

BWEA Response: Wales Microgeneration Action Plan

BWEA would like to thank for the opportunity to respond to this consultation and welcomes the Welsh Assembly Government's support for microgeneration technologies such as small wind turbines, by launching a consultation on microgeneration.

British Wind Energy Association (BWEA) was established in 1978 and is the representative body for companies active in the UK wind energy and marine renewables market. BWEA's membership has grown rapidly in recent years and now consists of 310 companies. Over 20 of our member companies are involved in small scale wind (defined as turbines that are less than 50kW of installed capacity); either through research and development, manufacturing, installation or consultancy, and several others have an interest in this area.

This response has been prepared on behalf of the wind industry and BWEA members although individual member companies may provide their own individual responses in addition to this response.

Summary of key points

This response is divided to each individual action as listed in the consultation document. BWEA welcomes the launch of the Wales Microgeneration Action Plan and the initiatives WAG proposes. In general, BWEA believes that microgeneration and small wind energy systems in particular can have a key part to play in our energy supplies, by providing decentralised renewables energy at the point of demand; having the potential to reduce fuel poverty; and acting as an educational tool in our schools and community centres.

The key issue that needs to be addressed is the gap between the costs of microgeneration technologies such as small wind turbines to the consumer against the potential income they can generate. Microgeneration technologies are currently being produced in small volumes, and therefore are concomitantly more expensive to the private individual. If this gap can be effectively addressed, then volume can be built to meet consumer demand at sustainable prices and economies of scale achieved, thus bringing down costs through a virtuous cycle. Early high levels of support for pioneering installations can be phased out over time, until full market convergence is reached.

While technology developers have been forging ahead to produce new innovate designs, policy developments have been slow in comparison. BWEA believes that there is a case for an interim policy to be put in place quickly while the long-term structure of microgeneration support is determined. A combination of net metering, ROC award and capital grant support affords the best balance of simplicity, speed of introduction and compatibility with current arrangements for such an interim package. WAG must begin a process now to determine the measures that should be used in the longer term to see microgeneration technologies through to a sustainable market in Wales.

1 Detailed Answers to Proposed Actions

Action 1 - Actively promote (www.energysavingwales.org.uk) website portal and enhance its usefulness.

BWEA believes that further action is required by the WAG to promote TAN8 and the targets within it. It is essential to raise awareness of TAN8 within the renewables industry and the microgeneration industry to ensure that they are fully aware of the policy implications of TAN8. This could be undertaken for instance by co-operation between WAG and NFPs which have dedicated Welsh links, such as WWF, Friends of the Earth, BWEA and the Centre for Alternative Technology.

Action 2 - Ensure that the DTI's promotional campaign is, in part, focussed on Wales and is relevant to different communities (urban, rural, mining valley, and coastal).

BWEA believes that co-operation between the Welsh and the English Governments is crucial in promoting microgeneration. Therefore BWEA would urge WAG to work closely with the Department of Trade and Industry (DTI) to ensure that promotional work on microgeneration also focuses on Wales. Furthermore, it will be essential that WAG will co-operate with DTI and have clear knowledge on departmental responsibilities in this area of work.

Action 3 - Introduce bilingual modules on renewable energy, including microgeneration, in the Welsh National curriculum.

As it stands at present the national curriculum in Wales is separate from that in England, and therefore different departments are involved in both Wales and in England. Hence it is critical that when action is taken in this area, the education department in Wales will incorporate renewables in the Welsh national curriculum.

BWEA urges Energy Wales to work with the DTI to ensure that the Department of Education (Estyn Wgec) is fully aware of all the issues relating to microgeneration. There is also a call for co-ordination and communicating the message on microgeneration and its educational potential across from one government department to another. In England for instance, DTI together with the Department for Education and Skills (DFES) is proposing a renewables campaign for schools, to which both departments have committed to. BWEA would encourage similar co-operation and co-ordination between different government departments also in Wales in order to utilise the full potential of using schools as catalysts for microgeneration.

Action 4 - Further develop interaction and dialogue with not for profit organisations (NFPs) involved in renewable energy and microgeneration.

BWEA believes that before NFPs are involved in such work, WAG needs to ensure that action 3 is undertaken properly and links established between relevant government departments. BWEA would for instance welcome the formation of a Steering Committee involving NFPs, Energy Wales, Department of Education,

WAG, and the microgeneration industry to fully utilise expertise in the microgeneration and educational sector.

Action 5 - Encourage the establishment of standards and a rating system for microgeneration systems.

