

Renewables Advisory Board

2005/06 - Review of the Renewables Obligation

Response to the Consultation

1. Background

The Renewables Advisory Board (RAB) is an independent, non departmental public body, sponsored by the DTI, which brings together the renewable industry, unions and government departments with an interest in renewable energy. It provides advice to Government on a wide range of renewable energy issues, and aims to develop mutual understanding of the key issues for the industry both in the short term and over the next 20 years.

This response provides a view of the members of RAB. However due to the diversity of interests of the board members their individual detailed views vary as might be expected, given the range of technologies and interests concerned.

2. Overall Response to the Consultation

The Renewables Advisory Board welcomes this opportunity to respond to DTI's consultation on the Review of the Renewables Consultation. Some overall comments are covered in this section, followed by specific responses to each question posed in the Consultation document.

RAB believes that the RO has played a vital role in stimulating the renewables market and has proved effective in bringing forward the most mature and lowest cost renewables technologies. An investment climate has been created that will lead to a substantial increase in the contribution from renewable energy to future energy needs, and at an affordable cost to consumers.

In reviewing the operation of the Obligation, it is very important that nothing is done which undermines investor confidence in the mechanism, particularly now, when investment decisions about a number of major projects are being considered. Significant changes should therefore only be made where there are unambiguous benefits to be gained, and the underlying principles should not be compromised.

On the other hand there are a number of practical issues which could be addressed and which would improve the operation of the Obligation and allow industry to develop projects which will contribute to the UK's renewable energy targets more easily. RAB welcomes the suggestions in the Consultation document which would address these operational issues.

3. Response to Specific Questions

Effectiveness of Renewables Obligation to Date

Q1: We welcome your views on our assessment of the impact of the Renewables Obligation and on whether your experience correlates with that assessment.

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The comments in the Consultation Document represent a fair assessment of the impact of the Obligation so far. The Obligation has stimulated investment in the lowest cost available renewable technologies. Support for the higher cost emerging technologies is best provided via separate means. The structure of the RO will inevitably lead to some undershoot of the Obligation Levels due to the “cliff edge effect”, but other factors are currently more significant constraints to the rate of renewable energy capacity than fear of ROC price collapse.

Q2: We would welcome your views on the cost of the Obligation to consumers thus far.

The cost to the consumer of the Renewables Obligation has been acceptable so far and is likely to be so into the future as higher generation levels reduce the cost per MWh generated, improving the value for money.

Q3: We welcome views both from electricity suppliers and electricity consumers and their representative bodies.

The RO has been effective in producing increases in development and interest in new renewable energy projects, especially in the cheaper renewable technologies and has provided a major stimulus to one of the most significant carbon reduction options for the UK.

Q4: What is your assessment of the Obligation’s effectiveness in assisting the delivery of new projects?

The Obligation has worked well, providing a clear and transparent framework understood by developers and financiers, and producing an improved investment climate for renewable energy projects, particularly lower cost renewables.

Q5: What is your assessment of our ability to meet the 2010 target?

The UK has the resources necessary to meet the target of 10% renewables by 2010. The RO is structured so as to produce a shortfall between the level of the obligation and the amount of renewables in operation, but by counting both renewables which qualify for the RO as well as those which do not (large hydro and energy from the biodegradable fraction of wastes) the UK is capable of meeting the 10% target.

However there are a number of issues outside the Obligation which will need to be addressed urgently if the target is to be met – these include:

- planning difficulties;
- the need for timely grid reinforcements;
- a need for perceived stability in Government policy;
- the requirement for additional support for technologies currently approaching convergence with the RO, such as offshore wind.

The political stability of the RO depends critically upon the ability of the industry to generate volumes of eligible renewable electricity which do not fall very short of the Obligation each year. It is clear, despite strong economic incentives within the RO and determined developer activity, that the lower cost technologies i.e. landfill gas, onshore wind, biomass co-firing, will be incapable of achieving this aim on their own. Offshore wind is the next most economically attractive proven technology with potential to reduce its costs over time. Several studies, including those by RAB, Climate Change Capital, and the

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BWEA have demonstrated that in the short term, early R2 offshore projects cannot be financed solely from the RO. It is essential that additional support be made available for Round Two offshore wind projects. A number of possible sources have been identified by RAB and others; the actual sources are less important than the fact that without them the RO is itself under threat.

