

**NORTH LONDON WASTE AUTHORITY**

**REPORT TITLE:**  
**UK RENEWABLE ENERGY STRATEGY CONSULTATION**

**REPORT OF:**  
**HEAD OF WASTE STRATEGY AND CONTRACTS**

<b>FOR SUBMISSION TO:</b> <b>AUTHORITY MEETING</b>	<b>DATE:</b> <b>26<sup>th</sup> September 2008</b>
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**SUMMARY OF REPORT:**

This report provides Members with an overview of the Government’s recently launched consultation on a UK Renewable Energy Strategy and outlines some of the key points in the consultation document and potential implications for the Authority. A recommended draft response to the consultation is attached as Appendix 1 to the report.

**RECOMMENDATION**

The Authority is recommended to approve the response to the Government consultation on a UK Renewable Energy Strategy attached as Appendix 1 of the report.

**Signed by: Head of Waste Strategy and Contracts**

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**Date:** .....

## **1.0 REPORT OVERVIEW**

- 1.1 This report first gives some background to the Draft UK Renewable Energy Strategy. In section 3 and 4 it then identifies which proposals are important to the Authority and the nature of the questions. Finally in section 5 it sets out the strategic and practical implications for the Authority, along with a recommended draft response at Appendix 1.
- 1.2 A glossary of terms is provided at Appendix 2.

## **2.0 BACKGROUND TO THE DRAFT UK RENEWABLE ENERGY STRATEGY**

- 2.1 In 2007, along with other EU partners, the UK agreed to a binding target that 20% of the EU's energy consumption must come from renewable sources by 2020. The European Commission has proposed that the UK's contribution to this should be to increase the share of renewables in our energy mix from around 1.5% in 2006 to 15% by 2020. This is a challenging target and one which it will be important to meet in the most cost-effective way possible. There is recognition that current policies will not deliver this ten-fold increase and that additional new measures will be necessary. This draft strategy seeks to outline how this increase will be achieved.
- 2.2 The Draft UK Renewable Energy Strategy sits alongside the draft Climate Change Bill and the Government's 2007 Energy White Paper which together represent the response to recognition by the Government that the threat of climate change is perhaps the greatest challenge facing the world today. It is also a response to the recognition that it is necessary to diversify our energy sources as well as radically reducing greenhouse gas emissions. The Strategy is seen as part of the move to a low carbon economy and acknowledgement that there is a need for a step change in the use of renewable energy for heat, electricity and transport going forwards.
- 2.3 The consultation draft of the UK Renewable Energy Strategy covers both energy supply and use and recognises that there is a trade off between higher renewable energy costs and the costs of catastrophic climate change. The strategy is set within the context of rising fossil fuel prices, especially oil, and potential uncertainty of overseas supplies in particular, going forward.

## **3.0 OVERVIEW OF THE DRAFT STRATEGY**

- 3.1 The draft strategy is relevant to the Authority primarily because it discusses energy and heat from waste, although it also covers renewable energy sources for transport too.
- 3.2 In addition, the draft UK Renewable Energy Strategy covers aspects of planning for renewable energy facilities and the need for community benefits to be considered when facilities are built. It also touches on energy saving.

- 3.3 Chapter 4 of the draft strategy covers heat and chapter 7 covers bioenergy, (i.e. the production of energy from biomass including landfill and sewage gas, gas or energy from the biodegradable portion of municipal solid waste, wood as a fuel, as well as specially grown crops). Biomass sources accounted for 30% of renewable electricity generating capacity at the end of 2006 (wind accounted for 39%, hydro the remainder).
- 3.4 It is noted that landfill gas is currently the most significant source of biomass-based renewable generation in the UK, but that the potential for growth is small in the short term as most large landfill sites are already being exploited, and may decline in future as existing sites are depleted. The draft UK Renewable Energy Strategy notes (paragraph 3.2.11) that further growth in biomass electricity generation is likely to be sourced from waste or energy crops.
- 3.5 The UK Renewable Energy Strategy seeks a significant expansion of renewable energy for electricity generation. In 2006, renewable electricity generating capacity from all the above types, supplied about 4.5% of the country's electricity. The strategy seeks to increase this percentage to 30-35% by 2020. It suggests that most of this increase will come from wind, but it also expects a significant uplift in electricity production from biomass, including waste.
- 3.6 In terms of heat, the UK Renewable Energy Strategy says that there is a need for a fourteen fold increase in renewable heat and acknowledges a leading role of biomass including waste for this purpose. The strategy also points out that the Government has already introduced a range of measures to support the growth of Good Quality Combined Heat and Power (GQ CHP) generating facilities in the UK, including Enhanced Capital Allowances for all GQ CHP eligible expenditure and Business Rates exemption for certain GQ CHP power generation plant and machinery.
- 3.7 The strategy also suggests the possibility of a Renewable Heat Obligation, which would operate much like the existing Renewables (Energy) Obligation<sup>1</sup> which would increase the value of heat and encourage the use of CHP.

