

DEPARTMENT FOR BUSINESS
ENTERPRISE & REGULATORY REFORM

RENEWABLES ADVISORY BOARD
ANNUAL REPORT 2005-2006

Progress and Key Findings

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RENEWABLES ADVISORY BOARD

– CHAIRMAN’S FOREWORD

by Malcolm Wicks, Minister for Energy

I am extremely happy to once again be the Minister for Energy and Chairman of the Renewables Advisory Board, and as such I welcome this opportunity to introduce this, the third annual report, that summarises the work undertaken in the third and fourth years of the Board.

The Renewables Advisory Board continues to draw on the experience and expertise from within both the industry and Government departments, along with their respective agencies, to provide evidence based constructive advice to government on meeting our renewable energy objectives. It is also helping to improve our understanding of the barriers and obstacles that may be constraining the opportunities that are out there for the development and deployment of all renewables technology throughout the UK.

Renewables has remained a developing and progressive industry with a great many changes and developments during the two year period covered by this report. The Renewables Advisory Board have input constructive and well argued thoughts and ideas, including some fundamental changes proposed, such as the consultations on the the Renewables Obligation to improve its working, the Energy Review and the Energy White Paper “Meeting the Energy Challenge”.

The Board continues to work enthusiastically through its working groups, addressing some of the major issues and barriers facing the Government’s energy targets. Over the period covered by this report eight working groups have been active:

- Energy Policy
- Offshore Wind
- Unlocking Consents
- Planning
- Grid
- Marine
- Biomass and
- Microgeneration

I am truly impressed with this continued level of passion and commitment from those involved in the work of the Renewables Advisory Board. This has led to the development of solutions and new initiatives and ideas, many of which are set out in the following pages.

I remain pleased with the continued contribution that the Renewables Advisory Board is making and would like to thank all of the Members for their continued commitment and efforts in driving forward the renewables agenda.

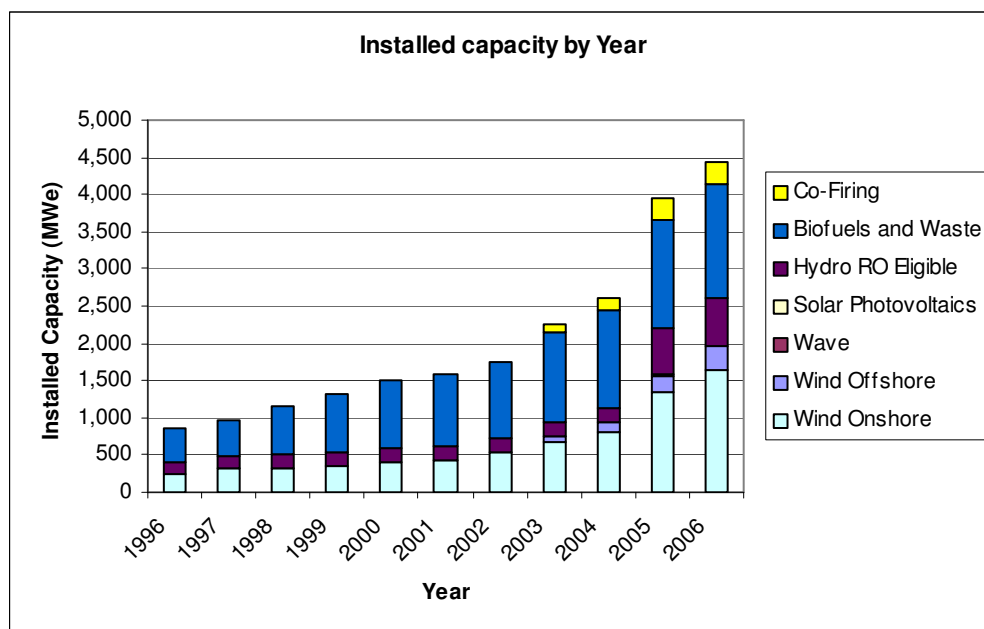
RENEWABLES ADVISORY BOARD

FOREWORD

by Alan Moore, Chairman of the Sector-Side

On 29th November 2005, the Prime Minister announced the launch of a Review of UK Energy Policy. The production of a co-ordinated response to the Energy Review was a priority for RAB at the start of 2006 and it is vital that the RAB-industry-Government partnership continues to operate effectively and address the key issues.

The Renewables Obligation (RO) has played a vital role in stimulating the renewables market and has proved effective in bringing forward the most mature and lowest cost renewable technologies, specifically onshore wind, landfill gas and co-fired biomass. An investment climate has been created that is substantially increasing the contribution from renewable energy to energy needs, at an affordable cost to consumers. Since the first year of the RO, there has been a three-fold increase in the number of Renewable Obligation Certificates (ROCs) generated. At the end of 2006, 4.6%¹ of UK electricity was generated from renewable sources (using the international definition of renewables).

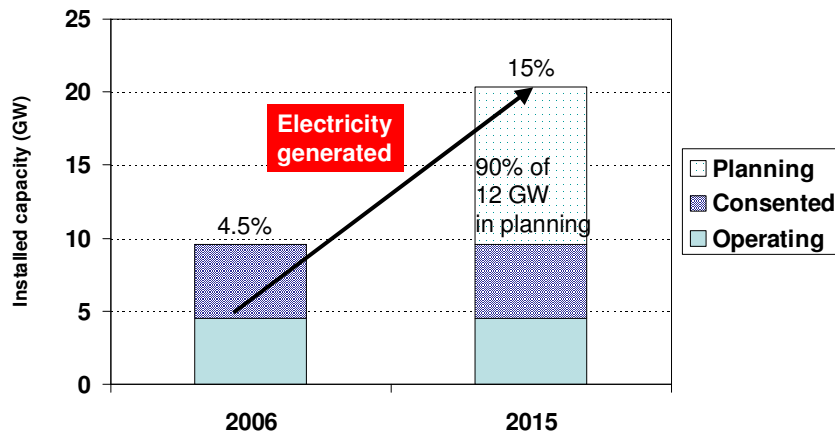


In reaching this position there has been construction of the first offshore wind projects (Barrow, Kentish Flats, North Hoyle and Scroby Sands). In addition, the first biomass plant (a 3MWe CHP plant at Balcas Ltd) has been commissioned under the Department for Business Enterprise and Regulatory Reform (BERR)'s Bioenergy Capital Grant Scheme, and construction is nearing completion on biomass projects on Teeside (Wilton 10, SembCorp Utilities (UK) Ltd), Eccleshall (Eccleshall Biomass Ltd), Port Talbot (Western Log Group Ltd) and Stevens Croft, Lockerbie (E.ON UK Plc).

¹ Energy Trends: June 2007 (BERR, URN 07/79b)

A fact often overlooked is the significant number of projects in the planning process (particularly onshore wind) that go a long way to meeting current targets. There is currently ~1.3GW under construction, a further 4.6GW that is consented (i.e. awaiting construction) and nearly 11.5GW of renewables in the consenting process. Planning and grid issues are delaying deployment of many of these projects, and RAB has continued to treat these as high priority issues for resolution.

Visible Projects to 2015



In responding to the consultation 'Reform of the Renewables Obligation & Statutory Consultation on the Renewables Obligation Order 2007', RAB strongly recommended that rather than band by technology, a small number of bands were created, with technologies then allocated to these bands, thereby removing the need for sub-bands.

RAB is pleased that the latest reform of the RO looks set to follow the multiple/fractional ROC model with bands based on technology groupings. This should lead to greater and faster installations of large-scale capacity from projects in advanced development, particularly offshore wind and dedicated biomass. In implementing the changes, it will be essential that the confidence of investors is retained in those technologies and projects already being deployed, and that confidence remains strong going forward.

In March 2007, the EU leaders accepted targets put forward by the European Commission ensuring that by 2020 emissions are reduced by 20% below 1990 levels, 20% of energy is from renewable sources and that biofuels make up 10% of transport fuels. A key piece of work for RAB in 2007 will be to critically assess, and make recommendations to ensure, the deliverability of these targets and provide Government with a realistic assessment and overview of the impacts for the UK's renewable energy industry.

As well as resolving grid and planning issues, we must ensure progress is maintained in solving aviation issues, the successful delivery of the offshore transmission regime, address cost reduction and deployment issues for offshore wind, better manage the wind turbine supply chain and start to consider support beyond the RO. Progress is being made but we

must maintain the pressure on these vital issues and the Board continues to do that as well as advise Government on how best to overcome these issues.

The work of the Board in 2007 will be focused on nine work streams that address the key issues and barriers to the Government's renewable energy targets. RAB has previously focused on renewable electricity generation, however, in 2007, focus will extend to providing advice to Government on implementation of its microgeneration and zero carbon home policies, and new Groups will be established to advise Government on the implementation of the Environmental Transformation Fund, and to examine the barriers to the use of renewable heat and related market issues, addressing all sizes from domestic to large industrial applications. A particular emphasis is to be placed on the appropriate use of CHP to maximise renewable benefits.

The work streams, jointly chaired by a BERR representative and an industry member, are:

#	Work Group	Sector-side Chair
1.	Energy Policy	David Still
2.	Grid	Kevin McCullough
3.	Planning	Chris Morris
4.	Offshore Wind	Sue Wheeler
5.	Marine (Wave & Tidal)	Andrew Mill
6.	Microgeneration	Matthew Spencer
7.	Biomass	David Williams
8.	Renewables Heat ^{New}	Mike Rolls
9.	Input to ETF ^{New}	Simon Roberts

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This report is being published as part of the work of the Sustainable Energy Policy Network².

² Sustainable Energy Policy Network (SEPN) - a network of policy units from across Government Departments, the devolved administrations, regulators and key delivery organisations that are jointly responsible for delivering the Energy White Paper.

WORKING GROUPS SUMMARY OF KEY FINDINGS, OUTPUTS & NEXT STEPS

ENERGY POLICY

Key Messages

- “The RO is central to the growth of renewables going forward but effectiveness requires robust delivery mechanisms for delivery of consents and grid connections” (RO Consultation Response³, December 2006)
- “If banded, RAB strongly recommends retaining the existing RO band (i.e. 1 ROC), with the creation of a new multiple ROC band for offshore wind and a new, fractional ROC band for co-firing” (RO Consultation Response, December 2006).

