The Renewables Obligation (Scotland)

Consultation Paper

Section 1 – Introduction

1. Earlier this year the UK Government announced its new policy on renewable energy, the aim of which is to stimulate further the development of the UK renewable energy industry. The objective is that, by 2003, 5% of UK electricity requirements will be met from renewable sources, rising to 10% in 2010, subject to the cost to consumers being acceptable. The policy has 5 key aims:

- To assist the UK to meet national and international targets for the reduction of emissions, including greenhouse gases;
- To help provide secure, diverse, sustainable and competitive energy supplies;
- To stimulate the development of new technologies necessary to provide the basis for continuing growth of the contribution from renewables into the longer term;
- To assist the UK renewables industry to become competitive in home and export markets and in doing so to provide employment; and
- To make a contribution to rural development.

2. The Department of Trade and Industry published a consultation document on its Renewables Obligation (RO) on 5 October, which is available on the DTI website[1]. DTI propose that the RO will place a new statutory obligation under the Utilities Act 2000 on all electricity suppliers who supply customers in England and Wales.

3. The promotion of renewable energy under the Utilities Act 2000 is executively devolved to the Scottish Executive, giving Scottish Ministers the power to set a separate obligation for Scotland, and exclude particular technologies. The Executive's commitment to the development of renewables will be implemented under the Renewables Obligation (Scotland) or ROS. The ROS will oblige all licensed electricity suppliers in Scotland to obtain renewables obligation certificates sufficient to cover a specified proportion of the electricity supplied to their customers in Scotland. It will be implemented by a statutory instrument which will be drafted early next year after full consideration of all of the responses received to this consultation paper. After a short formal consultation with licensed electricity suppliers which is scheduled for April, the statutory instrument will then be laid before the Scottish Parliament, with the intention that it come into effect around October 2001.

4. This deliberately short consultation paper should be read along with the DTI consultation paper, which provides more background and detail than this paper does.

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[1] www.dti.gov.uk/renew/ropc.pdf

5. To help the Scottish Executive to implement the ROS as effectively as possible, it is vital that we receive the views of all those with an interest. Specifically, we are seeking your views on the following issues:-

Section 4	**Arrangements for issuing and redeeming certificates**
Section 5	**Qualifying sources of renewable energy, particularly energy from waste**
Section 6	**The buy-out price in Scotland**
Section 7	**The profile of the ROS to 2010**
Section 8	**Support measures for the longer term technologies**
Section 9	**Proposed arrangements for the continuation of the Scottish Renewables Obligation**

Responses to this consultation should be sent **by Friday 9 February** to:

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Unless respondents request otherwise, all comments received will be made available for public view.

<u>Section 2 - Background</u>

6. Scotland is already well endowed with renewable energy sources. In the period up to 1980, 1200MW of hydro capacity was built in Scotland. It meets up to 11% of Scottish electricity demand, depending on rainfall. Since 1995, there have been further renewable energy developments under the Scottish Renewables Obligation (SRO), with over 100 contracts being awarded to developers. These projects got off to quite a slow start, but the pace of development is now quickening and they currently meet over 1% of Scottish electricity demand, with that figure expected to rise to around 2% over the next few years. One interesting feature has been that the success of wind energy planning applications has been higher in Scotland, at around 66%, than in England and Wales, where the approval rate is much lower.

7. The ROS will build on what existing hydro schemes and the SRO have achieved, although renewable energy projects with contracts under the SRO will continue to be developed and to operate. The ROS will be an integral part of the Executive's Scottish Climate Change Programme, and is intended to make an increasing contribution towards the Programme's target for the reduction of greenhouse gas emissions. It will not be operating in isolation, but is one of a number of measures to stimulate renewables, including new planning guidance for renewable energy development in Scotland (NPPG6), and an Executive review, currently ongoing, of the capacity of the Scottish electricity grid to connect more renewables developments.

<u>Section 3 - the Size of the ROS</u>

8. As part of its consultation on the draft Scottish Climate Change Programme (SCCP), the Executive sought views on setting the ROS to rise to 5% of electricity sales in Scotland by 2010. On the assumption that most if not all of the new renewables capacity needed to meet the ROS will be built in Scotland (a reasonable assumption given the favourable economics of wind generation in Scotland) this would boost the 13% of supply expected to be met from renewables by 2003 to around 18% by 2010.

