RAMBLERS' ASSOCIATION SCOTLAND

ENERGY POLICY STATEMENT

23 June 2006

Summary
Global climate change is an issue which needs to be addressed and addressed now. But care must be taken when meeting obligations to reduce emissions that environmental qualities enjoyed by many are not destroyed in the process.

The main issues that the Ramblers' Association Scotland finds with the implementation of current renewable energy policy are as follows:

- Government policy is focussing too much on supporting renewable electricity generation through one technology - large-scale, land based wind turbine developments.

- Modern wind turbines are now too large to be able to fit comfortably into most landscapes, visually dominating surrounding views.

- Upland habitats are often sensitive to change and slow to recover, displaying a lasting legacy of visual scars.

- Landscape is an essential consideration when striking a balance between conserving the natural and cultural heritage, and using it as an economic resource.

- Damaging upland landscapes with heavy engineering projects like wind turbines must surely be seen as inappropriate.

In order to address the negative landscape impacts we believe that:

- There is no need to follow this course in order to meet obligations to reduce greenhouse gas emissions. A range of options is open to the Government and choices can be made to balance the means employed to address carbon emissions.

- Energy conservation coupled with energy efficiency is the most sustainable option for the long term. There are means available which can be applied now to make major savings in carbon emissions, more government action is needed to stimulate this.

- Planning guidance has a key role in setting the framework for development, with criteria needed to guide large wind turbine developments well offshore, while supporting small-scale domestic or community schemes which satisfy local electricity needs.

- There is an urgent need for fundamental changes in the financial incentives driving development of renewable energy technologies – The Renewables Obligation needs to be reformed to reduce support for large-scale onshore wind turbine developments while increasing support for a wider range of technologies.

- The electricity grid system needs realigning to accommodate much more decentralised generation, with subsea cables being the preferred option for transporting power from remote generators to existing high voltage transmission lines near to centres of demand.

In conclusion, Government targets for electricity generation and reductions in carbon emissions can be met without having a widespread visual impact on the scenic value of Scotland's landscape.

INTRODUCTION

1. Ramblers' Association Scotland recognises the problems associated with climate change and supports appropriate action to reduce carbon emissions. We support the promotion of the sustainable energy technologies, and in particular, technologies which are not environmentally damaging. However, given the landscape and visual impact of some renewable technologies, we would support a careful and responsible attitude to their development which takes other environmental issues into consideration, as well as carbon abatement.

2. We welcome the leading role that the UK Government has played in drawing international attention to the problems arising from climate change. Equally important is the opportunity within the UK to develop a very wide range of energy generation systems. Increasing the contribution to overall energy supply from renewable technologies is desirable, but care must be taken to avoid focussing on any one technology.

3. A diverse range of technologies is required with more investment needed for microgeneration and biomass technologies, along with offshore technologies. This needs to be combined with a massive improvement in the way that we use energy, investing in energy efficiency and conservation, as well as in demand reduction. All must be set within a context that recognises the values inherent in the Scottish landscape, ensuring that these are cherished, not despoiled.

4. We note that the changes advocated in this policy statement will not detract from the Scottish Executive's 2010 and 2020 targets for renewable energy development. The Enterprise Minister has indicated that sufficient approvals have already been given to meet the 2010 target of 18% of electricity generated from renewable sources by 2010, and that the 2020 target is to be met through the development of a range of technologies. The Scottish Executive therefore has the time available to make the changes proposed in this policy statement in order to meet the 2020 target in ways that command widespread public support.

CONTEXT

5. Since the UK Government's Energy White Paper was produced in 2003, the effort to reduce CO_2 emissions has been mainly focussed on electricity generation. The Government's advisers, the Sustainable Development Commission, emphasised the importance of energy saving in a report released in May 2005 and said it was "essential to reduce demand on the grid" and that demand management was perhaps "the most cost-effective way of meeting our obligations to cut greenhouse gas emission". However, measures to manage energy demand are seriously lagging behind wind turbine development.

