



44 Grand Parade, Brighton BN2 9QA
Phone – 01273 878770
Email – admin@environmental-protection.org.uk

Microgeneration Policy Team
Department of Energy and Climate Change
Area 1E
3 Whitehall Place
London SW1A 2AW

10th March 2011

Emailed to - microgenconsult@decc.gsi.gov.uk

Consultation on a Microgeneration Strategy

We are writing in response to the above consultation. Environmental Protection UK has considered the consultation document and welcomes the opportunity to comment on the proposals.

1. Environmental Protection UK Recommendation

A location based approach for microgeneration to support localism

For the reasons outlined in our response below, EPUK strongly urge that the Microgeneration Strategy is re-visited to ensure that it maximises carbon emission reductions and makes broader links with other Government policy priorities. This should take the form of a location based approach for deployment of renewable energy and microgeneration. This approach directs specific microgeneration technologies towards geographical areas where carbon savings are maximised, local environmental issues minimised (or even improved upon) and opportunities to reduce fuel poverty taken.

The planning system is the key tool for implementing such an approach. In line with the Government's Localism agenda local authorities are best placed to decide upon practical implementation of this system, restricting deployment of particular technologies in some areas and removing planning restrictions in others. Current Government plans to provide permitted development for many classes of microgeneration technologies run counter to such a local approach, replacing local decision making through the planning system with central prescription via permitted development.

Environment Protection UK would welcome the opportunity to work with DECC to explore how a local based approach to microgeneration and renewable energy could be implemented in practice.

2. About Environmental Protection UK

Environmental Protection UK is a national charity that provides expert policy analysis and advice on air quality, land quality, and noise and their effects on people and communities in terms of a wider range of issues including public health, planning, transport, ecosystem services and energy and climate.

We offer clear and critical analysis of UK government and European Union policy proposals, through a range of high-quality publications and expert-led events, as well as up-to-date regulatory information through Essential Environment, our comprehensive guide to UK and EU environment legislation.

We bring together policy makers, business, local authorities and academics to enable and foster successful partnerships for environmental action, and provide networking opportunities to support the careers of environmental professionals and allow them to share best practice.

Our structure enables us to take a progressive and pragmatic approach to the issues which concern us and, on behalf of our wide and extensive cross-sector membership, to promote integrated and effective policy making which supports sensible and workable solutions to pressing environmental challenges.

Environmental Protection UK works with and for UK national and devolved governments, local authorities, business, academics and the general public, and with relevant EU institutions and NGOs.

3. Our Comments

Please note that our response relates to policy considerations we feel are missing in the strategy document. We have therefore not answered the questions in the consultation document.

Environmental Protection UK feel that the Microgeneration Strategy is very narrow in both its consideration of potential barriers to the roll-out of microgeneration technologies, and also the wider roll out of microgeneration in areas of Government policy aside from carbon emission reduction.

Particularly puzzling is the almost total omission of the role of the planning system in supporting microgeneration. This is barely mentioned at all in the document, aside from references towards the back of the document in 5.3 and 5.11. Whilst we are well aware that DECC and CLG are working hard on changes to the planning system to support renewable energy, the almost total absence of references to this in the document gives the impression that links to policy outside of that directly applicable to microgeneration have been given only scant attention in the strategy.

These links are important, as microgeneration can potentially have significant positive and negative impacts on other areas of public policy. The programmes (Feed in Tariffs and the Renewable Heat Incentive) established to support microgeneration technology have poor cost efficiencies, and it is therefore strongly desirable that these schemes help achieve as many policy 'wins' as possible, whilst also ensuring that they secure

maximum possible carbon savings. As it stands, Government policy on microgeneration (as detailed in this strategy) achieves none of these wider goals as it fails to consider how microgeneration deployment can be targeted to achieve maximum gains, and minimise any negative impacts of the technologies involved.

Specifically the strategy as it stands fails to consider the following areas:

a) Maximising Potential Carbon Savings

A 'one size fits all approach' to the deployment of microgeneration technologies will not maximise carbon savings, and some degree of planning is strongly desirable to ensure appropriate technologies are directed to particular (geographical areas). This is especially important for microgeneration technologies where support payments under FiTs or RHI are 'deemed' rather than metered (i.e. according to potential rather than heat or power actually supplied). In order to gain maximum value for money microgeneration technologies need to generate appreciable quantities of heat and/or power.

Not all technologies are equally suitable across the whole of the UK. The most striking example of this is micro wind turbines: the Energy Saving Trust report 'Location, Location, Location'¹ made clear that in many situations micro wind turbines do not generate appreciable quantities of power, with particularly disappointing results in the urban environments where most people live and work. This technology needs to be focused on windy areas away from buildings that disrupt the airflow – in these situations the EST report suggested that very good results could be obtained.

Solar power is another example where geography has a significant impact on its suitability. The results obtained in the south of England for both solar thermal and solar photovoltaic systems are far better than in the north of England and Scotland – put simply the same system (with the same cost) will yield greater quantities of heat and power the further south it is installed.