9. This SCCP proposal for an ROS rising to 5% by 2010 was supported by a large majority of respondents to the SCCP, although some wanted the Executive to go for a higher target while others opposed an extension of renewable energy use in Scotland on the grounds that it already met the UK Government's target of 10%.

10. Scottish Ministers considered, in the light of the consultation response whether to revise their initial proposal that the ROS should be 5% by 2010. **On balance they have decided that in view of the wide support expressed by respondents to the SCCP consultation, the ROS should be set to rise to 5% by 2010.**

<u>Section 4 - How ROS will work</u>

11. As already stated, the ROS will be a percentage obligation on all electricity suppliers in Scotland to cover a specified proportion of electricity they supply to customers in Scotland with Renewables Obligation Certificates (ROCs) from qualifying sources of renewable energy. That specified proportion will rise to 5% of electricity sales over the period 2003 – 2010. The ROS will remain in force for 25 years. It will work in the following way:-

11.1 The energy regulator, OFGEM, will accredit Scottish renewables generating stations as qualifying under the obligation. (See Section 5 on what will be regarded as qualifying generation).

11.2 For every batch of renewable electricity generated by an accredited generator (see paragraph 12 below) and supplied to a licensed supplier for supply to a customer in GB (see paragraph 13 below), OFGEM will issue a ROC to the renewable generator (except perhaps for SRO schemes where the ROCs might be allocated to a third party – see Section 9);

11.3 The ROCs issued to non-SRO generators can then be sold to electricity suppliers or traded in a new GB-wide green certificate market (which may eventually become Europe-wide);

11.4 All electricity suppliers in Scotland will have to obtain enough ROCs (either by own generation of renewables or by purchase of ROCs in the market) to cover the amount of renewable electricity specified in the ROS. Alternatively, they may pay OFGEM a buy-out price, which will act as a ceiling on the cost to consumers of renewables (see Section 6 on the buy out price in Scotland);

11.5 The cost to suppliers of either obtaining ROCs or buying out their obligation may be passed on, in greater or lesser degree, to customers. Scottish suppliers will be able to bank and borrow ROCs in the way outlined in the DTI consultation paper.

11.6 Each supplier not buying out its obligation will provide ROCs to OFGEM as evidence that it has met its obligation.

12. It is proposed that one ROC will be issued to a qualifying renewable generator in respect of a set amount of metered units of eligible renewable electricity which it has generated and has then been supplied by a licensed supplier to its customers in Great Britain. The proposal is that the set amount for one ROC will be 10,000 kWh.

13. OFGEM Scotland will make an annual report to the Scottish Executive on the extent of suppliers' compliance with the ROS. Suppliers will have to demonstrate compliance with ROS by redeeming ROCs or buying out their ROS obligation and also, in view of the terms of the Utilities Act 2000, by satisfying OFGEM that none of the renewable energy produced under ROS has been supplied to customers outside GB. Non-compliance with the Obligation will be subject to the full range of the OFGEM's enforcement powers under the Utilities Act 2000.

14. Suppliers with a deficit of ROCs will have the option of buying more in the market, and those with surplus ROCs can sell them. It is anticipated that this will result in an open GB-wide market for ROCs, which will be regulated by OFGEM, who will take steps to protect against fraud.

15. Views are sought on the proposals for the issuing and redemption of certificates and compliance checking.

Section 5 – Qualifying renewables technologies

16. In contrast with the previous SRO arrangements, Scottish Ministers will not direct which specific renewables projects at specific sites will be developed to meet the ROS target. Instead the market will in general take these decisions. But Ministers will be able to specify which technologies will not qualify for support under ROS. For example, large hydro schemes (> 10MW declared net capacity) will be excluded from support under ROS (and the RO) on the basis that large hydro is a well established technology.