Next Steps

- The required outcomes from the Energy Review process are maintenance of investor support in the RO, continued deployment of the cheapest technologies and faster development of the next cheapest technology (offshore wind and biomass).
- Additional support is required for emerging energy technologies. Policy or capital grants are required in order for these technologies to progress.

OFFSHORE WIND

Key Messages

- Offshore wind is still key to delivering 2015 and 2020 targets.
- R&D and the benefits of learning through industry development are the two key areas that can have a significant influence on cost reduction.

Next Steps

- RAB will review the ‘banding proposals’ in the Energy White Paper to assess whether they are likely to provide sufficient support to guarantee mass deployment of offshore wind.
- RAB will formulate a plan for the future of offshore projects, with input from ongoing BERR, Crown Estate and BWEA initiatives.

³ <http://www.BERR.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/page16101.html>

PLANNING

Key Outputs

- Reports on community involvement/ benefit were completed:
 - Protocols for Public Engagement with Proposed Wind Energy Developments in the UK
 - A 'Toolkit' for community benefit from wind energy developments
 - Bankable models for community ownership of wind farms.

Next Steps

- RAB will continue to consider measures to support BERR in taking forward Energy Review recommendations on planning reform. The Planning Working Group (PWG) will progress, where appropriate, responses to the various consultations that BERR, Department for Communities and Local Government (CLG), Scottish Executive (SE) and Welsh Assembly have put forward. A key focus will be responding to the Planning White Paper.

GRID

Key Outputs

- Inputs to the various Ofgem Transmission Price Control Review (TPCR) consultations and the BERR Distributed Energy Call for Evidence Consultation.
- Discussions with NGET regarding grid access 'user commitment' arrangements and with the Electricity Networks Steering Group (ENSG)'s Transmission Working Group (TWG) regarding infrastructure development and grid access in Scotland.

Next Steps

- RAB will focus on:
 - Management of the BETTA Queue.
 - GB compliance with Article 7 of the EU Directive on Promoting Renewable Energy Connection.
 - Grid Code Compliance.
 - Long-term network access.

MARINE

Key Messages

- "RAB welcomes the concept of marine spatial planning, to play a more strategic approach to accounting for all activities and resources, as part of sustainable development" Defra Marine Bill Consultation Response, June 2006.
- "Consenting should remain the responsibility of BERR, as it is the department responsible for energy policy and its delivery" Defra Marine Bill Consultation Response, June 2006.

Next Steps

- Undertake a critical assessment of marine renewables industry, focusing on current development status of leading candidates.
- Prepare an evaluation of the reasons for the poor take-up of the Marine Renewables Deployment Fund (MRDF).

BIOMASS

Key Messages

- RAB anticipates that reducing the allowable biodegradable fraction of biomass fuels within the RO, from 98% to 90%, will be successful in bringing forward the deployment of significant dedicated biomass capacity.
- RAB proposes that for biomass projects over 50MW, the Government should consider sustainability accreditation (for imported biomass).

Next Steps

- The Biomass Strategy was published in May 2007. The Group will continue to provide advice to Government to help take forward current policy initiatives and the Biomass and Waste Strategies. The Group will input to the Energy White Paper bioenergy, co-firing and waste agendas as required.

MICROGENERATION

Key Outputs

- The Terms of Reference for a study to review the role of micro-generation in delivering zero carbon homes has been completed.
- A workshop has been held that produced a set of actions for RAB to take forward in areas where gaps exist in driving the delivery of government policy on microgeneration.

Next Steps

- To peer review route maps for the microgeneration technologies, starting with solar thermal.
- To undertake a study that assists in building the economic case for microgeneration.

ENERGY POLICY

Key Messages

- *“If the recommendations from RAB are followed, there is no reason why renewables cannot contribute 30% of electricity requirements by the year 2030”* (Energy Review Consultation Response⁴, April 2006)
- *“The RO is central to the growth of renewables going forward but effectiveness requires robust delivery mechanisms for delivery of consents and grid connections”* (RO Consultation Response⁴, December 2006)
- *“If banded, RAB strongly recommends retaining the existing RO band (i.e. 1 ROC), with the creation of a new multiple ROC band for offshore wind and a new, fractional ROC band for co-firing”* (RO Consultation Response, December 2006)

Background

On 29 November 2005, the Prime Minister announced the launch of a Review of UK energy policy. A priority for RAB was to respond to this Review ensuring that the case for renewables was addressed and offered realistic, evidence based projections to 2030, both in terms of technology and investment. Later in October 2006, the Government published a consultation document⁵ on proposals for changes to the Renewables Obligation (RO). These changes would provide differentiated support levels to different renewables technologies and give additional certainty on long-term Renewable Obligation Certificate (ROC) prices. The RAB Work Group published responses to the Energy Review and RO Consultation.

⁴ <http://www.BERR.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/page16101.html>

⁵ Reform of the Renewables Obligation & Statutory Consultation on the Renewables Obligation Order 2007

Progress

Energy review consultation response, April 2006

The response to the Energy Review demonstrated the potential contribution that renewable energy can make to the UK energy economy, looking at timescales between 2010 and 2030 and the associated benefits and costs.

The RAB also commissioned a supporting document, examining the role of renewable energy in improving security of supply, lowering financial risk for energy portfolios, and reducing electricity cost volatility and fuel costs for the UK. The report 'Renewable Energy Generation – supporting documentation for the RAB submission to the 2006 UK Energy Review⁶') highlighted the importance of the contribution that renewable energy can make to the country's security of supply. It provided a clear analysis of the issues surrounding backup and variability, and clearly stated the additional benefits gained from generation from renewable energy sources. The key recommendations to Government made by RAB in the response to the Energy 2006 Review can be found at <http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/page16101.html>.

RO consultation response, December 2006

A response to the consultation 'Reform of the Renewables Obligation & Statutory Consultation on the Renewables Obligation Order 2007' was published in December 2006. RAB welcomed the intent and spirit of the Consultation and its key principles of sustaining the RO, maintaining investor confidence and establishing more sustainable policies on biomass co-firing.

RAB is clear that in order to ensure the continued mass deployment of renewable energy technologies to help achieve a low carbon future for the UK and to keep pace with the targets set by Government, additional support must be provided to offshore wind. In RAB's view, this can best be achieved through a portfolio of measures, including measures outside of the RO, specifically planning reform and socialising offshore grid costs.

The latest reform of the RO must provide the opportunity for the deployment of the next cheapest mass technologies, whilst retaining the confidence of investors in those technologies and projects already being deployed. The continued effectiveness of the RO will only be realised if the delivery mechanisms for gaining consents and grid connection are robust.

Support additional to the RO will be needed to ensure the required level of deployment of offshore wind, either through recycling money from the NFPA auctions, the Environmental Transformation Fund or other mechanisms. However, if we are to assume that funding for the RO is limited to current levels, then the RAB believes that a 'banded obligation' has the potential to provide a workable solution and a mechanism by which additional support can be made available to offshore wind.

RAB has strong views on how banding should be implemented and these are summarised below:

- The Consultation proposed that bands were set by technology. However, RAB strongly recommends the creation of a small number of bands, with technologies then allocated to these bands; this approach would also remove the need for sub bands.

⁶ (<http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/page16101.html>)

- RAB strongly recommends retaining the existing RO band (i.e. 1 ROC), with the creation of a new multiple ROC band for offshore wind and a new, fractional ROC band for co-firing.
- RAB would support existing ROC support for dedicated biomass plant.
- RAB proposes that for biomass projects over 50MW, the Government should consider sustainability accreditation for imported biomass.
- There is serious concern that unrestricted or uncapped co-firing of any biomass could seriously affect the operation of the RO for other technologies. It is essential that Government understands the consequences of such a decision, and that it knows the real upper limits of generation capability from all co-firing plants.
- There is a strong view that co-firing overseas residues (i.e. palm kernel and olive residues) should not be incentivised through the RO as market distortions are already evident in diverting biomass resources away from developing economies towards the UK. Moreover, with the relatively low capital investment costs associated with most co-firing schemes, there is already an incentive on UK fossil fuel plant to reduce emissions through Phase 2 (2008-2012) of the EU Emissions Trading Scheme.
- RAB strongly maintains that emerging technologies should be supported through capital schemes. Where possible, the Government should consider a unified approach with devolved administrations for funding emerging technologies. The Environmental Transformation Fund should be used to subsidise 'hard to finance' technologies such as wave and tidal stream technologies.
- RAB supports the principle of grandfathering and agrees that projects that have incurred significant expenditure, in anticipation of present ROC values, must be grandfathered. Assuming that projects that are commissioned within two years of any announcement of banding changes, RAB proposes a starting date for grandfathering of April 2010 at the earliest.

Next Steps

The required outcomes from the Energy Review process are maintenance of investor support in the RO and continued deployment of the cheapest technologies and faster development of the next cheapest technology (offshore wind and biomass). Following publication of the Energy White Paper, the key issues for RAB to address will include:

- **Funding/RO banding**
Further detailed study work needs to be carried out when band levels are being set to ensure that there is a 'neutral' RO and that there is enough support to meet the 2020 aspirations of 20% renewable electricity generation.
- **Co-firing**
Co-firing has the potential to seriously compromise the RO if allowed to develop unchecked.
- **The deliverability of the 20% EU target by 2020**
RAB will undertake a realistic assessment/overview of the impacts and provide a short authoritative paper presenting an objective industry view.
- **Support for emerging technologies**
Additional support is required for these technologies. Policy (like building regulations) or capital grants are required for the emerging technologies to progress.

OFFSHORE WIND

Key Messages

- Offshore wind is still key to delivering 2015 and 2020 targets
- Economics and appropriate support systems continue to be challenging
- R&D and the benefits of learning through industry development are the two key areas that can have a significant influence on cost reduction

Background

The Offshore Wind Group (OSWG) is examining issues critical to the development of offshore wind projects necessary to achieve the renewable electricity targets in 2015 and 2020. The Group had an active programme of work in 2005 and early 2006, which:

- Looked at the economics for offshore wind developments.
- Reviewed the issues on the critical path for delivery of the Round 2 offshore wind projects.
- Prepared Case studies for the Thames Estuary and the Wash areas.
- Examined the Final Sums Liability (FSL) issue that affects the timing of grid reinforcement projects, and acceptable liabilities for project developers.
- Investigated the scope for cost reduction in the supply chain for offshore wind.
- Provided input to the Energy Review and the response to the RO consultation.