RAB stresses the need to tackle these issues, and is itself helping to address them as far as appropriate through its own work programme.

Energy from Mixed Wastes

Q6: Views are invited on ILEX's analysis, in particular:

Q7: Do you agree that existing regulatory drivers in the waste management area will incentivise a substantial increase in waste generation anyway?

RAB welcomes the DTI's clear statement that the biodegradable fraction of waste is a valuable renewable resource and would like to see DTI and DEFRA together working on building a more positive perception among the public of energy from waste as an environmental solution, emphasising its positive contribution to both our renewable energy targets and waste management objectives.

However we are concerned about any measure which might affect investor confidence and so believe that changes to the Obligation should only be made where the benefits are clear.

In the case of wastes, changes in other regulatory drivers are likely to have a great impact on the technologies employed for waste management. However the extent to which energy projects will feature in this mix and the likely impact of including wastes within the RO are unclear. RAB believes that definitions should be clarified regarding how materials are classified as eligible under the RO.

There are several examples of apparent anomalies in historic interpretations by the regulator. However RAB remains convinced that "mass incineration" should not be included within the RO.

The consultation document suggests increasing the obligation levels to take account of the extension in eligibility as a way of minimising the impact of any change on confidence in the RO mechanism. It would however be difficult to quantify accurately how much energy from waste would be developed as a result of eligibility for the RO. This would make it difficult to raise the obligation level to appropriate levels.

Including wastes within the RO would potentially increase the cost to consumers, and cause uncertainty in the market, potentially affecting investor confidence. The benefits of inclusion are not clear and quantifiable. Therefore on balance RAB has a preference for keeping the eligibility rules for waste unchanged and encouraging development in this sector through other means.

Q8: Are the principal barriers to greater energy recovery from mixed wastes structural (planning/perception etc) or economic?

Planning and public perception are significant barriers to the development of waste to energy projects. The energy options must compete with other waste disposal routes which meet current and emerging

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policy on waste management at a reasonable cost to the consumer. ROC income would add some 15% to the income for a waste treatment plant, which would influence the ranking of options but would not override the other factors which are taken into account.

Q9: Do you agree with ILEX's analysis of the potential impact on the Obligation of extending ROC eligibility to more EfW?

If RO eligibility were to be extended without altering the profile of the Obligation, then it would have a negative impact on higher-cost technologies already within the RO, including offshore wind which has the potential to make a significant contribution to the 2010 target.

Amending the level of the Obligation to accommodate a new supply of ROCs from EfW would be difficult given the many factors affecting investment decisions in waste plants, and the benefits would be uncertain.

Q10 Views are invited on the options for changing the eligibility rules for electricity generated from wastes and their advantages and disadvantages?

For the reasons outlined above RAB believes that Option (A) – maintaining existing eligibility rules – is to be preferred.

Q11: Are there other considerations beyond those above which should influence decisions in this area?

Maintaining investor confidence in the RO overall is the prime concern and the benefits of the changes discussed seem too uncertain to justify the upheavals involved.

Q12: Views are invited on the alternative options presented on page 25.

It is likely that both Option (D), (amending the 98% rule), and Option (E) (issuing ROCS for electricity produced via advanced conversion technologies and from chp facilities) would lead to limited benefits while also not affecting the ROC supply-demand balance significantly. RAB suggests that there should be an assessment of the additional supply of ROCs that these proposals could provide, and also that any decision is linked to the consideration of ways in which the heat market might be supported.

Lower Cost Renewable Technologies

Q13: Views are invited on the analysis provided by Oxera and Enviros.

In common with other bodies that have reviewed the work by Enviros, we have some reservations on their analysis which does not seem to take into account recent views on the costs of developing wind projects, takes a more pessimistic view of the potential than other well respected analyses and may overestimate the likely cost reductions in the future for on shore wind.