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<sup>1</sup> **The Renewables Obligation**

The Renewables Obligation requires licensed electricity suppliers to source a specific and annually increasing percentage of the electricity they supply from renewable sources. The current level is 9.1% for 2008/09 rising to 15.4% by 2015/16. This is set out in the [Renewables Obligation Order](#). (Source: BERR website accessed 01/09/08)

Renewable Obligation Certificates (ROCs) are issued for every megawatt hour of electricity generated from renewable sources and therefore act as proof of production from renewable sources.

It is expected that the Obligation, together with exemption from the Climate Change Levy for electricity from renewables, will provide support to industry of up to £1bn per year by 2010. (Source: BERR website accessed 01/09/08)

- 3.8 The strategy provides strong support for the use of Solid Recovered Fuel (SRF), also noting (paragraph 4.3.8) that technologies other than incineration, such as gasification, may offer a low emission alternative to direct burn incineration. However, the strategy also concedes that "there may be some way to go before such technologies become commercially viable and planning objections could remain".
- 3.9 The strategy proposes to increase the Renewables Obligation and extend its life in order to increase certainty of Renewables Obligation Certificate (ROC) income. Under already proposed reforms to the Renewables Obligation currently being taken forward through the Energy Bill, the proposal is that dedicated biomass CHP plant will receive 2 ROCs per MWh of generated electricity, as opposed to 1.5 ROCs for power-only plants. The table below shows the proposed level of support for biomass (including waste) under a banded Renewables Obligation.

**Proposed level for support for biomass under the banded  
Renewables Obligation**

Technologies	Level of Support (ROCs/MWh)
Landfill gas	0.25
Sewage gas; co-firing of biomass	0.5
Energy from waste with CHP	1.0
Co-firing of energy crops; energy from waste with CHP	1.0
Dedicated biomass	1.5
Fuels created using advanced conversion technologies; dedicated biomass with CHP, dedicated energy crops with or without CHP	2.0

- 3.10 Reference is made in the UK Renewable Energy Strategy to the Government's Waste Strategy for England and two key objectives to help reduce greenhouse gas emissions are singled out: namely by diverting greater amounts of biodegradable waste away from landfill and by increasing the recovery of energy from waste. The UK Renewable Energy Strategy refers to the Waste Strategy for England as identifying combustion as the preferred option for waste wood (over recycling) and anaerobic digestion as the preferred option for food waste.
- 3.11 It appears illogical however that the Government is willing to issue ROCs for the renewable element of mixed waste that is tipped in landfill sites where it decomposes and creates methane, much of which can be captured and burned to generate electricity, but when the same mixed waste with the same renewable elements is used to generate electricity directly at a conventional energy-from-waste incinerator the Government is not willing to issue any ROCs at all. Instead the energy-from-waste incinerators have to secure heat markets before they receive any ROCs support at all, albeit the support is then at a higher level.

- 3.12 In addition, the UK Renewable Energy Strategy notes that there is a £2 billion programme of Private Finance Initiative (PFI) credits for waste infrastructure, together with ROCs for electricity generated from biomass. The UK Renewable Energy Strategy notes that the resulting infrastructure will help overcome the current shortage of Waste Incineration Directive (WID) compliant combustion capacity, and will support other forms of energy from waste technology, such as anaerobic digestion. Strong support is given in the document to anaerobic digestion for biowaste and food waste and the strategy states (paragraph 7.5.21) that the government favours source segregation of food waste for anaerobic digestion, in part because this improves the ease of obtaining markets for digestate (compared with those for digestate from mixed wastes), and synergies with farming policy.
- 3.13 The strategy also suggests the possibility of landfill bans on biomass to divert material into recovery options.

#### **4.0 QUESTIONS FOR CONSULTEES**

- 4.1 There are 41 separate questions for consultees in the document, relating to the main chapters of the strategy and an additional 9 questions relating to Annex 2 on feed-in tariffs for small-scale electricity generation.
- 4.2 The questions include a request for any suggestions on further changes needed in the planning system to facilitate the development of renewables; a request for comments on the government's assessment that a Renewable Heat Incentive would work better in the heat market and a request for further comments on measures to reduce the constraints on renewable development arising from grid issues. (It is useful to note that a Transmission Access Review (TAR)<sup>2</sup> has also been published alongside the UK Renewable Energy Strategy).
- 4.3 Finally, the consultation asks for consultees' views on community benefit that should be delivered by greater renewables and in particular, what more could the Government or other parties do to ensure community support for new renewable generation capacity.