The results of all these work programmes fed into RAB's response to the Energy Review (April 2006), which expressed support for the idea of amending the way that support is distributed from the Renewable Obligation mechanism and further investment to support emerging technologies such as offshore wind.

Progress

The UK has significant potential for the rapid growth of generation of electricity from offshore wind power. Offshore wind has the potential to meet 4%⁷ of the Government's target to supply 10% of UK electricity from renewable energy sources by 2010, and is the only technology which can currently deliver at the scale required for the 2015 and 2020 targets. In 2006, the RAB work group continued to address the key issues of economics/ critical path for delivery of the Round 2 offshore wind projects and FSL.

⁷ <http://www.bwea.com/offshore/info.html>

Members of the OSWG (with the Finance & Investment Working Group) were also involved in the steering committee for a study with LEK Consultants on behalf of the Carbon Trust, which re-assessed the case for renewables and the structure of support mechanisms to deliver new technologies, with a specific focus on offshore wind and marine. The report 'Policy frameworks for renewables' was published in July 2006 (see www.carbontrust.co.uk). The discussion helped to clarify RAB's views on the Renewables Obligation and fed into the response to the Energy Review (see Energy Review Section).

In April 2006, ODE Ltd was commissioned to investigate the scope for cost reduction in the supply chain for offshore wind, with the specific objectives to estimate the future costs of offshore wind generation, to assess where cost reductions in offshore wind projects were most likely to be realised and to use the information gathered to estimate the timing, cost and deployment of future offshore wind generation.

A final report⁸ (and cost model) for this work has been completed; the report identified two key areas that would have a significant influence on cost reduction: these were R&D and the benefits of learning through industry development. Six parameters were identified as having the most significant effect on overall project costs: supply and demand, steel costs, copper costs, the effect of learning, research and development, and supply and demand of turbines.

Major savings can be realised if turbines are made of lighter more reliable materials and where turbine components such as gearboxes are developed to be more fatigue resistant. This latter development would lead to reductions in offshore operating and maintenance costs. The other significant areas worthy of R&D investment include foundations, access, transition piece and installation vessels.

The cost reductions from learning curves will only be realised if the industry actually progresses. This trend is based on the fact that for every doubling of installed capacity there is a 10% reduction in cost based on current plans. Further study was also conducted on the sensitivity of load factors to wind farm output and on the individual effects of the perceived trends on CAPEX. It was determined that a 15% change in load factor could lead to a 60% change in output and hence location of the wind farm is paramount and initial detailed study into the site wind profile by use of met masts is imperative.

The analysis of the trends indicated that the R&D and learning trends reduce the CAPEX costs significantly without which the CAPEX would almost double by year 2020. The parametric study also showed just less than a 30% reduction in CAPEX cost for both R&D and learning, offset by a 46% increase due to steel costs and 18% due to the cost of copper. Turbine costs in the long-term tends to reduce the CAPEX by some 15%.

Given that the funding gap was a key barrier, the Energy Review outcome on financial support was a main focus in 2006, activities of the OSWG were mostly covered by the Energy Policy sub group.

⁸ <http://www.BERR.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/offshore-wind/page16129.html>

Next Steps

Once the outcome of the Energy Review is clear, the OSWG will re-activate to commence work on more detailed issues, including:

Funding issues - banding of the RO

- The creation of a new, multiple ROC band for offshore wind is proposed. The Group will review the 'banding proposals' in the Energy White Paper to assess whether they are likely to provide sufficient support to guarantee mass deployment of offshore wind.

Offshore grid solutions – connections and transmission regime

The Group welcomes proposals to deliver a new offshore transmission regime by 2008 and looks forward to a rapid conclusion of the process. The Group will contribute, as necessary, to the debate on offshore transmission, infrastructure development, licensing, charging, ownership, regulation, access rights and compensation. The Group will engage with the joint BERR/Ofgem Project Board (that has superseded OTEG) in reviewing proposals and implementing the new offshore transmission regime.

Cost reduction (following up work undertaken in 2006), marinisation of the technology, sharing best practice and experiences from Round 1-2 and lessons from the offshore oil and gas industry

As with some Round 1 projects, the low reliability of turbines can cause significant and expensive operating cost exposure. Much is due to the inadequate marinisation of onshore machines for the offshore environment. The Group will maintain an overview of R&D activities, and with BWEA, identify any gaps in research, and advise BERR on future TP call specifications, review progress in the development of a more reliable supply chain and highlight outstanding issues that must be addressed as the industry progresses beyond Round 2. The Group will consider the value of commissioning a route map for cost reduction and performance improvement in offshore wind deployment.

- Additional finance, for focused pre-competitive development and demonstration projects could be available via the BERR/Defra Environmental Transformation Fund (ETF). The Group will review and input to RAB/BERR discussions on criteria setting for the ETF.
- The Group will consider commissioning a short study, in partnership with the BWEA, to review lessons learned from Round 2 projects, and the offshore oil and gas industry, and disseminate the results.

The future of offshore projects

A plan needs to be formulated, with input from ongoing Crown Estate and BWEA initiatives, to explain why more sites are required, discuss the drivers, mechanisms, allocation of sites, future licensing etc. This must also be considered in a European context. As a first step, a short paper would be drafted as a basis for further discussion around the key issues. The Group will engage with the BERR's strategic environmental assessment UK public consultation for offshore energy licensing via BWEA.

UNLOCKING CONSENTS

Key Findings

The study 'Barriers to Commissioning Renewable Energy Projects' (published November 2005⁹) concluded:

- Total renewable energy capacity approved in the five years to 2005 (in the onshore, offshore, hydro and biomass sectors) totalled 3,722MW. 16% of this capacity had been installed, 20% was under construction and 64% had yet to start construction.
- The time taken to commission Renewable Energy schemes, following planning approval, was lengthening.
- A range of factors was contributing to the delay including issues relating to landowner negotiations, grid connection, the supply chain, negotiating planning conditions and project economics.

The study proposed a number of recommendations to assist in speeding up the process of future approved schemes. An action plan was produced to address several of the recommendations. This formed a part of BERR's work plan and in 2006 the Working Group acted as a sounding board for future developments rather than pursuing its own programme of activity.

⁹ A copy of the report and policy makers summary can be found at: <http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/unblocking-consents/page16134.html>

Background

RAB identified post-planning approval delays as a key constraint, across the UK, which could threaten the delivery of the Government's renewable energy targets and aspirations. In spring 2005, the RAB Unlocking Consents Work Group was established, to examine the issues holding back the construction of consented renewable energy projects. The workgroup commissioned a study in June 2005 entitled 'Barriers to Commissioning Renewable Energy Projects'. The study collated evidence regarding the nature and scale of the post-planning approval delays. The report established the current position, likely future trends and recommended actions to speed up progress. It focused on barriers to commissioning onshore wind projects, given the potential for this resource to contribute to meeting the 2010 target. However, it also addressed offshore wind, biomass and hydro projects.

The study analysis discovered that the time taken to commission renewable energy schemes, following planning approval, was lengthening and that there were a number of factors leading to delays in the post approval phase of renewable energy schemes that were unlikely to improve without some form of intervention. It concluded that the key factors delaying projects were issues relating to landowner negotiations, grid connection, the supply chain, negotiating planning conditions and project economics.

Progress

A number of recommendations were proposed in the study (several were already being pursued elsewhere). RAB decided to follow up a number of recommendations and these are being addressed by BERR (see Appendix 1). The following activities have been completed in support of these recommendations.

- Planning Resources - BERR is running a series of Renewable Energy Planner & Councillor workshops designed to raise awareness of, and effectively disseminate information about, renewable energy and relevant government policy and planning process. Workshops include Planning for Wind, Advanced Planning for Wind, Microrenewables and Biomass. 55 workshops have been completed since October 2004 with over 1400 planner and councillor attendees. (Recommendation 9).
- Planning Resources - BERR has established a Planning & Renewables website for the local authority planning community which supports the BERR's Renewable Energy workshop programme. The website, hosts an Online Resource Bank; an electronic portal giving easy access to over 600 documents covering all aspects of renewable energy and the planning process. The website also distributes a regular Planning & Renewables E-Newsletter to over 1700 recipients in the local planning community. www.planningrenewables.org.uk (Recommendation 9).
- Post approval decision-making - BERR has produced (working closely with Communities and Local Government (CLG) and Devolved Administrations) a good practice guide to setting onshore wind energy planning conditions. The Guidance Note will be published in Summer 2007. It will be available electronically from the BERR website via www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/planning/page35020.html (Recommendation 7).

- Technology Supply and Engineering, Procurement & Construction (EPC) contracts - BERR has been running an initiative to increase UK supply in wind projects working with BWEA, Regional Development Agencies and wind turbine manufacturers. (Recommendations 3 & 4)
- Grid Connection - Progress on this area is being taken forward by both the RAB Grid working group and BERR's Renewable Deployment & Target Team Grid workstream – see Grid section for detail. (Recommendation 2)
- Post approval decision-making - Activity is being taken forward by the cross-Departmental Research Advisory Group and the BERR's Consents Team. BERR, Defra and the statutory consultees have agreed that when sufficient monitoring data becomes available, they will consider undertaking research projects to ensure that lessons are learnt. This work will be led and monitored by the Research Advisory Group. BERR and Defra work closely together on offshore renewable energy development applications given their interconnected responsibilities for, respectively, consents under Section 36 of the Electricity Act and licences under the Food and Environmental Protection Act (FEPA). Substantial progress has been made by Defra and BERR in this area and this issue is no longer considered to be a 'showstopper issue'. BERR and Defra meet regularly to discuss and move forward individual consent applications. (Recommendation 8)

PLANNING

Key Outputs

The following reports on community involvement/ benefit were completed:

- Protocols for Public Engagement with Proposed Wind Energy Developments in the UK
- A 'Toolkit' for community benefit from wind energy developments
- Bankable models for community ownership of wind farms

Background

RAB had identified planning and consents as a key constraint, across the UK, which could threaten the delivery of the Government's renewable energy targets. The purpose of the Planning Working Group (PWG) is to provide BERR with an industry-wide view on consenting matters to aid cross-departmental deliberations to deliver the aim, set out in the Energy Review, of a five-fold increase in the UK's renewables capacity.