Nonetheless we agree with the initial view reached in the study – i.e. that none of the electricity producing renewable technologies are currently economic without some form of additional financial support.

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Q14: Would it be possible to reduce the support that the Obligation gives to new landfill gas projects without a significant impact on the future level of deployment of landfill gas project?

It would not be possible to reduce the support given to landfill gas projects without significantly impacting future level of deployment for landfill gas projects. The remaining potential on “good” low cost sites is limited, but there is additional potential associated with smaller or older sites which could usefully be captured, producing renewables electricity and also helping minimise environmental issues associated with landfilled wastes. A reduction in support for new sites would cut off this potential.

Such a move would also seriously damage investor confidence in the industry. The RO was designed to be a technology neutral mechanism which brought on the most economic projects first. Technologies which fulfil this objective should not be penalised.

Q15: We do not think that the analysis suggests a clear-cut case for decreasing the support that the Obligation provides for onshore wind, but views are invited on the above analysis and extent to which some onshore wind economics are viable without the full support of the Obligation.

RAB strongly believes that there should be no decrease in support for onshore wind. It is important to incentivise the development of a broad range of sites in order to realise a significant contribution from the available resource and to allow development of a portfolio of covering the spectrum of types of site available. Introducing some form of categorisation of sites would be difficult without introducing some perverse incentives which distort the pattern of development.

Such a radical change in technology eligibility would severely under-mine long term confidence in the Obligation both in the wind sector and in other sectors which will take advantage of the RO in future years.

Q16: Views are invited on the whether NFFO 3, 4 and 5 projects should be eligible for the Obligation when their contracts expire?

RAB strongly believes that NFFO projects should remain eligible for the RO after the NFFO contracts have expired. A precedent was set by NFFO 1 & 2 projects (which are eligible), and the future eligibility of NFFO contracts has been a material factor in their purchase and sale. Such a step would also have an adverse effect on NFFO sites yet to be constructed which would then apply for economic termination of their contracts, which would further delay their development.

The DTI has never suggested in the past that such projects would not be eligible and in the terms of reference for this Review the DTI clearly stated that eligibility would not be removed from any project currently in operation or development. To remove eligibility from NFFO projects would go against this statement. This could damage confidence in the RO and future Government reassurances.

Q17: Is it important to distinguish between different technologies?

All NFFO projects should be fully eligible for the RO at the end of their contracts irrespective of their technology, preserving the technology neutrality of the Obligation.

Q18: Should there be additional requirements (egg refurbishment) before former NFFO 3, 4 and 5 projects would become eligible for further support from the Obligation.

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A requirement to refurbish or repower at the end of a NFFO contract to ensure RO eligibility, would be unnecessary and would create a perverse incentive to decommission equipment unnecessarily before the end of its life.

Q19: Would it be practical to devise rules to limit ROC-eligibility of ex-NFFO projects, without inhibiting continued operation and possible future expansion, of those projects?

We believe that such measures would be difficult to devise, and would add unnecessary complication to the RO without leading to any significant return.

Views are invited on the general issue of lower cost renewable technologies within the Obligation.

In particular:

Q21: Does the analysis provided by OXERA and Envirocorrelate with your understanding of the economics of the lower cost renewable technologies?

The main aim of the Obligation was to bring forward investment in technologies which could provide the benefits of renewable energy at the lowest cost, through the introduction of a market based, technology neutral mechanism. Government and industry have succeeded in their main aim, and the approach should be maintained.

Significant changes now would send some very dangerous signals to the investment community and affect investment behaviour in the technologies currently contributing to UK energy supplies. It would also undermine confidence in investment both in the next wave of technologies (such as off shore wind), but also in the technologies still at the development stage. Confidence in stable government intent is essential to creating an investment climate that will foster the investment and innovation needed to bring these new technologies to market.

The analysis indicates that the technologies still need support if investment is to continue, and there is consensus on this point. Some details of the Envirocor analysis have been questioned and need to be re-examined.

Q22: Would it be possible to reduce the support that the Obligation gives to any of the lower cost technologies without a significant impact on the level of renewable generation for the most economic projects?