#### **5. IMPLICATIONS FOR THE AUTHORITY**

- 5.1 The consultation proposal to increase the term and amount of money awarded to renewable energy projects through the Renewables Obligation will potentially benefit the Authority if it seeks to use a qualifying technology going forward. As noted above at 3.11, the Government has weighted this in favour of certain waste treatments.

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<sup>2</sup> i.e. A review of how easy it is for new electricity generating facilities to gain access and connection to the grid to supply power and therefore gain income.

- 5.2 The consultation asks for views on the need for and the means of providing incentives for the supply of renewable heat. If some form of heat incentive was introduced this should have the effect of encouraging energy-from-waste facilities and solid recovered fuel (SRF) using plants to be designed to operate in a combined heat and power mode, rather than just providing power. This would increase the likelihood of the Authority accessing such a plant which is operating in CHP mode and which therefore has a higher thermal efficiency than a power-only plant, which in turn should lower the gate fee to the Authority.
- 5.3 The consultation recognises the issues and problems associated with planning, but does not propose a specific remedy. The implications are that it is not going to be any easier to secure planning permission to develop energy producing facilities as a result of this strategy. As gaining the relevant planning consents can be a key risk for any new developments the draft strategy is not proposing any measures to reduce the Authority's risk associated with this issue.
- 5.4 The consultation seeks views on the nature of community benefit to be derived from renewables. This is a new development and it is not clear if this is going to be a statutory requirement or another aspect of the current "planning gain" arrangements. The impact on the Authority of this proposal is difficult to ascertain without further information.
- 5.5 The paper asks for views on how to assure supplies of biomass sustainability. This is not an issue for waste derived materials as waste continues to be generated; but the advantage of a continued supply of waste to generate energy and heat should be recognised and incentives provided to stimulate the collection and separation of material.
- 5.6 The paper specifically recognises that contribution can be made by anaerobic digestion and solid recovered fuel and asks for proposals that increase the use of these techniques.

## **6. RECOMMENDATION**

- 6.1 The Authority is recommended to approve the response to the Government consultation on a UK Renewable Energy Strategy attached as Appendix 1 of the report.

## **7. COMMENTS OF THE FINANCIAL ADVISER**

- 7.1 The Financial Adviser has been consulted in the preparation of this report and has no further comments to add.

## 8. COMMENTS OF THE LEGAL ADVISER

- 8.1 The Legal Adviser has reviewed this paper and has no further comments to add.

### Local Government Act 1972 – Access to information

#### **Documents and Websites used:**

UK Renewable Energy Strategy Consultation, Department for Business Enterprise and Regulatory Reform, June 2008

Draft Climate Change Bill, HM Government, 13<sup>th</sup> March 2007

The Waste Strategy for England, Department for Environment, Food and Rural Affairs, 2007

UK Biomass Strategy – Working Paper 1, Economic Analysis of Biomass Energy, Department for Trade and Industry, 2007

<http://www.berr.gov.uk/files/file39040.pdf>

UK Biomass Strategy – Working Paper 3, Anaerobic Digestion, Department for Environment, Food and Rural Affairs, May 2007

<http://www.defra.gov.uk/Environment/climatechange/uk/energy/renewablefuel.pdf/ukbio0507-work3.pdf>

Energy White Paper: Meeting the Energy Challenge, Department of Trade and Industry, 2007

Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, European Commission, 2008

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**DRAFT AUTHORITY RESPONSE TO THE UK RENEWABLE ENERGY  
STRATEGY CONSULTATION**

**Renewable Energy Strategy Consultation  
Ropemaker Court  
11 Lower Park Row  
Bristol  
BS1 5BN**

**26<sup>th</sup> September 2008**

Dear Sir,

**Ref: UK Renewable Energy Strategy Consultation**

Thank you for providing us with the opportunity to respond to the consultation on the above. The North London Waste Authority (NLWA) is one of the six joint waste disposal authorities in England, with nearly 1m tonnes of municipal solid waste arising in its area each year.

Currently 39.4% of the municipal waste handled by the Authority each year is sent for incineration with energy recovery, although the incinerator does not operate in a combined heat and power mode. The Authority has recently embarked on a procurement process to secure longer term services for managing waste when its contract with its existing supplier comes to an end in 2014. Accordingly the areas of the consultation which are of most relevance to us are those aspects relating to power and heat generation.

In our response which is attached we have focused upon aspects which have particular relevance to the Authority, specifically further developments of the renewables obligation and proposals for incentives for the supply of renewable heat, both of which have relevance to the production of energy and heat from waste.

In a couple of places the consultation document does not provide sufficient detail on which we can comment, specifically in relation to planning issues and providing community benefits to counterbalance the fact that it is necessary for some communities to host facilities. Where we feel that further clarification is required we have stated this.