Progress

Community benefits are an important tool in promoting public acceptance of new renewable energy developments. The UK market and planning law provides a different environment compared to continental Europe and policies and practices must be framed accordingly. Work in 2006 focused on completing three studies:

- Protocols for Public Engagement with Proposed Wind Energy Developments in the UK.
- A 'Toolkit' for community benefit from wind energy developments.
- Establish bankable models for community ownership of wind farms.

The studies were commissioned following recommendations that were presented in the 2004 report 'Community Benefits from Wind Power' (A study of UK practice & comparison with leading European countries)¹⁰.

The reports from all three studies received CLG endorsement and were launched at the BWEA conference in October 2006. The Welsh Assembly was not able to endorse the protocols but did acknowledge that it was a resource which may prove useful for LPAs and developers in Wales, should they wish to formalise community engagement in wind energy proposals. The reports were made available in May 2007 electronically via the BERR web site at <http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/planning/page34406.html> and www.planningrenewables.org.uk, the website for the local authority planning community which supports the BERR's Planner & Councillor Renewable Energy workshop programme.

¹⁰ A copy of the report (URN 05/1322) can be found at:
<http://www.berr.gov.uk/renewables/publications/pdfs/communitybenefitsfromwindpowerfullreport.pdf>

Protocols for public engagement with proposed wind energy developments in the UK

Protocols and guidelines have been produced for England and Wales. A Scottish version of the protocol and guidelines had also been produced but it was agreed with Scottish Executive that this version would not be published until the current Scottish stakeholder consultations on planning reform had been completed.

The protocols and guidance set the scene covering the need for effective public engagement and the principles of effective public engagement before presenting a protocol. The Protocol seeks wider, advance commitment to these principles from the developer and other stakeholders, alongside the local planning authorities. The Protocol sets out the expectations of key stakeholders and a range of commitments they may each make to enable effective public engagement around a proposed onshore wind energy development.

A 'Toolkit' for community benefit from wind energy developments

The 'Toolkit' provides guidance for wind power developers, local authorities and local communities to understand better:

- The range of ways in which 'host communities' can benefit from wind power developments.
- The possible justifications for ensuring greater local benefits.
- The factors which may influence the nature and scale of benefits available to host communities.
- The options for managing the delivery of benefits locally.
- The role each of them can potentially play in securing local benefits.

Establish bankable models for community ownership of wind farms

The aim of this project was to establish one or more potential models of community ownership in wind farms that are acceptable to lending institutions, developers and communities themselves. The view from the 2005 study was that by designing specific replicable models for community involvement that have been endorsed by these key stakeholders, this will facilitate increased community ownership and help the UK Government to achieve its renewable energy targets.

The report is not intended to be a guide for communities seeking to raise finance in order to set up a wind farm (other reports of this nature are available). It is intended first and foremost to establish ways to enable local ownership that fit with typical financing structures for commercial wind farm developments. Following consultation with community organisations involved in previous or existing community projects, developers and banks, the two structures that appear to be practical options for widespread community ownership at the present time are:

- Investment by individuals into a community organisation owning share capital in a joint venture company which owns the project.
- Revenue Stream from the wind farm paid to community trust.

In addition to work on community benefits, the PWG has supported BERR with completion of an 'Onshore Wind Energy Planning Guidance Note', submitted a response to the SE consultation on planning, SPP6 (October 06) and submitted a response to the consultation on improving public participation in EIAs for energy infrastructure. Further details on these activities is provided in Appendix 2.

Next Steps

The PWG will continue to consider measures to support BERR and CLG in taking forward Energy Review recommendations on planning reform. The PWG will progress, where appropriate, responses to the various consultations that BERR, CLG SE and Welsh Assembly have put forward, including:

- Planning White Paper.
- CLG consultation on 'Planning for Climate Change'.
- Statutory Guidance on Planning and Sustainable Development.
- Revision of Circular 15/1999, The Environmental Impact Assessment (Scotland) Regulations Consultation Paper.
- The Planning Gain Supplement (PGS) consultations:
 - HMRC's consultation on Valuing Planning Gain and Paying PGS
 - CLG's consultation on changes to planning obligations.
- Planning Policy Statement: Planning and Climate Change (supplement to PPS1).
- BERR's consultation on updating the electricity generating stations and overhead lines inquiry procedure rules in England and Wales.
- BERR's consultation on Resilience of Overhead Power Line Networks.
- Welsh Assembly Government (WAG)'s consultation on Planning for Climate Change.

Other Activities

Aviation and noise matters have been dealt with under the aegis of the BERR's Aviation Steering Group (ASG) and the Noise Working Group (NWG), although the RAB PWG keeps a watch in these areas and does/will bring to the attention of the RAB/ASG/NWG any issues of concern.

GRID

Key Outputs

- Inputs to the various Ofgem Transmission Price Control Review (TPCR) consultations
- Input to the BERR Distributed Energy Call for Evidence Consultation
- Discussions with NGET regarding grid access 'user commitment' arrangements
- Discussions with the Transmission Working Group (TWG) of the ENSG regarding infrastructure development and grid access in Scotland

Background

The Group was re-convened in 2006 to monitor and critically review electrical network issues as they impact on the connection of renewable generation technologies, to identify network related barriers and ensure programmes are in place to resolve these issues.

- The role of the Group was to review access and connection methodologies used by the National Grid. This would focus on the commercial aspects primarily related to charging mechanisms for access to, and use of, the grid system.
- The group would assess the impact of proposals with respect to any potential impact on RO targets.
- The Group would liaise with related work streams such as Offshore Grid and other industry groups such as the Electricity Networks Steering Group (ENSG) and the successor to OTEG (Offshore Transmission Experts Group).

Progress

The Group was very active in 2006 and provided input to three reviews and consultations relating to network development, access and charging. The Group developed influence with industry groups, such as NGET, Ofgem and the TWG via meetings and information exchange.

Transmission Price Control Review (TPCR)

The Group met three times in mid-2006, primarily to consider a response to the Ofgem TPCR Consultation and also to review the NGET interim proposals on grid access. As a result of these meetings the group submitted a response to the Ofgem consultation in July, responding to the consultation questions of particular relevance to renewables.

The key recommendations/comments from the Group's response are summarised below:

1. The transmission licencees should be incentivised to invest in their networks in an efficient, effective and cost reflective manner that does not discriminate, or result in undue connection delays.
2. There should be strong, effective and fair governance of the transmission licencees.
3. As recommended in the proposals a two-part flexible revenue driver is welcomed to respond to the needs of the system and potential connectees.
4. The balance of risk is fair and efficient between the transmission licencees and the system connectees.
5. Funding for innovation is encouraged provided this results in real benefits to the users of the transmission system.

Whilst the 'updated proposals' should allow transmission operators to respond more flexibly to the needs of the system users, the group was disappointed that the issues of access and connection timescales had received less attention. In addition to significant transmission infrastructure development, the period covered by the new Transmission Price Control will need to see major changes to the access and connection arrangements, applying to renewable generation, if the Government's renewable targets and aspirations are to be realised.

Delivering the Government's targets imply the need for some 12GW of renewable generation to be connected by 2010, rising to 25GW by 2020. If this amount of capacity is to be connected in the required timescales, fundamental changes to the access arrangements for renewable generation will need to be introduced, and measures taken that will allow available transmission capacity to be utilised more effectively.

Earlier in the year, the Access Reform Options Development Group (ARODG) developed promising options in both these areas and it is a pity that the output of this Group did not feature more prominently in the consultation document. At a time when events demand major changes and developments in these areas, Ofgem's updated proposals effectively represent 'business as usual'.

The issue of risk continued to be a concern to renewable generators seeking to connect to the transmission system. The Group believed that the allocation of risk should be to those best able to manage it, and that this should be fairly balanced between the transmission operators, the system operator and the users of the transmission system.

Call for evidence on barriers and incentives for distributed electricity generation

A response was submitted to the BERR/Ofgem's call for evidence on barriers and incentives for distributed electricity generation in December 2006 (Appendix 3 provides further details). It was the view of the Group that the main barriers to distributed electricity generation (and particularly renewable distributed electricity generation) were:

- Planning issues.
- Obtaining a timely connection to the system.
- Obtaining reasonable conditions for connection to the system.
- Obtaining cost effective access to the electricity market.
- Obtaining certainty that embedded benefits for distribution connected generators will not be removed.

Network access

Work is underway to critically review the scorecard approach, and the connect and manage approaches to British Electricity Transmission and Trading Arrangements (BETTA) Queue Management. The Group has been liaising with the ENSG Transmission Working Group regarding transmission investment and its impact in the connection of renewables in Scotland, and will also be reviewing GB compliance with Article 7 of the EU Directive 'The Promotion of Electricity Produced by RE Sources in the Internal Electricity Market'.

The Group met with NGT in November 2006 to discuss transitional and enduring provision of securities for transmission works 'Final Sums Liabilities'. One of the outcomes of this meeting is a proposal to produce a developers good practice guide on grid access. The Group will meet again with the NGET to further discuss these issues in 2007.

Next Steps

In addition to input to Energy White Paper (EWP) discussions the Group will focus on:

- Queue resolution. Work is underway (proposal being investigated) to critically review the approaches to BETTA Queue Management.
- The Group will be reviewing GB compliance with Article 7 of the EU Directive 'The Promotion of Electricity Produced by RE Sources in the Internal Electricity Market', to ensure the transmission charging system does not discriminate between large-scale and small-scale generation. The results will be the basis of further discussions with National Grid and OFGEM.
- The Group is going to review (with ENSG) the impact of grid code compliance on project development.
- Long-term network access is considered as an additional work area to possibly include use of system charging in the context of intermittency.

In addition, the Group will consider:

- Preparation of a strategic overview of the key issues, that ENSG, Ofgem and BERR could reference to support policy development.
- A developers good practice guide on grid access.