In the near term any reduction in support is likely to adversely affect levels of renewable generation, while at the same time reducing investor confidence. RAB understands that at some time in the future it is expected that the cost of some renewables will fully converge with the mainstream electricity market. However this is most probably in the medium to long term and does not require action now. In any future review it will remain essential that existing projects retain “grandfathered” rights under the RO.

Q22: Views are invited on the ‘Policy Options’ for handling the transition to market for lower cost technologies and in particular the option of granting ROC eligibility to new projects in some technology areas for a certain period of time or a certain volume of generation.

RAB agrees with Government that moving to a “fully banded” Obligation would be un-desirable, since this would create market uncertainty and could lead to market distortions. Nor do we accept the idea of a more complex structure which introduces market segmentation, for example by wind speed or landfill site size, since this also will introduce market anomalies and lead to perverse incentives.

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Setting limits to the time period for which projects in certain technology areas could be eligible for support might reduce these complications and provide a mechanism more in tune with the principles of the Obligation. The BWEA has proposed limits on eligibility in the form of a volume cap – known as a ‘full load hours’ limit in other countries and this proposal is worth further consideration at some future time.

Q23: Are there other possible approaches for tapering support for lower cost technologies?

A number of approaches, such as that proposed by the BWEA are possible, and more dialogue with industry bodies, taking account of experience with market mechanisms elsewhere in the world would be beneficial.

Q24: What practical issues may be raised in devising and implementing such rules?

The practical features would depend on the mechanisms being developed.

Obligation Levels Beyond 2015/16

Q25: The Government is interested in views as to whether an announcement of an increase in the Obligation level beyond 2015/16 at this stage would make a material difference to the financing and economics of longer-term renewables projects.

It will be necessary to announce the level of the Obligation beyond 2015/16 within 2-3 years in order to ensure that there is continuity, and that projects which will be built in 3 – 4 years time do not face uncertainties that may affect funding decisions. This will include Round 2 offshore wind projects. It would be helpful if a decision on the level of the Obligation could be made now, or at least a timetable was set indicating that the level would be set by 2008/09 at the latest.

Q26: The Government is also interested in evidence that supports these views. What considerations are most relevant to ensuring the successful development of these projects?

If the RO profile is level, then the recycling value of the ROC's may drop to zero if supply matches the Obligation threshold. The prospect of this would make investors cautious as far as lower return or risky projects are concerned, and may inhibit investment.

Q27: Views are invited on all of the issues above and the arguments for and against a further extension of Obligation levels beyond 2015/16 at this stage.

RAB encourages the Government to announce any increases in the Obligation levels after 2015 as soon as possible, and in any case set a timetable for such an announcement. This would improve confidence in longer term investment and lead to more renewables coming on line than would occur if such an announcement was delayed.

Q28: Views are therefore invited on the scope for alternative approaches to handling future decisions on Obligation levels.

It would be useful to set the level of the Obligation as far as 2020 as soon as possible, but also to establish a mechanism for fixing the level of the Obligation in future years, perhaps via a rolling target established 10 years ahead.

Q29: Are there approaches which do not involve such long term decision making by Government but could provide the market with additional confidence that the Government would increase Obligation levels “when the time came”, and thus increase confidence about long-term ROC prices and reduce developers’ and financiers’ concerns about the potential for a “cliff edge” in ROC prices?

RAB believes that establishing the level of the Obligation into the future as far and as early as possible is the best way of creating confidence in investors.

One possibility is a rolling target for ten years ahead of the current year, set 10% points above this year's out-turn. This provides a continuing steady incentive to achieve the desired 1% p.a. increase, with an adequate time horizon for investors. The likely financial cost to consumers of the RO would then be clearer for a decade ahead, enabling a more open discussion about how these relate to the benefits of increasing renewable energy generation in the UK.

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Q30: What would be the impact of an amendment to primary legislation of the kind described above? Would it improve developers and financiers views of the risks of investing in larger or longer term renewable energy projects, such as dedicated biomass power stations or Round 2 offshore wind farms? Are there disadvantages to an approach of this kind?

The impact of the sort of amendment proposed above would be positive, providing a higher level of certainty, and making significant investment decisions easier to make. We can see no disadvantages to such an approach.

