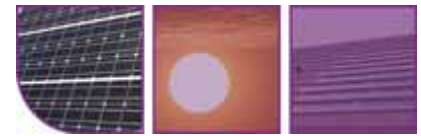
- **Stakeholder consultation with government departments, industry members, environmental organisations & professional bodies**
- **Issues scoped & useful points debated**
 - Entec list of issues agreed
 - Clear industry view on most technologies eg request solar pd, BWEA put forward wind parameters, CHP request for flexibility with flats, Hydro nothing needed etc
 - Clear view from reps of protected areas (National Parks) & listed buildings
 - Recognition of lack of evidence for certain issues (eg bats & birds)
 - Accreditation & industry standards raised especially in context of noise / vibration

Case Studies – Local Authorities



- **7 case study LA's picked from 25 contacted**
 - **Guildford Borough Council**
 - **Merton Borough Council**
 - **North Devon District Council**
 - **Derbyshire Dales District Council**
 - **Northumberland National Park Authority**
 - **Pembrokeshire Coast National Park Authority**
 - **Powys County Council (Radnorshire)**
 - **Further 5 inc Bristol & Kensington & Chelsea used selectively**

Questionnaires



- **The number of applications received pa is low currently averaging about 5 for all technologies & advice varies**
- **22 questionnaires were received & complemented by anecdotal feedback**
 - One customer initially refused by LA because of prominent position at the front of the house but received permission for rear of the house in a less windy position which he was not satisfied with;
 - Three of the customers (who eventually erected turbines) experienced a negative response from their neighbours who showed concern about visual & noise impact of the turbines.

Micro Wind – Stand Alone

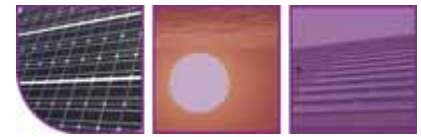


- Reasonably common mainly in rural areas but applications required / conditions imposed



- Generally approved subject to height, siting etc but occasional refusal on visual grounds
- Focussed upon height (10 metres), blade size (2 metres) / swept area & distance to nearest habitable room to avoid nuisance
- Rear of properties preferable esp protected areas – distance to highway

Micro Wind – Building Mounted



- **Currently rare and subject of applications which are carefully considered. High profile examples in Kensington and Southwark**



- **Main impacts to resolve – visual, noise, vibration and installation / maintenance**
- **Entec researched product range & noise – advised on spacing to habitable room / standards**
- **Height above ridge (3 metres suggested)**

Micro Wind – Visual Impact



- Major planning consideration – consultee concern
- Considered visual & landscape / townscape impacts
- Cumulative effects
- Listed buildings, conservation areas and national parks / AONB's – application likely still needed for roof mounted turbines

Micro Wind – Noise & Vibration



- **Wind industry standard does not currently contain noise limits. Vibration standards do exist.**
- **Reviewed known products and noise levels – 60 dBA cut off proposed that allows for many**
- **Aim to achieve 45 dBA at nearest habitable room of neighbouring properties to avoid nuisance**
- **Distance recommended to achieve above in absence of noise limit**

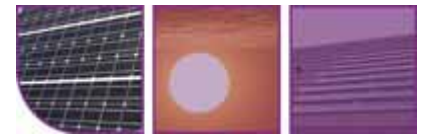
Micro Wind – Bats & Birds



- **Lack of substantive evidence on bats and birds – agreed by consultees**

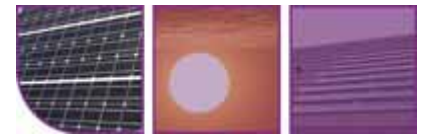


- **Strike**
- **Avoidance more concern**
- **Guidance on siting needed**
- **Future review suggested**



- **Need for Guidance Notes**
- **Industry Standards**
- **Accreditation of products, installation & maintenance**

Recommendations



- **Entec will be recommending:**

- a presumption in favour of (retrofit of) all forms of microgeneration equipment for domestic properties, with carefully considered parameters to minimize nuisance, visual and other impacts
- Preparation of guidance to complement any changes and consideration of related standards and accreditation



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See **entecuk.com** for copy of the presentation

James Hall, Director