MARINE

Key Messages

- “RAB welcomes the concept of marine spatial planning, to play a more strategic approach to accounting for all activities and resources, as part of sustainable development” Defra Marine Bill Consultation Response, June 2006.
- “Consenting should remain the responsibility of BERR, as it is the department responsible for energy policy and its delivery” Defra Marine Bill Consultation Response, June 2006.
- “RAB supports maintenance of a stable, UK-wide market for renewable power and ROCs”, SE RO Scotland Consultation Response, July 2006.

Background

The Marine Group was convened to prepare a response to Defra’s consultation on the Marine Bill published in March 2006. The Group also submitted a response to the Scottish Executive’s consultation on the proposed amendment to the Renewables Obligation Scotland (ROS wave and tidal support) in July 2006.

Progress

A response¹¹ to DEFRA on the Marine Bill consultation was submitted in June 2007 (see Appendix 4 for further details).

Marine Spatial Planning

RAB welcomes the concept of marine spatial planning, to play a more strategic approach to accounting for all activities and resources, as part of sustainable development. We anticipate this being helpful to the allocation of specific areas of the marine environment to the commercial development of marine renewables.

¹¹ (<http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/marine/page30146.html>).

Consenting and the role of the Marine Maritime Organisation

RAB welcomed the intent to streamline and simplify the process for the consenting of activities in the marine environment. However, the fundamental concern was that consenting should remain the responsibility of BERR, as it was the department responsible for energy policy and its delivery. To move responsibility for consenting away from BERR to a completely independent body could, in RAB's view, only make it more difficult for the Government to achieve its targets for renewable energy and carbon dioxide emission reduction. It would also be seen by the industry as a potential barrier to development particularly during the transition phase. The current stage of marine renewable development could not afford any further barriers if the UK is to retain its lead in this industry and fulfill its potential.

A response to the SE ROS consultation was submitted on 2nd August 2006 (see Appendix 4 for further details).

RAB warmly supported the Executive's intent from this proposed amendment to the ROS, to support the development of an indigenous wave and tidal stream/current industry through the creation of a market for power from wave and tidal stream devices, giving long-term market signals to encourage private sector investment. Nonetheless, RAB was anxious to maintain, as far as possible, a stable, UK-wide market for renewable power and ROCs, and RAB saw the proposed ROS amendment introducing more complexity and uncertainty, and given this complexity and the limited geographical reach of the proposal this might not encourage investment to a significant level. Consequently, RAB did not advocate the introduction of measures in Scotland that were different to the rest of the UK.

Next Steps

The Group's objectives in 2007 are listed below:

- Objective 1a – Initial critical assessment of marine renewables industry, focusing on current development status of leading candidates (by mid-May)
- Objective 2 - Prepare an evaluation of the reasons for the poor take-up of the MRDF (by end May)
- Objective 1b - Critical assessment of marine renewables industry (by end August)
- Objective 3 - Evaluation and comparison of approaches in Scotland & UK (by end August)
- Objective 4 – Consenting (by end October)
- Objective 5 - Evaluation of potential for tidal barrages and lagoons (by end October).

The Group will also consider producing a response to the Defra consultation 'A Sea Change, a Marine Bill White Paper'. Five key issues are covered: planning in the marine area; licensing activities in the marine area; marine nature conservation; modernising marine fisheries management; and a new marine management organisation.

BIOMASS

Key Messages - from the RO Consultation Response (December 2006):

- Although too early to assess, RAB anticipates that reducing the allowable biodegradable fraction of biomass fuels within the RO from 98% to 90% will be successful in bringing forward the deployment of significant dedicated biomass capacity.
- RAB believes that co-firing overseas residues should be incentivised through the EU ETS. However, RAB supports the view that 'co-firing with energy crops' should remain eligible for support within the RO.
- RAB proposes that for biomass projects over 50MW, the Government should consider sustainability accreditation (for imported biomass).

Background

A Biomass working group was re-established in September 2006 to provide advice to Government in the development of the Government's Biomass Strategy, support the actions resulting from the Biomass Task Force report (via the Biomass Implementation Advisory Group), and examine implications for biomass technologies, in light of the different approaches to changing support mechanisms as they emerge from the Energy Review.

The Group would contribute to the development of the Strategy through a series of themed meetings covering: support mechanisms, the evidence base for the Strategy, band pricing and accreditation, EU Policies and Directives and sectoral analysis.

Progress

During 2006 the Group had considered:

- Issues relating to equipment and fuel standards and certification.
- The review of the co-firing regulations (and BERR reports on the sustainability and economics of co-firing in the UK).
- A review to look at the most significant routes from fuel to energy (taking account of costs/support measures, carbon saving and other environmental and sustainability benefits, the practical market potential and comparisons with other emerging technologies).

The Group provided input to RAB's response to the Energy Review and proposed changes to the RO. A summary of the key issues for biomass projects and co-firing is presented below:

- It is a little early to assess the success of the recent change from 98% biodegradable fraction to 90% but it is anticipated that this will be successful in deployment of significant dedicated biomass capacity. The recent increases in energy prices have also provided the increment necessary to allow residue based dedicated plant to become viable. The danger in a banded mechanism, that brings municipal waste into a partial ROC band, is the legislative difficulty in separating some residues from waste despite the significant fuel price differences.
- Furthermore, the need to bring tangible resources such as agricultural residues into the financing of dedicated plants means that the prime imperative is to not allow any RO changes to take value away from projects which have recently become viable.
- RAB proposes that for biomass projects over 50MW, the Government should consider sustainability accreditation, for imported biomass only.
- The issue of co-firing is central to how effective a banded obligation will be in supporting the development of a broader range of renewable technologies. It is essential that Government knows the real upper limits of generation capability from all co-firing plants, as the amounts of co-firing could increase out of control and destroy investor confidence in investing in other renewable energy capacity. RAB believes that changes to the co-firing rules must support, not hinder, the development of new, dedicated biomass plant.
- There is a strong view that co-firing overseas residues (i.e. palm kernel and olive residues) should not be incentivised through the RO, as market distortions are already evident in diverting biomass resources away from developing economies towards the UK. Moreover, with the relatively low capital investment costs associated with most co-firing schemes, there is already an incentive on UK fossil fuel plant to reduce emissions through Phase 2 (2008-2012) of the EU Emissions Trading Scheme.
- RAB supports the view that 'co-firing with energy crops' should be considered as a separate technology from co-firing residues, and should be allocated to the central band. RAB supports an uncapped obligation in regard to energy crops and considers that additional support for energy crops should continue through planting grants administered by Defra, not by the allocation of multiple ROCs.

Next Steps

The Biomass Strategy was published in May 2007. The Group will continue to provide advice to Government to help take forward current policy initiatives and the Biomass and Waste Strategies. The Group will input to the Energy White Paper bioenergy, co-firing and waste agendas as required.

A Sub-Group will be convened in 2007 to cover renewables 'heating and cooling'.

MICROGENERATION

Key Outputs

- The Terms of Reference for a study to review the role of micro-generation in delivering zero carbon homes has been completed.
- A Workshop has been held that produced a set of actions for the group to take forward in areas where they believe that gaps exist in driving the delivery of government policy on microgeneration.

Background

A 'Microgeneration / Zero/Lower Carbon Buildings' Group was convened in October 2006. The immediate objectives are:

- To facilitate the delivery of the CLG zero carbon homes policy - by researching and communicating the impact of the policy on microgeneration markets and assessing the capability of the sector to deliver.
- To advise BERR on its microgeneration strategy - by developing guidance on technology route maps.
- To act as a forum for intelligence sharing on microgeneration between government, agencies, trade bodies and businesses in the sector.

Progress

The Group held an initial meeting in November 2006 to discuss the initial tasks outlined above and also discuss the wider issues around delivering microgeneration. In summary:

- The Group considered that skills and training remained as barriers to delivering growth in microgeneration technologies;
- A clear 'map' that advised consumers how to procure microgeneration technologies, alongside specification of system guidance would be beneficial. It was noted that BERR was considering ways of mapping out the information that is available to the consumer;
- Further work is needed on monitoring the performance of microgeneration technologies. For example, in the case of microwind very little data was available. An assessment of the wind resource in urban environments is required as a pre-cursor to further assessment of the market and the wider viability of microwind.

In December 2006 CLG issued a consultation 'Building A Green Future' which proposed a series of changes to building regulations which would result in zero carbon development being obligatory for all new housing within ten years. This sets out a long-term regulatory requirement that is likely to be the primary driver for the microgeneration market, rather than grants or consumers' willingness to pay. There is currently little analysis of which microgeneration technologies can contribute most cost-effectively to meeting zero carbon targets, and how big these markets might be. There is also little understanding of where the UK microgeneration sector strengths lie and what can be done to increase the UK share of business generated by this policy. Previous microgeneration studies by EST and others have suggested that there are a number of potential barriers to the uptake of microgeneration. There is also a concern amongst some policy makers about the capacity of the microgeneration and construction sectors to implement the policy within the required timescale.

A specification for a study to review the role of microgeneration¹² in delivering zero carbon homes has been drafted. The study will aim to inform the delivery of the CLG's proposed zero carbon policy, by providing decision makers in government and industry with an assessment of the likely rates of uptake of microgeneration technology in new housing, an analysis of the capacity of industry to deliver the required goods & services, an assessment of the policy's potential industrial benefits to the UK, and the identification of actions to overcome barriers to the use of microgeneration in the policy's implementation.

Next Steps

The Group has three meetings identified in the first half of 2007 to:

- Map current barriers, initiatives, and gaps on microgeneration;
- Get agreement on the Terms of Reference for the study of the role of microgeneration in delivering zero carbon homes; the proposed objectives are to:
 - analyse market size for a range of scenarios drawing on the existing EST model;
 - assess industry capability;
 - identify barriers and potential solutions.
- Run a workshop to agree the scope of route maps for microgeneration technologies;
- Debate the scope for an industrial benefits study, to assist in building the economic case for microgeneration.