Combined Heat and Power and the Renewables Obligation

Q31: Views are invited on the findings in the Impax Study.

RAB strongly supports adequate incentives for CHP. However it believes these should be provided separately from the RO for reasons which follow.

Q32: To what extent would the proposal for CHP exemption lead to more CHP capacity? If supported, should the proposal apply to existing schemes (or would this provide windfall gains)?

The proposal would lead to some increase in CHP capacity, providing some incentive to chp investment. To avoid windfall gains, the measure should not be applied to existing schemes.

Q33: To what extent would the proposal help meet the 10 GW 2010 target for CHP?

The proposal would assist in meeting the 10GW 2010 target.

Q34: What impact do you think there would be on renewables?

RAB believes that this proposal would severely undermine investor confidence in the RO, and overcomplicate the situation, and strongly advises against its adoption. Separate measures tailored to chp should be developed to encourage its uptake.

Q35: What impact do you think there would be on the costs to consumers?

The proposed measure would significantly increase the cost of the RO to the consumer, since the Obligation would need to be increased to compensate.

Q36: Do you think the proposal is practicable?

In principle it is possible to implement the proposal were the Government to decide to do so. However, it would add extra complexity and uncertainty to the RO as it would be very difficult to project how much CHP would qualify for the exemption and it would be very difficult to set the compensating increases in the obligation level.

Q37: What would be your preferred mechanism for supporting CHP?

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A solution more tailored to the needs of CHP, and which separated out the issues would be preferable, perhaps involving a CHP Obligation modelled on the RO, or a support mechanism based on the heat produced from chp.

Q38: What are the advantages and disadvantages of linking support for CHP to an instrument designed to encourage renewables?

The clearest disadvantage of the proposed mechanism is that it links support for CHP to renewables, so complicating an already complex issue and introducing other factors which will make investor decision making ever more difficult.

Operation of the ROC Market

Q39: Views are invited on the current levels of liquidity in the ROC market and how much importance should be attached to encouraging greater liquidity in the market.

There is currently a very low level of liquidity in the ROC market. If the market were more liquid then some additional investors might be drawn into the market, and more reliable forward curves for ROC prices may evolve. However these effects may be quite limited and their impact on actual investment small. So while measures could be taken to encourage more liquidity, the benefits of such actions would need to be carefully weighed against the unsettling effect of any changes on investment patterns. Moreover RAB is yet to identify a method of improving liquidity which can be shown to work effectively.

Q40: Views are invited on the issue of ROC revocation and alternative approaches.

The need for revocation is minimal, given the low level to which it has been employed so far, and other potential mechanisms (e.g. prosecution for fraud) that exist to protect against malpractice.

Q41: To what extent are the current rules on revocation in the Obligation a deterrent to ROC trading? How significant a problem is this bearing in mind the very low levels of ROC revocation to date?

The potential for revocation is a complicating and unsettling factor in the market and its removal would increase confidence.

Q42: Would it be possible for the market to develop solutions to the (low) risk of ROC revocation – e.g. through insurance products?

While in principle such a market solution could be developed, the low levels of revocation and the potential for other administrative solutions probably makes this unnecessary.

Q43: How effective are the current rules in deterring fraud? How effective would the alternative approach be? Would it be more or less effective?

The current arrangements are effective, as witnessed by the low levels of detected fraud. However the other mechanisms proposed in the Consultation document could also be effective.

Q44: Views are invited on the practicality of the option to allow non-suppliers to present ROCs (outlined in paragraphs 7.12 to 7.16); its potential impacts on the operation of the renewables obligation and the ROCs market; and any impact on costs to consumers.

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Most agree that greater liquidity in the ROC market would be desirable. However since the ultimate Obligation rests with Suppliers there are practical difficulties in allowing others to surrender ROCs. RAB would need to be convinced that these difficulties can be overcome before supporting such a significant market development.

Q45: Views are invited on the issue of a market operator for the Obligation and what roles a new organisation might valuably perform in relation to the operation of the ROC market and administration of the Obligation.