The Low Carbon Buildings Programme (LCBP), which replaced Clear Skies and the PV Major Demonstration funding programmes in England, Wales and Northern Ireland in April 2006, will incorporate a new accreditation programme. This programme is expected to be fully operation by the end of 2006 and will cover all microgeneration technologies.

Furthermore, the Renewable Energy Association (REA) is developing a Code of Conduct assurance scheme to the microgeneration sector, with the objective of creating a not-for-profit consumer confidence scheme to which microgeneration installers and suppliers can sign up to. It is essential that the Wales Consumer Council is aware of both the LCBP accreditation programme, as well as the REA's Code of Conduct work, so that overlap of similar work taking place in Wales can be avoided and that these two programmes also incorporate the microgeneration sector in Wales.

Action 6 - Encourage community groups to take advantage of grants such as those under the WAG Objective 1 and low carbon building programmes

BWEA would welcome more renewable energy projects under the WAG Objective 1 scheme (European Structural Funds) and its future replacement. Furthermore, BWEA would encourage a greater proportion from European Structural funds allocated to Wales to be given to renewable energy and energy efficiency projects.

Action 7 - The Carbon Trust to encourage increased take-up of the interest free loan scheme for SMEs in order to implement more low carbon technologies.

BWEA fully supports increased take-up of loans under the Carbon Trust, however, these need to be promoted through the Business Eye and other WAG appointed business services in Wales to give this scheme greater awareness amongst SME.

Action 8 - Establish a green energy cluster for Welsh SMEs involved in manufacturing and installing microgeneration systems.
Action 9 - Increase efforts to support producers of microgeneration equipment in Wales and to attract new producers.

BWEA believes that details of the cluster must be publicly available. Furthermore WAG must actively seek to involve manufacturers outside Wales with an investment drive, with the aim of encouraging them to establish an installer infrastructure in Wales. BWEA welcomes the proposed initiative to get manufacturers under one cluster; however there is a danger that fragmentation of the overall UK effort could lead to some development of a manufacturer base who are each too small to compete on a global basis. Therefore the WAG should

encourage inward investment whilst taking care in developing a Welsh-specific micro-generation manufacturing sector.

BWEA would also welcome a drive to establish microgeneration in public buildings to create a viable market in Wales for this sector.

Furthermore, WAG could encourage public bodies such as schools, hospitals and universities to integrate microgeneration to create viable market, drive investment and lead by example to their local communities and key stakeholders.

Action 10 - Provide opportunities and incentives for improvement of skills and knowledge of plumbers, electricians, builders, surveyors, and others involved in installing and assessing microgeneration systems, including planners.

BWEA welcomes training initiatives and the inclusion of these in further education colleges (this requires DELLS & DEIN involvement). There is also a need to identify vocational skills which would be required and expected to be introduced in any possible future training.

Action 11 – Encourage publications used by the building trade to incorporate articles on microgeneration written by authorities in the field.

In addition to publications, BWEA would encourage WAG together with relevant educational institutions to organise workshops and seminars aimed to the building trade to raise their awareness on microgeneration. The workshops could be used to mobilise this industry to take microgeneration into consideration by providing them the opportunity to see working installations of various microgeneration technologies and their potential.

Action 12 – Consider whether additional planning guidance is needed on the installation procedures for microgeneration in residential and non-residential developments.

BWEA considers that the guidance on microgeneration provided by TAN8 should go further, and would welcome additional planning guidance for microgeneration in Wales, in the form of a 'technical annex' or similar accompanying supplementary guidance to TAN8. Merton Borough Council was the first council in England to introduce a 10% of onsite renewable energy generation requirement in new built projects, and other councils are following suit, however throughout the UK there is variation between Local Planning Authorities approach towards implementing such policies, therefore ambitious and clear policy is required to ensure greater implementation of planning policies that require onsite generation.

Planning Policy Statement 22 (PPS) in England proposes that local planning authorities may consider implementing policies for the requirement of onsite generation, however the requirement for local authorities to adopt such a policy should be mandatory, and it may be the case that PPS22 will be reviewed. In Scotland, policy framework for renewable energy is set out in National Planning

Policy Guideline (NPPG) 6: Renewable Energy Developments and in Securing a Renewable Future: Scotland's Renewable Energy. NPPG 6 is being reviewed at present; however an additional guide for microrenewables (wind, solar thermal, photovoltaic, heat pumps and biomass technologies) was published in May 2006. Planning Advice Note (PAN) 45: Renewable Energy Technologies supports the policies in NPPG 6 by providing information and best practice on renewables developments, particularly larger installations such as wind farms and waste to energy plants and includes an Annex on microrenewables (wind, solar thermal, photovoltaic, heat pumps and biomass). This document explains how the planning system can support the microrenewables industry and it seeks to encourage the take up of these technologies "*in a way that protects the environmental quality of urban and rural areas*". See Annex A for more details.