The Group will respond to the CLG consultation on sustainable homes. Other issues that the Group will consider include:

- Investigating the streamlining and optimisation of support mechanisms for microgeneration technologies.
- Investigating network issues (technical, commercial and regulatory) relevant to microgeneration (supporting current work in the area). These are (broadly): connection, data flows & management and network stability.
- Liase with the RAB Biomass Group with regard to biomass air quality issues.

¹² The term 'microgeneration' is used here as shorthand for on-site renewables and low carbon energy generation technology, and thus constitutes a range of technology options from MW wind and biomass technology to kW technology on individual buildings.

FORWARD WORK PROGRAMME

In January 2007 RAB met to review its priorities for 2007. A number of the RAB workgroups are well established, however, in 2007 the Board has decided to focus on some new areas of work:

RAB has previously focused on renewable electricity generation. However, in its response to the Biomass Task Force Report the Government has undertaken to increase the use of biomass heat and electricity and is likely to set out clear and quantifiable targets for biomass heat in the future. Therefore, in 2007, a RAB Work Group will be convened to provide advice to Government on this important sector.

In December 2006, the Code for Sustainable Homes, a new national standard for sustainable design and construction of new homes, was launched as part of a package of measures towards zero carbon development. A series of changes are proposed to building regulations that will result in zero carbon development being obligatory for all new housing within ten years. This sets a long-term regulatory requirement that is likely to be the primary driver for the microgeneration market. A RAB work group on microgeneration was convened in October 2006 and is now working towards providing advice to Government on the critical issues on the path to zero carbon, which will include technology route mapping and examining the economic case for microgeneration.

Wave and tidal-stream energy represents a significant as yet untapped source of renewable energy in the UK, with the construction and installation of early grid-connected wave and tidal-stream power devices still an early stage of development. In 2007, RAB will review the current status of the marine renewables industry and assess critically the contribution it can make to the UK's renewables capacity.

The work of the Board in 2007 will be focused on nine work streams that address the key issues and barriers to the Government's renewable energy targets. The work streams, jointly chaired by a BERR representative and an industry member, are:

#	Work Group	Sector-side Chair
1.	Energy Policy	David Still
2.	Grid	Kevin McCullough
3.	Planning	Chris Morris
4.	Offshore Wind	Sue Wheeler
5.	Marine (Wave & Tidal)	Andrew Mill
6.	Microgeneration	Matthew Spencer
7.	Biomass	David Williams
8.	Renewables Heat ^{New}	Mike Rolls
9.	Input to ETF ^{New}	Simon Roberts

Each of these work groups will develop a plan and a programme of work that will address these key issues.

APPENDIX 1

UNLOCKING CONSENTS

A number of recommendations were proposed in the 2005 'Barriers to Commissioning Renewable Energy Projects' study (many of which were already being addressed elsewhere). The following recommendations are being addressed by the BERR.

Recommendation 1 – Landowner negotiations & connection wayleave rights

RAB to encourage the Law Society to include landowner services within its publications and online resources (e.g. online Directory of Solicitors and Barristers, which can be searched by area of law), in order to help those approached by a developer to access expert advice. RAB also to explore the scope for advice on how to approach negotiations, with a landowner representative organisation such as CLA.

Recommendation 2 – Grid connection - RAB to urgently take a lead on reviewing grid connection issues, the magnitude of anticipated delays and explore possible solutions in association with BERR/Ofgem/ NGET.

Recommendation 3 – Technology supply - RAB/BERR/Trade Associations to develop a programme of work to address the ability of the supply chain to build projects for 2010. These should include technology, supply, market confidence and contracting issues.

Recommendation 4 – Engineering, procurement and construction (EPC) contracts - BWEA, with support of BERR/Scottish Executive, to (continue to) facilitate discussions between offshore wind developers and suppliers on co-operation and alliances (as in the oil and gas industry) to resolve issues surrounding contract prices and apportionment of risk.

Recommendation 5 – Post approval decision making by determining authorities - Negotiating planning agreements and agreeing and discharging conditions -

Government to work with planning bodies (RTPI and/or TCPA) to develop guidance for determining authorities and developers on the process of agreeing a timetable for post approval actions (finalising legal agreements and agreeing conditions) to provide more certainty for developers to allow them to start putting construction plans in place.

Recommendation 6 – Post approval decision making by determining authorities - Negotiating planning agreements and agreeing and discharging conditions -

Government in association with industry and planning bodies to draft guidance on the suggested contents of legal agreements for onshore wind schemes. Guidance could also be used to encourage 'frontloading' of legal planning agreements, whereby the outline of an agreement is commenced prior to the resolution to grant planning permission.

Recommendation 7 – Post approval decision making by determining authorities - Negotiating planning agreements and agreeing and discharging conditions - RAB/BWEA to establish a working group with planning officers and CLG (formerly ODPM)/BERR/Scottish Executive representatives to produce guidance on planning conditions for renewable energy schemes.

Recommendation 8 – Post approval decision making by determining authorities - Negotiating planning agreements and agreeing and discharging conditions - RAB to consider and advance a range of possible measures to reduce delays to offshore wind farms due to FEPA licensing conditions, including producing guidance on appropriate conditions for offshore schemes, co-ordination of industry standards based on technical capabilities, co-ordination of a centralised database of monitoring studies to reduce cases of repeat monitoring.

Recommendation 9 – Planning resources - Government to work to improve the skills and capacity of organisations involved in the post approval decision making process, including determining authorities (BERR, Scottish Executive and Defra) and statutory consultees. Measures to consider include the use of recently increased planning fees to improve resources for processing renewable energy applications; increased funding of key organisations through Government budgetary decisions to support adequate staffing levels; working with trade associations to develop training packages on renewable energy technologies; provision of regular technology bulletins and/or provision of a centralised advice centre, and reviewing the strategy in place for the recruitment and retention of key staff.

APPENDIX 2

PLANNING

Protocols for public engagement with proposed wind energy developments in the UK

Protocols and guidelines have been produced for England and Wales. A Scottish version of the protocol and guidelines had also been produced but it was agreed with SE that this version would not be published until the current Scottish stakeholder consultations on planning reform had been completed.

The Protocol seeks wider, advance commitment to the principles of effective public engagement from the developer and other stakeholders, alongside the local planning authorities. The Protocol sets out the expectations of key stakeholders and a range of commitments they may each make to enable effective public engagement around a proposed onshore wind energy development.

The protocol is supported by guidance that is designed to provide more detailed explanation and examples of how the undertakings may be delivered in the process of public engagement. It is not intended to be prescriptive but to give the various stakeholders a sense of the range of options that they may seek to apply in the specific circumstances of an individual proposal.

The guidance is in sections which works from the generic to the specific, covering:

- The Policy Framework for Public Engagement in Planning - outlining how planning policy defines and promotes effective public engagement.
- Policy and Guidance for Wind Energy – considers the policy frameworks for renewable energy in the UK.
- The Scope of Public Engagement with Proposed Wind Energy Developments– setting out the key phases within a wind energy development and describing the scope of public engagement during those phases. This covers the different activities, aims of engagement, stakeholders involved and the levels of engagement with examples.
- Delivering Effective Public Engagement – summarising the key phases within the public engagement process and their relationship with the wind development process, and outlining guidance for developers and local planning authorities.
- Understanding Community Benefits – explaining how the provision of local benefits and how these fit within a public engagement process (and introducing the Community Benefits Toolkit - described below).

The annexes provide more detailed information on particular issues including methods of community engagement.

See <http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/planning/page34498.html>

Producing a ‘Toolkit’ for community benefit from wind energy developments

The Toolkit’ provides guidance for wind power developers, local authorities and local communities to understand better:

- the range of ways in which ‘host communities’ can benefit from wind power developments
- the possible justifications for ensuring greater local benefits
- the factors which may influence the nature and scale of benefits available to host communities
- the options for managing the delivery of benefits locally
- the role each of them can potentially play in securing local benefits.

The focus for the Toolkit is on those potential benefits which can be directly influenced and which are likely to be widely considered to be ‘of benefit to the local community’, rather than a few specific individuals within it. These are:

- **Community funds:** receiving a lump sum or regular payments into some sort of fund for the benefit of local residents.
- **Benefits in kind:** where the developer directly provides or pays for local community facility improvements, environmental improvements, visitor facilities, school and educational support etc.
- **Local ownership** of shares in the project by local people, either through their own investment or through a profit-sharing or part-ownership scheme designed to tie community benefits directly to the project performance.
- **Local contracting** and associated local employment during construction and operation.

This guidance in the Toolkit is backed up with simple economic wind farm models and illustrated with case studies of the different benefits agreed at existing wind farms. There are also checklists for wind energy developers, community organisations and local authorities, to help them through the process.

See <http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/planning/page35017.html>

Establish bankable models for community ownership of wind farms

This project was jointly overseen with the Finance & Investment Working Group to establish one or more potential models of community ownership in wind farms that are acceptable to lending institutions, developers and communities themselves. The view from the 2005 study was that, by designing specific replicable models for community involvement that have been endorsed by these key stakeholders, this will facilitate increased community ownership and help the UK Government to reach its renewable energy targets.

The report is not intended to be a guide for communities seeking to raise finance in order to set up a wind farm (other reports of this nature are available). It is intended first and foremost to establish ways to enable local ownership that fit with typical financing structures for commercial wind farm developments.

Following consultation with: (i) community organisations involved in previous or existing community projects, (ii) developers; and (iii) banks, the two structures that appear to be practical options for widespread community ownership at the present time are:

- *Investment by individuals* into a community organisation owning share capital in a joint venture company which owns the project.
- *Revenue Stream* from the wind farm paid to a community trust.

In terms of how a community organisation should organise itself, the Baywind/Energy4All co-operative structure stands out as the most obvious option. The work suggests that a community group should look to raise equity by means of issuing a prospectus or seeking approval from an FSA-authorized person.

The revenue stream model is tried and tested, albeit historically on the basis of fixed amounts. Although there was no consensus on how the revenue stream should be calculated, consultees in general preferred an income stream based upon project performance as opposed to fixed amounts.

The research suggests that the revenue stream model is the only practical method of community ownership where the raising of significant community funds is simply not possible.

See <http://www.berr.gov.uk/energy/sources/renewables/policy/renewables-advisory-board/planning/page35019.html>

Response to the SE consultation on planning, SPP6 (October 06) – a summary

The PWG recommended that a 'Renewables Statement of Need' was adopted in SPP6 so that it's considered a material consideration in planning applications.