Some industry bodies see that there could be merit in establishing a separate body to administer the RO which could provide benefits through focus on the issues involved in making the RO work smoothly. However the development of such a body would be effort intensive and introduce a discontinuity into the process, so the costs and benefits would have to be carefully weighed before proceeding down this route.

Q46: Views are invited on how an appeals mechanism might practically operate in a way which added value and overcome the concerns outlined in paragraphs 7.20 to 7.25.

As the ROC market grows and the value at stake rises, then having independent adjudication on contested decisions may become more desirable. An appeals procedure would bring an extra level of accountability and assurance against administrative mistakes made by Ofgem.

Administration and other detailed technical or definitional issues

Q47: Views are invited on bringing forward ROC issuing and its potential benefits and possible disadvantages.

Bringing forward the issuing of ROCs would be beneficial, improving the cash flow of generators and reducing requirements for working capital. It would also aid in business planning. There are no apparent disadvantages to this change provided it is practicable.

Q48: Views are invited on the option to allow the Article 4(10)c declaration to be submitted by generating stations on a one off or annual basis.

The proposal that Article 4(10)c declarations should be submitted on an annual or one off basis is very sensible. Submitting the declarations on a one off basis would be preferable to an annual basis.

Q49: Views are invited on the option to allow generating stations to notify Ofgem only where input electricity exceeds 0.5% of gross output or exported electricity.

RAB is strongly supportive of the proposal to allow generators to notify Ofgem only when input electricity exceeds 0.5% of gross output. The current arrangements are cumbersome and unnecessary. They increase the administrative burden of participating in the Obligation.

Q50: Views are invited on the potential for alternative arrangements for measuring biomass fuels for both dedicated biomass plants and co-fired plants. Any arrangements would need to be able to provide rigorous and readily auditable confirmation to Ofgem in relation to the calorific value and volumes of biomass being used in the plant each month.

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Deeming that all output of a dedicated biomass plant is ROC eligible, subject to verification that the percentage of fossil fuel used in the plant was below an agreed percentage, is pragmatic and welcome. The requirement for on site measurement of mixtures of biomass for co-firing seems onerous. The requirement should be to provide an auditable and reliable account of the amount of biomass fired. The process needed to demonstrate this could depend on local circumstances – for example blending off site but close to the plant is a different matter from blending overseas. DTI and OFGEM are asked to review the need for this requirement.

Q51: Views are invited on whether the proposed changes to the timetable for supplier compliance would be useful and possible to simplify the current system in the ways described above.

The proposed changes to the timetable for supplier compliance should speed up the time between the end of the obligation period and the recycling of buyout payments. This will increase cash flow to ROC holders, and decrease the risk of supplier default impacting upon the size of the buyout fund.

Q52: Views are invited on the desirability and practicality of aggregating supply across several licences.

The proposal to aggregate supply across a number of licences is sensible. The Government should ensure that aggregation does not allow suppliers to avoid paying the buyout on some of its supply and that in the case of default responsibility for default is clear and traceable.

Q53: Views are invited on shorter Obligation periods.

Shorter Obligation periods would improve cash flows for generators, and would reduce the risk of supplier defaults as the size of the shortfall would be reduced but this should be balanced against increased complexity and administration requirements. Seasonal variations in renewables output would lead to increased volatility in ROC values. On balance, RAB favours shorter periods.

Q54: Views are invited on the benefits of the changes for smaller generators and any practical issues associated with their implementation.

The proposals to change the RO for smaller generators are to be welcomed.

Q55: Views are invited on the potential benefits of this change and whether a sale and buy back agreement is necessary to provide evidence that electricity from small generators is usefully supplying customers in the UK.

This would also be a welcome development.

Q56: Views are invited on the need for an amendment to the Obligation for fossil fuel generating stations with dedicated renewables generating sets.

This would be a logical development. However RAB asks that a study be conducted to estimate the potential volume of additional ROCs which might be expected to be produced by these large generating units, before agreeing with this proposal.

Q57: Views are invited on storage and the policy goals set out above.

In the longer term the development of storage may well be an important factor and the use of storage should not be deterred unnecessarily.