BWEA believes that WAG could give stronger direction to local authorities to establish microgeneration targets, as has been the case in England. Furthermore, BWEA believes that in order to show that WAG is serious about its commitment to sustainable development, renewables and microgeneration should be included across all its policies.

Furthermore, both English Government and the Scottish Executive are reviewing their planning policy regarding microgeneration; in England the General Permitted Development Order is under review to make it easier for microgeneration technologies to go through the planning system.

Action 13 – Ensure there are adequate provisions in Wales for training qualified, certificated home inspectors.

BWEA supports this action. See further answers to Action 10 and 11. Furthermore, BWEA believes that as public bodies, training centres can demonstrate best practice in the installation of microgeneration by leading by example.

Action 14 – Identify opportunities within stock improvement programmes where fuel-poor households would benefit from installation of microgeneration.

BWEA supports the use of microgeneration in alleviating fuel poverty and using for instance opportunities from the European Structural funds to help fuel poor communities in Wales. Organisations such as National Energy Action (NEA) Wales are work towards alleviating fuel poverty in Wales and BWEA would urge WAG to co-ordinate with NEA Wales regarding creating programmes that install microgeneration at fuel poor households. Furthermore, BWEA would welcome any opportunities also within Community First programmes, as well as the Head of the Valleys programmes.

Action 15 – Encourage ESCOs in Wales to consider microgeneration systems along with other means of producing low-carbon heat and electricity.

BWEA supports the introduction of energy service companies in Wales.

Action 16 – Identify potential community, or other larger-scale schemes where microgeneration would be effective in producing heat or CHP.

BWEA supports the identification of community and large-scale schemes, particularly in public buildings such as schools, hospitals and community centres as these can lead by example in encouraging the uptake of microgeneration.

Action 17 – Continue to support the development and application of high design standards in construction, including the appropriate installation of microgeneration systems.

BWEA supports the development of high design and installation standards of microgeneration systems. BWEA is in the process of developing Health & safety Guidelines for the small wind energy sector, therefore ensuring that BWEA members install their technologies in a respectable manner. These guidelines are due to be published in July 2006 and will be available through www.bwea.com.

Action 18 – Share experience of installing microgeneration systems with other organisations, e.g. via seminars in different parts of Wales. Promote greater uptake in the public sector.

BWEA believes that large public events which are sponsored by WAG could demonstrate microgeneration best practice and raise awareness of the technologies. For example events such as the Royal Welsh Show and the National Eisteddfod Show would be ideal events to utilise microgeneration installations. These events attract several public bodies which are funded by WAG, and could therefore act as ideal platforms to provide details on available microgeneration technologies, training courses and installers.

Action 19 - Assess the feasibility of introducing more microgeneration systems into schools.

Action 20 - Increase the energy efficiency, and the appropriate application of microgeneration systems, in NHS buildings across Wales.

BWEA supports the introduction of microgeneration systems in schools as they are ideal places in raising awareness of the technologies and energy use amongst children and subsequently their parents. BWEA would also support the installation of microgeneration technologies in all public buildings such as universities, government offices, NHS buildings and other community centres.

Action 21 – Encourage research into renewable/low-carbon energy issues, including microgeneration.

BWEA supports this initiative and the utilisation of institutions such as Energy Technium in researching renewable and low carbon technologies. If there is WERC established, greater proportion of investment is needed in R&D in the energy field

Action 22 – Consider, as a priority, the future potential of new microgeneration technologies and explore opportunities for commercialisation.

BWEA believes that greater proportion of investment should be directed to microgeneration and would urge DEIN to actively recruit knowledge-based businesses to encourage them to establish themselves in Wales. Institutions such as Energy Technium and WERC must work together with organisations such as the Knowledge Enterprise Funds (KEF) scheme for universities to establish connections between energy research and businesses.

2 Answers to specific questions

Increase the demand for microgeneration

Q1: What additional actions, and by whom, would help to achieve the outcomes?

See answer to Q2.

Q2: What should be the priority for these actions?

Campaign for schools

- Schools can act as great awareness building places. There should be an aim to get microgeneration and renewables to the Welsh national curriculum
- BWEA would encourage WAG to set a specific target for Wales whereby a certain amount of schools would have microgeneration by 2010, 2015 and 2020 for example.

Installation of microgeneration at WAG estates

- WAG can influence by its own actions and install microgeneration at its own estates to raise awareness and encourage take-up of these technologies.