6. There has been much talk of the need for a diverse portfolio of renewable energy technologies, yet Government financial instruments to support renewable energy projects, in the shape of Renewables Obligation Certificates, have mainly had the effect of promoting on-shore wind turbines, to the virtual exclusion of other renewable technologies. The Royal Society of Edinburgh has stated their profound doubts about the rationale and validity of the ROCs system.

7. This Government policy which encourages excessive development of giant onshore wind turbines has been criticised by parliamentary watchdog committees (the National Audit Office and the Public Accounts Committee) as being the most expensive way to tackle carbon emissions given the range of options available to Government.

8. Scotland has abundant resources for renewable energy production. Scotland also has open landscapes of world-wide renown. The landscape is a precious resource which needs protection from over-exploitation. The European Landscape Convention, to which the UK is a signatory, states that landscape is an essential consideration when striking a balance between conserving the natural and cultural heritage, and using it as an economic resource.

9. The Scottish Executive have set an aspirational target of 40% of Scotland's electricity needs to be supplied from renewable sources by 2020. This has been translated as 6 gigawatts of installed capacity.

The National Grid Company have received applications for connection to the electricity grid amounting to 14 gigawatts, which is well in excess of what is required.

10. In addition, the size of commercial wind turbines has been increasing. Most existing land-based wind turbines are between 50m and 70m to the vertical blade tip. Recent land-based developments are greater than 100m tall, with applications for 125m and 135m currently being submitted, in addition to proposals for 150m high turbines offshore. Couple this with the number of projects under consideration and there is the real potential for a massive visual impact across Scotland's landscapes.

11. The Ramblers' Association Scotland is concerned that current policy direction will have an adverse impact on our countryside. There are alternative means of achieving carbon emissions reductions without the intrusion of industrial-scale wind turbine developments into Scotland's landscapes. Arguments about energy gaps and climate change have the potential to justify just about any generating method. Policy direction needs to be applied in the most effective and efficient way, with the financial incentives in place to assist development.

12. We believe that land based wind turbine systems should be primarily designed for meeting local energy needs: turbines that are small in scale and in fields and on roofs, not in the hills. New incentives are needed to provide an entirely different basis for encouraging wind turbine development, with preference given to small scale developments on land, with large scale developments only favoured in offshore locations. In future we believe that most land-based wind turbines should be less than 50 metres in height. Large scale generation should be achieved primarily through offshore wind turbines, 100 metres high or more.

13. By changing its current approach the UK and Scottish Governments will be able to demonstrate to many other countries that climate change can be tackled successfully in ways which are sensitive to the widest range of environmental and community interests.

ENERGY CONSERVATION

14. We support the Government's Sustainable Development Commission in its emphasis on energy saving and the need to reduce demand on the national grid. It is increasingly being recognised that energy efficiency measures and reducing energy demand on the electricity grid are probably the most cost-effective means of reducing carbon emissions.

15. The UK Government and the Devolved Administrations have a key role in setting Building Regulations. These should be adjusted to ensure that we have the highest European standards of insulation and energy efficiency in new build housing. Policies focussing on energy conservation across all sectors may be the most effective means of reducing CO_2 emissions for the longer term.

16. Installation of solar panels (solar heating or photovoltaic) and increased levels of insulation along with other energy saving measures, such as promoting the installation of Combined Heat and Power systems, on all new buildings would greatly contribute to reducing energy demand. This would have to be done through both regulation and guidance, along with financial incentives to encourage uptake, with Local Authorities having a key role to play. Co-operation between the UK Government and the Scottish Executive would greatly enhance this.

MICROGENERATION

17. There is an urgent need to adjust the policy and financial incentives that support energy generation so that much more priority is given to small-scale developments. This includes microgeneration schemes such as small turbines on roofs and gardens, solar heating and photovoltaic panels, and ground-source heat pumps. In addition to improved financial incentives, there is a strong case for encouraging small-scale developments through redefining the Permitted Development Rights in the planning system. Subject to criteria to limit noise and visual impact, this would facilitate much greater uptake of microgeneration technologies in domestic and business properties

18. Small wind turbines close to local communities, farm and croft areas can help toward meeting local electricity needs and reducing demand on the national grid. Local grid connections and new metering

arrangements may be required in such circumstances to utilise any electricity that is surplus to local requirements. By giving much more priority to small scale wind turbine developments the financial benefits from renewable energy development will be spread much more widely, to individuals and local communities, than through the present arrangements, which appear to concentrate community financial benefits in the immediate location of large-scale commercial operations.