17. Under the previous SRO arrangements (and NFFO in England and Wales), the policy has been to regard energy from waste, i.e. municipal waste incineration or gasification, as a renewable form of electricity generation. Scottish Ministers have noted that the UK Government now considers that energy from waste (but not energy from landfill gas or sewage gas) should be excluded from support under the RO (although it is proposed that it should receive exemption from Climate Change Levy), whilst still contributing to the 10% UK renewables target. It is acknowledged that Scotland needs to do much more than it currently does in terms of waste minimisation, reuse and recycling, where our track record is comparatively very poor, and that the development of waste incineration facilities with support under ROS might weaken the drive needed to greatly increase waste reuse/recycling. It might also lead to waste being transported to Scotland for incineration. And in any event, the EU Landfill Directive may spur the development of waste incineration by restricting the volumes of waste which can go to landfill. These are arguments against support for energy from waste under ROS.

18. On the other hand, while the EU Landfill Directive may indeed spur the development of incineration, it does not follow that all the waste incineration capacity which might be developed in Scotland as a result will be built with energy recovery, since the latter represents a significant additional capital cost. The argument for not excluding waste incineration capacity located in Scotland from support under ROS is therefore that it would secure the development of energy recovery from waste incineration, rather than just waste incineration per se.

19. A variant would be to exclude municipal waste incineration from support under ROS, but not to exclude support for waste gasification. This technology has been developed to the point where it is now available and could be applied in Scotland to produce clean energy from large volumes of municipal waste.

20. Scottish Ministers have not taken a final view on whether energy from waste incineration, or from waste gasification should be included or excluded from support under ROS , and will not do so until after carefully considering the views expressed by respondents to this consultation. For the avoidance of doubt, it is proposed that energy from landfill gas and sewage gas should qualify for support under ROS, as well as under the RO in England and Wales.

21. The table at Annex 1 shows the renewable sources which, it is proposed, should be supported, and (for comparison purposes) which will benefit from Climate Change Levy exemption and from capital grants under the GB-wide schemes announced by DTI (see Section 8 below).

22. You are asked for your views about the question of qualifying renewable technologies under the ROS, and particularly about the issue of energy from waste.

Section 6 – the buy-out price in Scotland

23. The fact that ROCs will be traded in a GB-wide open market means that the price cap for ROCs in Scotland will have to be set at the same level as that in England and Wales. To do otherwise would distort the market and thus put a disproportionate burden on consumers on one or other side of the border. So it is proposed that the buy-out price in Scotland should be set at the level being proposed by DTI, i.e. 3.0 p/kWh, index linked in future. It is also proposed that buy out receipts in Scotland be recycled by OFGEM Scotland to suppliers in Scotland in proportion to their fulfilment of ROS. This approach has been chosen because it reduces the chances of underachievement of the ROS target.

24. Views are sought on the proposal that the buy-out price should be GB-wide, and on the proposal for recycling of buy-out receipts in Scotland by OFGEM Scotland.

Section 7 - the profile of the ROS target 2003 - 2010

25. The percentage obligation specified in the ROS Order to be laid before the Scottish Parliament next year will have to include as a baseline the Scottish share of all existing qualifying renewables generation capacity in GB (eg. output from existing small hydro plant of <10MW) and may in addition include the amount of output expected to be produced by the SRO projects – see Section 9 below for the options on this issue. The ROS Order will set out the percentage obligation on all suppliers in Scotland, rising each year over the period 2003-2010. During that period, the percentage figure will increase incrementally, from the baseline described above in 2003 to 5% over the baseline by 2010. It is envisaged that it will remain at this level until 31 March 2026. Although subsequent policy decision could be taken to raise it, it is the explicit intention that it will never be reduced.

26. Views are sought on how the growth in required renewables output should be specified over the years 2003-2010, i.e. on the "shape" of the profile.

Section 8 - support measures for the longer term technologies

27. One key feature of renewables electricity generation is the high capital cost that can be involved. It is expected that a significant proportion of the UK target of 10% by 2010 will need to be met through the deployment of longer-term technologies such as offshore wind and energy crops, which have higher capital costs than the more established technologies such as onshore wind and hydro. DTI describes in its consultation paper the availability of capital grants for a small number of demonstration projects for offshore wind. In addition, the New Opportunities Fund is to make money available for the development of some energy crops projects, which could include forestry biomass. Depending on Ministerial decisions on funding, Scottish projects will be eligible for consideration. It is intended that these

demonstration projects will help to reduce the costs of these technologies to the point where they can compete in the market without special grant assistance, thus becoming more attractive in their own right to electricity suppliers as a means of meeting their obligation.