The PWG was concerned that SPP6 was too heavily focused on onshore wind, and would welcome greater reference to other renewable technologies.

The PWG was concerned that SPP6 did not reflect the sense of urgency that is needed if the UK is to do all it can to mitigate the risk of climate change. While a considerable renewables capacity has been consented, experience shows that not all of this will be built – there is a danger of complacency that could delay the granting of new consents.

The PWG recommended that SPP6 should remind planning authorities of the need to deal with renewables quickly, both in dealing with the applications and in agreeing conditions (specific reference was made to the forthcoming BERR guidance note, which gives examples of good planning conditions that can be used to help in this process). The PWG also recommended that the need for a timely response to applications from statutory consultees is stressed in SPP6.

The PWG was also concerned that many of the millions of pounds that had been invested in current planning applications could fall outside Broad Areas of Search. The undermining of the progression of these projects would have significant impact on investor confidence and would greatly undermine future deployment in Scotland, not only of wind but other technologies such as wave and tidal. The PWG was concerned that the development of new local planning policies would result in an effective moratorium on the consenting of new projects until they are completed.

Response to the consultation on improving public participation in EIAs for energy infrastructure – a summary

The PWG welcomed this initiative to improve public participation in EIAs and recognised that the BERR proposals were bound by requirements of the Aarhus Directive. However, the PWG was concerned on certain points as follows:

- The PWG felt that the determining authorities should be responsible for lodging additional information from third parties as they will have to take this information into account. The applicant has no control over submissions from other parties so it does not seem reasonable for them to take responsibility for them. The PWG also felt that it was not appropriate for the applicant to decide what information is relevant and therefore made available to the public.
- The PWG welcomed the suggestion of a deadline for representations and would like to limit the ability of consultative bodies to issue a holding objection which they are then slow to clarify – the current situation can cause considerable delays in the planning process.
- The PWG felt that the relevant consultative bodies for each EIA should be agreed between the applicant and the determining body as part of the scoping study for the EIA. Different combinations of consultative bodies will be appropriate in different circumstances.

APPENDIX 3

GRID

Call for evidence on barriers and incentives for distributed electricity generation – a summary of the RAB response

a. Obtaining a Timely Connection to the System

One of the main barriers to the growth in renewable generation in Great Britain is the delay often encountered in the date for which a connection to the system can be secured in many parts of the country. This is not just for generators wishing to be connected to the transmission system. Recent amendments to the Connection and Use of System Code make it clear that generators as small as 13kW could in principle be prevented from connecting to a distribution network if the Transmission System Operator deemed that transmission reinforcement was required.

It is neither in the interests of the environment, nor in compliance with, at least the spirit and possibly the letter, of the Single Market Directive 2003/54/EC and the Renewable Directive 2001/77/EC that renewable generation is prevented from connecting purely so that old fossil fuelled generation can continue to generate without constraint. Whilst Articles 11 part 3 and 14 part 4 of the Single Market Directive say that a Member State may require the transmission or distribution system operator to give priority to the despatch of renewable generators, Article 23 Part 1 (f) says that the terms and conditions for access to the system should take account of the benefits of various renewable energy sources. The Renewable Directive is more prescriptive.

It is clear that Member States as a minimum may give priority to access for renewable generators and arguable that they must do so. The group do not therefore think that it is acceptable for renewable generation to be delayed in connecting purely so that fossil fired generation does not have to be constrained down. Renewable generation should be connected as soon as the local connection can be built and in the event that until wider system reinforcement is carried out the system is constrained, this should be managed giving priority to renewable generation, albeit keeping fossil fired generation that is constrained off as a result, neutral to this process. Neutral in this instance would be recovery of reasonable costs.

b. Obtaining reasonable conditions for connection to the system

Generators connected to a Distribution Network should have no requirement to have a relationship with the Transmission System Operator. To the extent that the flows between transmission and distribution networks influence the networks can be managed between the DNO and the TSO. There should therefore be no requirement for generators of any size that are not connected to the transmission system to accede to the Connection and Use of System Code or comply directly with the Grid Code. To the extent that it is important, for example, for certain generic technical conditions to be met this can be implemented through Distribution Code provisions, as has already happened for medium generators in England.

The issue of whether all the technical requirements that are placed on generators are reasonable is of course a separate one, but there are suitable governance processes for directing change in this area. In order to ensure such issues are fully considered adequate representation and weighting of consideration needs to be given to the interests of 'new

generation'. It is RAB's view at the moment that this is not the case and too much weighting is given to the imposition of traditional methods. RAB would expect Ofgem to be seeking the lowest cost solution which may not be placing technical obligations on generators

The group noted in this regard the current work on the transmission system SQSS and intermittent generation. Generation that has a small probability of being at full output during system peak conditions should share transmission capacity with more controllable fossil fired generation, the natural role of which is to provide power when generation with an intermittent prime mover is not generating.

In terms of distribution system charging we support the aims of Ofgem as stated in paragraph 7.14 of the Call for Evidence for distribution charges to reflect the costs and benefits to DNOs of distributed generators.

c. Obtaining Cost Effective Access to the Market

This relates to the current dual cash out prices arrangement within the balancing mechanism. This has the effect of making the market systematically long and thereby devalues electricity produced by renewable generators, particularly those with non-continuous prime movers. In addition there are concerns the applicability of imbalance cash out to generator output which we maintain is neither cost reflective nor a reflection of how the power system is operated. Generator shortfalls, whether caused by a large generator tripping or the wind being less than predicted at gate closure are 'known unknowns'. It is because of these and other 'known unknowns' that the system operator carries 'insurance' in the form of reserve and response. It is therefore appropriate and cost reflective that generators that shortfall due to either a technical fault or a shortfall in for example the wind, pay for a share of the cost of reserve and response rather than an imbalance cash out price.

d. Obtaining certainty that embedded benefits will not be removed

Paragraph 2.17 of the Call for Evidence makes reference to the view held by (it appears only) NGC that the embedded benefits enjoyed essentially since 1990 are not cost reflective and that transmission related charges for generators and demand connected to a distribution network ought to be on the basis of gross generation and gross demand. This would not be cost reflective as it is clearly the net flow between a distribution system and the transmission network (in whatever direction) that determines the flow related costs of the transmission system.

APPENDIX 4

MARINE

DEFRA Marine Bill Consultation – a summary of the RAB Response

Marine Spatial Planning

RAB welcomes the concept of marine spatial planning, to play a more strategic approach to accounting for all activities and resources, as part of sustainable development. We anticipate this being helpful to the allocation of areas of the marine environment to the commercial development of marine renewables.

In relation to renewable energy, critical to the challenge of marine spatial planning is balancing short-term and local environmental impacts with the long-term and global benefits from renewable energy. A recent report on behalf of the BERR by ABPMer (Atlas of UK Marine Renewable Energy Resources) has identified, at a high level, the location of the wave, tidal stream and offshore wind resource. The report demonstrates certain strategic areas for the exploitation of renewable energy in the marine environment. These would include:

- South West Cornwall and North and West of Scotland for wave power.
- The Pentland Firth and the Severn Estuary for tidal stream.
- Morecombe Bay, Outer Hebrides and the Greater Wash for offshore wind.

There will be many other sites that provide commercial opportunities outside these strategic areas.

The specific locations preferred for development will also depend upon grid availability, customer location, and other constraints, such as shipping and other marine uses. However, the Government's position has been to encourage the development and deployment of renewable energy wherever they have good commercial prospects.

In developing a marine spatial plan, we would ask that the contribution from marine renewables to sustainability, energy goals and wealth creation feature as important considerations. We anticipate that developing a fully integrated marine spatial plan will take some time and that the research data to produce a fully informed plan does not yet exist. We would be anxious if, as the plan is being developed, this would prevent or delay consenting decisions for renewable energy projects.

We would also advocate a risk-based assessment when considering proposed developments, rather than the precautionary principle, which could inappropriately prevent development when the local environmental impacts are very small, yet the global environmental benefits large.

We see the plan as being a spatial expression of existing policy, sensible and desirable, though not mandatory, with a process for review and identifying and resolving any conflicts. It would be fully integrated, yet flexible, and no one policy would have absolute right over any others. It should embody our best understanding, yet be flexible to new research, as through more data it would become more informed and more certain. The plan should not be a moratorium on development.

Consenting and the role of the Marine Maritime Organisation

RAB welcomes the intent to streamline and simplify the process for the consenting of activities in the marine environment.

However, our fundamental concern is that consenting should remain the responsibility of the BERR, as it is the department responsible for energy policy and its delivery. To move responsibility for consenting away from the BERR to a completely independent body can, in our view, only make it more difficult for the Government to achieve its targets for renewable energy and carbon dioxide emission reduction. It would also be seen by the industry as a potential barrier to development particularly during the transition phase. The current stage of marine renewable development can not afford any further barriers if the UK is to retain its lead in this industry and fulfill its potential

RAB agrees that the 'merging of FEPA and Coastal Protection Act (CPA) regimes' would be a very sensible and desirable simplification that is necessary but recommends a single sectoral consent provided by BERR, with the MMO and marine spatial plan providing information to advise this consenting decision.

It is envisaged that a simplified licensing system could be based solely around the Section 36 Electricity Act 1989 for the renewables sector. Section 36 is fundamental to the electricity generation consenting process and we do not wish to see Section 36 consenting moved away from the Government department responsible for energy policy, security of supply, diversity of energy sources and for delivering targets for renewable energy generation.

SE ROS consultation - a summary of the RAB Response

Since the Executive announced its intent to introduce special arrangements in Scotland to support wave and tidal power, the BERR's Energy Review has reached its conclusion and been published. The Energy Review signals BERR's intent to introduce a 'banded obligation' to support emerging energy technologies, such as offshore wind, wave and tidal stream. RAB strongly recommended that, rather than introduce a special scheme for Scotland, that the Executive worked closely with the BERR to introduce a UK-wide amendment to the RO/ROS that encourages emerging technologies in a consistent way across the UK.