RENEWABLE HEATING

19. A large percentage of domestic energy use goes toward heating buildings. Ground source heat pumps can play an effective role in space heating, where combined with high insulation standards and design for passive solar gain. Biomass also has a role to play in rural areas in reducing electricity use, especially in conjunction with Combined Heat and Power systems. Biomass planting schemes, where they involve the growing of woody material, should come under forestry guidelines to limit any potential adverse environmental impacts.

LARGE-SCALE GENERATION

20. It is inevitable that some large commercial renewable energy developments will be required to contribute low-carbon electricity generation to meet Government targets. There should be based more on offshore renewable energy development, through wind, wave or tidal provisions. Offshore wind turbines are more efficient at generating electricity than onshore turbine developments and potentially have less visual impact. Such off-shore developments must be subject to an Environmental Impact Assessment (EIA).

21. Unfortunately present Government policy is excessively focussed on supporting renewables through large scale, land based windfarms. This is leading to the industrialisation of the landscape in many parts of Scotland and is eroding public support for the development of renewable energy systems. There is a need for fundamental changes in the planning guidance and the financial incentives that support renewable energy developments.

22. One problem of many renewable technologies is their inability to deliver reliable and predictable quantities of power on demand due to their dependence on the vagaries of the weather. Back up generation is required to maintain supply. Conventional fossil fuel generators fitted with carbon capture and sequestration technology for removing the carbon dioxide generated by the burning of fossil fuels such as coal and gas must therefore be an essential part of the electricity generating mix. This, combined with the expansion of biomass, hydrogen and tidal generation systems, should provide for the base load generation required in addition to the intermittent energy sources based on wind, solar and wave.

23. A significant proportion of electricity generation in the United Kingdom comes at present from nuclear generation and a future government will, in due course, have to consider the replacement of existing nuclear power stations as they become obsolete. This includes existing nuclear stations in Scotland. We recognise that nuclear power is one of a range of possible energy supply options but see no need at the present time for further nuclear power station development on the grounds of cost, safety, security and the potential long term consequences for future generations. Investment in nuclear power is likely to diminish political and financial commitment to reducing energy consumption and developing the wide suite of alternative energy generation options. This would be most undesirable.

ENERGY TRANSMISSION

24. We consider that there is the need for a radical reappraisal of what is needed in terms of future national grid development. In particular we feel that there should be more emphasis given to the generation of renewable energy close to the areas of greatest use, reducing the need for the development of inefficient, long distance, land based transmission infrastructure. Where new long distance transmission has to be provided it should be primarily for energy sources that are supplying substantial amounts of power in as reliable and continuous a way as possible and not for intermittent supply, as results from land based turbines.

25. We believe that most new long distance transmission in the future should be based on sub-sea cables, not through the construction of new overland routes or by increasing the height of existing pylons. This will also facilitate the development of offshore wind turbine developments and wave and tidal

systems. Where new connections are required on land to integrate sub-sea cables with the national grid, these overland connections should be placed underground wherever possible.

26. To remove uncertainty in the electricity market about how society should meet its energy needs, a strategic plan for renewable energy development must identify how much wind based renewable energy is likely to be required in a future suite of renewable technologies and to what extent this is to be based on offshore or onshore wind turbine development. The plan should include, in relation to onshore development, the contribution expected from turbines located on private and public buildings, located around farm and croft buildings and from small scale community based developments. This should also include the effects of necessary changes to electricity transmission and distribution networks.