28. The volume of the available Scottish wind resource could sustain a large increase of renewable energy from onshore windfarms, albeit at the cost of the considerable strengthening of the electricity grid which would be needed in some areas, especially in the north and west. Some small hydro schemes will probably also be developed. In addition, Scotland has a considerable medium term resource in the shape of forestry biomass, and in the longer term in wave power. There currently may be an opportunity to develop a lead in wave energy and other marine power technology, through indigenous marine energy expertise. The energy potential from marine power in Scotland, while not nearly as much as for wind, is quite significant on the north and west coasts, and there could be an advantage in establishing a home market in the technology.

29. However, wave power in particular is considerably more expensive than onshore wind energy. Developments in Scotland thus far, including the Islay LIMPET project, have had to be financially supported under the Scottish Renewables Obligation. Some further wave power development under ROS might be able to proceed at the prices implied by a price cap of 3p per unit for ROCs, but substantial development might require additional financial support. The Scottish Executive has been allocated some of the Climate Change Levy revenue over the next 3 years and some respondents to the SCCP consultation expressed considerable support for some of this money to be used to stimulate new renewables developments. The sums available are however small in comparison to the cost of developing large renewables projects, although they could well make a difference in encouraging community scale projects.

30. Renewables research and development is the responsibility of the Department of Trade and Industry, which has allocated £14 million for R&D on renewables in 2000/2001 and has supported wave power research in the past. The Scottish Executive will encourage as many good Scottish projects as possible to compete for that funding, and will review the possibility of direct support for longer term renewables technologies. As mentioned in paragraph 7, it is also leading a review of the capacity of the electricity grid in Scotland to connect significant numbers of new renewables generation projects.

31. Views are sought on the proposals for support funding for longer-term technologies, and on any other forms of support which respondents would consider necessary from a Scottish perspective.

Section 9 - arrangements for continuation of the Scottish Renewables Obligation

32. We have considered a number of options for the Scottish Renewable Obligation (SRO) projects already commissioned and those still to be commissioned. In summary, the options are:

> 32.1 to retain the present arrangements, and exclude SRO projects from support under ROS. This would imply the retention of the fossil fuel levy in Scotland for the next 15 years or so.
>
> 32.2 not to exclude the SRO projects from support under ROS, but to adopt a mechanism similar to that to be used in England and Wales whereby the ROCs for NFFO projects are to be assigned to the Non-Fossil Purchasing Agency. This would be necessary to ensure that the SRO generators did not receive financial support under both schemes, and also to ensure that all GB electricity suppliers, and not just the two Scottish former PESs which are contracted to take all of the SRO output, are afforded equal access to the ROCs associated with that SRO output.

33. Views are invited on these options for supporting the SRO contracts already in place

Energy Division
Scottish Executive

30 November 2000

Annex 1: Summary of Technologies Included in UK 10% Target, CCL Exemption and The Renewables (Scotland) Obligation

Technology	UK 10% Target	ROS	CCL Exemption	Capital Grant
Landfill Gas	**Y**	**Y**	**Y**	**N**
Sewage Gas	**Y**	**Y**	**Y**	**N**
Energy from Waste	**Y**	**?**	**Y**	**N**
Hydro less than 10 MW installed capacity	**Y**	**Y**	**Y**	**N**
Hydro > 10 MW installed capacity	**Y**	**N**	**N**	**N**
Onshore wind	**Y**	**Y**	**Y**	**N**
Offshore wind	**Y**	**Y**	**Y**	**Y**
Energy crops/ forestry biomass	**Y**	**Y**	**Y**	**Y**
Wave Power	**Y**	**Y**	**Y**	**?**
Photovoltaics/Solar	**Y**	**Y**	**Y**	**N**

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