Public information is one tool to ensure these factors are understood and acted upon, however policy in terms of national and local planning, and the targeting of support schemes, will ultimately be far more successful than simply appealing to people to understand the issues. The microgeneration strategy as it stands completely fails to appreciate these issues and the need for any kind of targeting of technologies to the most appropriate areas.

b) Minimising Local Environmental Impacts

Microgeneration technologies can have significant effects on local environmental factors such as air quality and noise. Again, there is currently no consideration of these impacts in the strategy. Whilst the planning system currently provides a degree of protection for local environmental quality, plans to expand permitted development to cover a wider range of microgeneration technologies look set to undermine this. Overall we are concerned that DECC appear to consider that local environmental quality concerns form a barrier to the greater use of microgeneration technologies that must be removed,

¹ See

www.energysavingtrust.org.uk/content/download/1834470/5058917/file/EST%20Location%20Location%20Location%20Report2.pdf

rather than actively considering how microgeneration can be targeted to both reduce carbon emissions and also to promote a high quality, healthy local environment for people and our natural resources – surely the ultimate goal of any environmental policy.

Noise - Many microgeneration technologies have the potential to cause noise problems, particularly micro wind turbines and air source heat pumps. The Government's noise policy statement², published last year by Defra, states the Government's noise policy aims as:

'Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

- *avoid significant adverse impacts on health and quality of life;*
- *mitigate and minimise adverse impacts on health and quality of life; and*
- *where possible, contribute to the improvement of health and quality of life'*

There is no consideration of these policy aims in the microgeneration strategy.

Happily the locations where micro wind turbines and air source heat pumps have the greatest potential to cause noise problems are the densely populated urban areas where they have the lowest potential for carbon savings. In densely populated urban areas micro wind turbines often fail to produce appreciable quantities of power, whilst the carbon savings offered by air source heat pumps over widely available mains gas are marginal at best³. These technologies are best suited to rural areas where a better wind resource is available for turbines and there is space around buildings for optimum siting of air source heat pumps; natural gas availability is low and noise is far less likely to be an issue.

Passive microgeneration technologies such as solar (thermal and photovoltaic) are conversely well suited to the urban environment, producing significant carbon savings whilst also having no impact on (or even reducing) noise in these environments.

Air Quality - Biomass burning has the potential to significantly impact on air quality. The Government's policy aim for air quality, as stated in the coalition agreement is to 'Work towards full compliance with European Air Quality Standards'. These standards are legally binding, and enforceable through the European courts. Modelling by Defra has suggested that an unconstrained increase in the use of biomass burning could have a significant negative impact on air quality. In a 2009 letter to all local authority chief executives (in England and Wales)⁴ the then Defra and DECC Minister Lord Hunt explained that:

'Potential conflicts between air quality and climate goals can be avoided through:

- *The use of high quality, low emission plant*
- *Prioritising replacement of old coal and oil fired plant with high quality wood fired plant (which may actually benefit air quality)*
- *Prioritising off gas grid areas away from densely populated urban areas'*

² See www.defra.gov.uk/environment/quality/noise/policy/documents/noise-policy.pdf

³ See www.energysavingtrust.org.uk/Generate-your-own-energy/Air-source-heat-pumps

⁴ A copy of this letter is attached to this response

Again, this policy is not considered at all in the microgeneration strategy.

Happily in some areas biomass can actually help to improve air quality, if it replaces old coal and oil fired heating in locations where mains gas is not available. Passive microgeneration technologies such as solar thermal can also help to improve air quality in the urban environment as they reduce the need for combustion appliances such as boilers to be used.

c) Reducing Fuel Poverty

The Government has a target that 'by 22 November 2016, as far as is reasonably practicable, no person in England should have to live in fuel poverty'⁵. However, in recent years rising fuel prices have hampered the Government's commendable aims to tackle this problem.

Microgeneration technologies present a considerable opportunity to tackle fuel poverty by providing a permanent source of free or low cost energy for fuel for poor households. They are particularly suitable for 'hard to treat' homes where it is difficult to apply conventional energy efficiency measures such as loft and cavity wall insulation, and high efficiency boilers.

There is no consideration of how microgeneration technologies might be used to tackle fuel poverty in the current strategy document, representing a missed opportunity to tie together these policy aims. Currently the evidence available suggests that take-up of Government incentives through the Feed in Tariffs is predominately coming from large companies (solar farms, etc) and owner occupiers able to access the necessary capital funding, rather than fuel poor households.

3. Contact Us

If you require any further information on the views expressed in this response please contact:

Ed Dearnley
Policy Officer
01273 878771
ed.dearnley@environmental-protection.org.uk

Address

Environmental Protection UK
44 Grand Parade
Brighton
BN2 9QA

⁵ See www.decc.gov.uk/en/content/cms/what_we_do/consumers/fuel_poverty/strategy/strategy.aspx