Q3: What would be appropriate indicators for success and how could we measure them?

Greater take up of microgeneration in public buildings, schools and the private sector and the number of microgenerators installed and total generating capacity by 2010 (and in the future by 2015 and 2020) – these numbers should be set during the process of defining longer-term policy for the sector, including:

- Percentage of households and businesses with installed microgeneration technologies
- Number of Wales-based manufacturers
- Number of Wales-manufactured technologies vs. installed numbers
- Number of exported small scale turbines and other microgeneration technologies
- Reduction in CO₂ emissions from buildings with microgeneration

Supporting businesses installing microgeneration

Q4: What additional actions, and by whom, would help to establish a vibrant microgeneration industry in Wales?

WAG to create market in public sphere first.

Q5: What would be the best way of encouraging the building trade to become competent in microgeneration technologies?

Encourage microgeneration and vocational training in Welsh further education colleges.

Q6. How could planning guidance be modified to encourage the uptake of microgeneration?

Planning guidance at the very least should adopt what England has adopted within PPS22, as well as provide planning guidance for the microgeneration sector. Both the English Government and the Scottish Executive are reviewing their planning policy regarding microgeneration, as well as permitted development rights orders to make it easier for microgeneration technologies to go through the planning system. Therefore BWEA would advise that any guidance on microgeneration must be in line with the review to the England and Wales General Permitted Development Order.

Promoting microgeneration in different sectors

Q7: How else can we demonstrate that microgeneration is appropriate for our homes, schools, businesses etc.?

By encouraging the installation of microgeneration in public buildings across Wales.

Q8: How should the actions be prioritised?

See Q2.

Q9: How should success be measured?

By the amount of microgeneration installed; the number of people in fuel poverty coming out of fuel poverty by means of microgeneration.

Q10: How could more champions be found and supported to promote microgeneration in different sectors?

BWEA believes that large public events which are sponsored by WAG could demonstrate microgeneration best practice and raise awareness of the technologies. For example events such as the Royal Welsh Show and the National Eisteddfod Show would be ideal events to utilise microgeneration installations. These events attract several public bodies which are funded by WAG, and could therefore act as ideal platforms to provide details on available microgeneration technologies, training courses and installers.

Addressing R&D needs in microgeneration

Q11: How could we strengthen the relevant Wales R&D base?

Increase investment in R&D and have greater co-operation between different strands of R&D in Wales. See Action 22.

Q12: How could we encourage more commercialisation in Wales of good new microgeneration concepts?

BWEA believes that encouraging business incubators from the WERC would lead to more commercialisation of microgeneration in Wales. Furthermore, BWEA would welcome WAG to encourage businesses outside Wales to come and invest in Wales.

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Annex A

Small scale renewables and PPS22

Planning Policy Statement 22: Renewable Energy (PPS22) for England refers to small scale renewables several times, summary of which are quoted below.

Key principles (p.8)

(vi) Small-scale projects can provide a limited but valuable contribution to overall outputs of renewable energy and to meeting energy needs both locally and nationally. Planning authorities should not therefore reject planning applications simply because the level of output is small.

National Designations (p.11)

12....Small-scale developments should be permitted within areas such as National Parks, Areas of Outstanding Natural Beauty and Heritage Coasts provided that there is no significant environmental detriment to the area concerned.

OTHER CONSIDERATIONS (p.12)

18. Small Scale Renewable Energy Developments

Local planning authorities and developers should consider the opportunity for incorporating renewable energy projects in all new developments. Small scale renewable energy schemes utilising technologies such as solar panels, Biomass heating, small scale wind turbines, photovoltaic cells and combined heat and power schemes can be incorporated both into new developments and some existing buildings. Local planning authorities should specifically encourage such schemes through positively expressed policies in local development documents.

The full PPS22 document is available to download from www.odpm.gov.uk/index.asp?id=1143909.

Planning for Micro Renewables Annex to PAN 45 Renewable Energy Technologies

The Scottish Executive published its guide on planning for microrenewables in May 2006 to encourage the take up of these technologies in Scotland. The Scottish Executive recognises that microrenewables can have a key role in job creation, energy security and has positive educational and promotional value. Furthermore, the Executive has stated that *"increased use of renewable energy, including micro-renewables, can make an important contribution to efforts to reduce carbon emissions in support of climate change and renewable energy objectives."*

The guide concentrates on wind, solar thermal, photovoltaic, heat pumps and biomass technologies and is available to download from www.scotland.gov.uk/Publications/2006/04/21130424/0.