PLANNING GUIDANCE

27. Too many onshore wind turbine applications today contain turbines that are far to large to be accommodated in the landscape or are located on land which is inappropriate for industrial scale development. There is a clear difference between developments which meet local need and those which are intended primarily to supply the distribution network. Small-scale domestic or community schemes will generally be less visually intrusive. There is a need for the Scottish Executive to set guidance to indicate that on land there should be constraints on wind turbine size, with more consideration given to small turbines, ideally less than 50m tall. Offshore, it would be appropriate to encourage the development of wind turbines of 2 to 5 megawatt capacity.

28. The Scottish Executive and Local Planning Authorities need to work to planning criteria along the following lines:

- Wind turbine developments should be located primarily within areas of land which have been subject to cultivation or disturbance in recent times, i.e. arable land, re-seeded pasture or afforested land, or brownfield or industrial sites.

- In areas acceptable for wind turbine developments, presumptions against development should apply where turbine height or extent is not in scale with the surrounding landscape character.

- Wind turbine developments should be designed so that turbines do not normally breach the skyline when viewed from their zones of visual influence.

- Windfarm developments should only be permitted where it can be demonstrated that there is no significant adverse impact on the enjoyment of outdoor recreation, habitats and species of nature conservation value, or on archaeological or historical features.

RESTITUTION

29. Restitution bonds are an integral part of the lifespan of any development, and need to be in place before the start of any approved project, before development commences, to ensure that full landscape and habitat restoration can be undertaken at the end of the project's lifespan. Restoration costs will need be reviewed at periods throughout the lifetime of the project to ensure sufficient funds will be available to cover reinstatement.

ENVIRONMENTAL MODIFICATION

30. Developments which involve significant modification of the natural environment or landscape, e.g. river and loch systems, are generally inappropriate, unless such features have already been subject to significant modification by industrial-scale developments like hydro-electric or water supply schemes.

ADDITIONAL INCENTIVES IN REMOTE AREAS AND SOCIALLY DEPRIVED AREAS

31. Renewable energy policy needs to include the provision of additional financial incentives and advice to those living in remote areas of Scotland, especially in island communities, and to those parts of Scotland's towns and cities which are suffering from social deprivation. The objective should be to encourage individual householders, businesses and local communities to become more self sufficient in energy use through the development of small-scale renewable energy schemes, including wind turbine developments. Such support may be regarded as part of regional development policy in remote areas and

as part of social policy in deprived areas. In both situations the aim would be to substantially reduce energy costs, both through energy conservation and local generation, and thereby providing significant environmental and economic benefits direct to individuals and local communities.

TRANSPORT

32. With regard to transport there needs to be more investment and support for sustainable transport initiatives in preference to increasing road capacity and domestic aviation developments. In addition, there is a requirement to improve the provision and quality of routes for walking and cycling to offer alternatives to motorised transport for short distance journeys. Reducing the fossil carbon content of transport fuel and increasing the fuel efficiency of vehicles is necessary, but it is not enough on its own, and links must be made with other government departments and agencies across the transport sector to offer alternative lower-carbon means of travelling

SCOTTISH NATIONAL FORUM

33. A national forum is required, set up by the Scottish Executive, to discuss energy development and its relationship to environmental and transport policy. This forum would need the representation of all major stakeholders, including the full range of environmental interests as well as local community and local authority interests. The present consultative group, the Forum for Renewable Energy in Scotland (FREDS), is dominated by business interests and provides an unsatisfactory basis for stakeholder engagement. The remit of a national forum needs widening to include energy in all is aspects, not merely focussing on renewables.

UK GOVERNMENT POLICY REVIEW

34. A fundamental review of the planning and financial arrangements that underpin renewable energy developments is essential and overdue, especially the financial incentives associated with windfarm and wind turbine developments. Previous consultations have failed to produce the necessary outcome of a decrease in the support given to large scale onshore windfarm development and a proportional increase in the support for small scale wind turbine developments, offshore developments and alternative renewable technologies. A review needs also to examine the national grid requirements in the light of increasing opposition to land based large scale windfarm developments and increasing support for offshore developments.

UK LEGISLATION

35. Legislation needs to be introduced into the Westminster parliament to bring new controls and incentives to renewable energy development which take better account of environmental interests and the effective expenditure of public funds in support of renewable energy development.

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