RAB's understanding of the legislative timetable is that any amendments to the RO could only be introduced by April 2009 at the earliest. RAB also understands the SE's desire to introduce further support for wave and tidal power, through amendment to the ROS, by early 2007. Between 2007 and 2009, if SE chose not to introduce the additional support to wave and tidal stream power from 2007, there exists the BERR's Marine Renewables Deployment Fund (MRDF) to support small farms of grid connected wave and tidal stream farms.

Projects supported by the MRDF will also generate information that will allow the Executive, the BERR and other key stakeholders to obtain a more informed understanding of the current economics of wave and tidal stream power, which will be necessary prior to demonstrating to the European Commission that any proposed changes to the RO/ROS would not overcompensate beneficiaries.

RAB understands that the MRDF is not there to support large-scale power generation projects. However, the development status of the industry is such that, in our view it is too early for it to be contemplating large projects. It would seem logical to us that the industry focuses at this stage on building small arrays with support from the MRDF, rather than jumping to much larger projects. The combination of grant and revenue support offered by the MRDF also gives lower commercial risk than a wholly revenue support scheme, such as that contemplated for Scotland.

Nonetheless, RAB understands the imperative Scotland feels to do all that it can to help create a successful wave and tidal stream industry in Scotland. Consequently, if SE did proceed with special arrangements for Scotland, RAB had the following comments.

- RAB would prefer that the SE scheme harmonised with any UK-wide scheme, if introduced by the BERR, in 2009.
- It might be impossible for licensed electricity suppliers to meet a 'marine obligation' from 2007, due to the present industrial capacity of the suppliers and the technology development status. In this eventuality, licensed electricity suppliers will be forced to pay the buy-out, because there is no option. This could be seen as unfair. It would also lead to the accumulation of a potentially large buy-out fund, which could disproportionately reward very early suppliers of 'marine-ROCs'.
- Wave and tidal stream are very different technologies, with different economics. Measures designed to support wave power projects could lead to financially over-compensating tidal stream projects. Alternatively, measures designed to support tidal stream may not provide a sufficient financial incentive to invest in wave power projects. Consequently, RAB feel that SE may have to put in place different 'bands' for wave and tidal stream.
- RAB would recommend a target from 2007 that is commensurate with the ability of the industry to supply at this stage. The present industrial capacity is limited and it would be very difficult to see that it could rapidly expand its manufacturing capacity. This would also have the effect of limiting the cost to the consumer.
- In the past, the arbitrage opportunities between the Scottish buy-out fund and the England and Wales buy-out fund caused distortion to ROC values. The industry sought to resolve this market distortion through the amalgamation of the buy-out funds across the UK. This was successfully completed in 2005 with considerable benefits resulting from a simplified RO and a more level playing field for competition between suppliers. The SE proposal to differentiate between the values of ROCs in different jurisdictions would re-create a problem that had been solved.
- Under the SE preferred option for recycling the buy-out fund, the fund would be distributed to projects across the UK. RAB can't see how this can be in the interest of Scottish consumers.
- RAB are also anxious to see that the planning, leasing and consenting arrangements will be in place to cope with any rapid increase in the number of applications for commercial projects.
- RAB are anxious that grid-connection could be a substantial hurdle to the implementation of wave and tidal stream projects on such a short timescale.

APPENDIX 5

Renewables Advisory Board Terms of Reference 2007

Mission Statement:

“Advancing Renewables Together” - To provide constructive evidence based advice to Government on the effective delivery of its renewable energy objectives.

Role & Remit

The Renewables Advisory Board brings together Government departments, the renewables industry and trade unions, to improve Government understanding of the obstacles and opportunities for the development and deployment of renewable technologies in the UK and make specific recommendations.

APPENDIX 6

Renewables Advisory Board Members (as at 31 December 2006)

The Board is composed of ex officio members, drawn from Government and the Trade Unions, and specifically appointed members. The ex officio members are:

The Parliamentary Under Secretary of State for Energy	Lord Truscott
Deputy Minister for Enterprise & Lifelong Learning, Scotland	Allan Wilson
Minister for Economic Development & ICT	Andrew Davies
Sustainable Energy, Department of Enterprise, Trade & Investment, Northern Ireland Office	Malachy McKernan
National Officer for Energy, AMICUS-AEEU	Dougie Rooney
Director of Renewable Energy Policy and Deployment, BERR	Kristian Armstrong
Director of Sustainable Energy Policy, DEFRA	Jackie Janes
Planning - Resources and Environment Policy, CLG	Peter Ellis
Director of Finance Regulation & Energy, HM Treasury	Paul Randle
Head of Environmental Policy, Defence Estates, Ministry of Defence	Ray Dickinson
Head of Power Projects, UK Trade & Investment	Bob Bish
Chief Executive, The Carbon Trust	Tom Delay
Head of Renewables and CHP, Ofgem	Cath Martindale
Scottish Executive	Jane Morgan
Vice President, The Crown Estate	Robert Hastings
TUC	Philip Pearson

In the absence of Ministers of the devolved administrations, their senior officials act for them at Board meetings.

The appointed members of the Board are as follow:

Dr Tariq Ali	Research Director, Energy & Environment Office, Imperial College
Mr Keith Anderson	Director for Renewables, Scottish Power
Mr Doug Coleman	Managing Director, United Utilities plc
Mr Paul Jefferiss	Head of Environmental Policy, BP
Mr Gearóid Lane ¹³	Director of Gas and Electricity Procurement, Centrica plc
Mr Kevin McCullough	Managing Director, RWE nPower Renewables
Mr Andrew Mill	Chief Executive, NaREC
Mr Alan Moore	Chairman, British Wind Energy Association
Dr Christopher Morris	Commercial Director, Wind Prospect Ltd
Mr Simon Roberts	Chief Executive, Centre for Sustainable Energy
Mr David Scaysbrook	Chairman and CEO, Novera
Mr Graham Sinden	Researcher, Oxford University
Dr Brian Smith	Head of Projects, Scottish and Southern Electricity plc
Mr Matthew Spencer	Chief Executive, Regen SW
Mr David Still	Managing Director, Clipper Wind Power Europe
Mr David Williams	Managing Director, Eco2 Ltd
New from January 2007:	
Mr Brian Mark	Director of Sustainability, Fulcrum Consulting
Mr Keith Plowman	Director of Development & Construction, E.ON UK plc
Mr Michael Rolls	Managing Director, Power Plants, Siemens Power Generation UK
Mr Peter Rolton	Managing Director, Rolton Group
Mr David Sowden	Managing Director, JDS Consulting Associates Ltd
Mrs Sue Wheeler	Head of New Energy, Centrica plc

¹³ Appointment ends January 2007.

APPENDIX 7

Renewables Advisory Board Work Group Members

Work Group	RAB Chair	BERR Representative	Status
Biomass	David Williams	Gary Shanahan	Active
Energy Review	David Still	Chris Barton/ Michael Duggan	Active
Finance & Investment	Simon Roberts	Sarah Kydd	Closed 2005
Grid	Kevin McCullough	Philip Baker/ Phil Hicken	Active
Input to ETF	Simon Roberts	Sarah Rhodes	New
Marine	Andrew Mill	Gary Shanahan/ John Spurgeon	Active
Microgeneration	Matthew Spencer	Rachel Crisp	Active
Offshore Wind	Sue Wheeler	Katherine Watson/ John Overton	Active
Planning	Chris Morris	Zoë Keeton	Active
Renewables Heat	Michael Rolls	Steve Michell/ Gary Shanahan	New
Unlocking Consents	-	Fiona Livingston	Closed 2005

APPENDIX 8

Glossary of Terms & Abbreviations

ARODG	Access Reform Options Development Group
ASG	Aviation Steering Group
BERR	Department for Business Enterprise and Regulatory Reform
BETTA	British Electricity Transmission & Trading Arrangements
BIAG	Biomass Advisory Group
BIPV	Building Integrated PV
BWEA	British Wind Energy Association
CAA	Civil Aviation Authority
CAPEX	Capital Expenditure
CHP	Combined Heat and Power
CLA	Country Landowners Association
CLG	Department for Communities and Local Government
CPA	Coastal Protection Act
DEFRA	Department for Environment, Food & Rural Affairs
DG	Distributed Generation
DNOs	Distribution Network Operators
E&W	England and Wales
EEC	Energy Efficiency Commitment
ENSG	Electricity Networks Steering Group
EST	Energy Saving Trust
EU ETS	European Union Emissions Trading Scheme
EWP	Energy White Paper
FEPA	Food and Environment Protection Act
FIWG	Finance and Investment Working Group
FSL	Final Sums Liability
GW	Gigawatt
IEA	International Energy Agency
Kv	Kilo volt
LPA	Local Planning Authority
MMO	Marine Maritime Organisation
MOD	Ministry of Defence
MRDF	Marine Renewables Deployment Fund
MW	Megawatt
NGC/NGET	National Grid Company/ National Grid Electricity Transmission plc
NPPG6	National Planning Policy Guidance 6
NWG	Noise Working Group
ODPM	Office of the Deputy Prime Minister
OFGEM	Office of the Gas & Electricity Markets
OGD	Other Government Departments
OPEX	Operational Expenditure
OSWG	Offshore Wind Group
OTEG	Offshore Transmission Experts Group
PPA	Power Purchase Agreement
PPG22	Planning Policy Guidance 22
PPS22	Planning Policy Statement 22

PV	Photovoltaics
PWG	Planning Working Group
RAB	Renewables Advisory Board
R&D	Research and Development
RDA	Regional Development Agency
RO	Renewable Obligation
ROC	Renewable Obligation Certificate
RTPI	Royal Town Planning Institute
SEPN	Sustainable Energy Policy Network
SQSS	GB Security and Quality of Supply Standard
TAN8	Technical Advice Note 8
TCPA	Town and Country Planning Association
TO	Transmission Owner
TOR	Terms of Reference
TPCR	Transmission Price Control Review
TSO /SO	Transmission System Operator/ System Operator
TWG	Transmission Working Group
UC	User Commitment

Every effort is made to ensure that the information given herein is accurate, but no legal responsibility is accepted for any errors, omissions or misleading statements in the information caused by negligence or otherwise, and no responsibility is accepted in regards to the standing of any firms, companies or individual mentioned.

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