Thank you once again for the opportunity to respond to this consultation and if you require clarification on any of the points raised, please do not hesitate to contact me.

Yours faithfully

**Cllr Clyde Loakes  
Chair, North London Waste Authority**

## **RENEWABLE ENERGY STRATEGY CONSULTATION – Draft response to specific questions**

### **Chapter 1**

**Q1: How might we design policies to meet the 2020 renewable energy target that give enough certainty to business but allow flexibility to change the level of ambition for a sector or the level of financial incentive as new information emerges?**

A1: Biomass based projects are capital intensive, and in many cases are funded by senior bank debt. This funding route requires significant levels of certainty over project cash flows and sufficient level of return to justify the level of perceived risk. The current regime is not producing a sufficient level of new projects to meet the Government's aspirations for renewable heat or electricity.

Policies need to provide certainty for a period of at least ten years to give developers sufficient confidence to invest in developing new capacity. Constant review and change does not help create new capacity so we would urge long term commitments to policies once agreed.

### **Chapter 3**

**Q5: What more could the Government or other parties do to enable the planning system to facilitate renewable deployment?**

A5: The current proposal that planning applications for facilities over 50MW electricity output should be submitted to an Infrastructure Planning Commission is unlikely to catch the majority of biomass plants. Waste disposal authorities seeking outlets for Solid Recovered Fuel produced from municipal solid waste are unlikely to control sufficient fuel that will put a plant into the category decided by the Infrastructure Planning Commission (IPC). Plants that burn waste based biomass will therefore still be subject to the difficulties currently encountered in the waste planning system. Government could either seek to support local authorities through robust planning guidance, or refer all such plants to the IPC, or lower the threshold for referring some or all energy-from-waste plants to the IPC. (The differentiation could be based upon fuel type if there are different environmental impacts, or by plant efficiency as defined in ways similar to that already employed by the Good Quality CHP rules). However, until the terms of reference and working practices of the IPC are confirmed it is not possible to say which is preferable.

**Q10: Do you agree with our analysis on the importance of retaining the Renewables Obligation as our prime support mechanism for centralised renewable electricity?**

A10: The need for a support mechanism is clear; however, the success of the Renewables Obligation to date as the means of stimulating new capacity is open to debate. The reasons for its failure are in part due to its lack of certainty of income. Many waste project developers preferred the certainty of the previous NFFO system because it was clear to all parties what income would be generated. A feed-in tariff structure shares this advantage. The

Government's argument defending the Renewables Obligation in order to avoid another change has validity, but is undermined by the previous historical adjustment of the Renewables Obligation. If the change in required capacity is large (which it is) then the Government needs to set large incentives in order to provide sufficient "driving force" to encourage the capacity to come forwards. In this respect a feed-in tariff approach that was structured to remain unchanged for the required duration to enable development and financing of the required capacity would be more likely to encourage investment.

**Q11: What changes (if any) should we make to the Renewables Obligation in the light of the EU 2020 renewable energy target?**

A11: Our response to Q1 also relates to this question.

#### **Chapter 4**

**Q13: Assuming financial support measures are in place, what more could the Government do to realise the full potential of renewable Combined Heat and Power?**

A13: The current CHP regime within the Renewables Obligation provides little incentives for CHP from waste derived fuels or residual (i.e. post reduction, recycling and composting) municipal waste. Operators of waste fired plant are not rewarded securely for heat supply. The current rules also discourage larger and potentially more efficient plant from being CHP because the factors used to determine Good Quality CHP become more demanding with increasing plant size. This seems to contradict the intention to create new capacity.

Incentives for heat supply should be created so that plant operators are not financially disadvantaged by operating in CHP mode. Additionally the CHP QA factors should be reviewed so that the ability to achieve Good Quality (and therefore get ROCs) is not so difficult.

**Q16: Do you agree with our assessment that a Renewable Heat Incentive would work better in the heat market?**

A16: Given the lack of certainty created by the Renewables Obligation Order, having a similar structure for heat is unlikely to provide the required certainty to provide heat as part of CHP. A feed tariff approach is likely to create more supply as it would provide greater certainty.

**Q18: How far should the Government go in focusing on areas off the gas grid as offering the most potential for renewable heat technologies?**

A18: Whilst logically consistent from a fuel supply perspective, this approach will miss the opportunity to create big wins. Renewable heat opportunities are likely to co-exist with the existing gas supply network, and can be converted if the financial incentives exist.

## Chapter 6

### **Q24: How can we best incentivise renewable and low-carbon transport in a sustainable and cost-effective way?**

A24: Compressed and/or liquefied methane derived from anaerobic digestion of food waste and other biodegradable wastes can potentially provide a clean fuel ideally suited to urban settings. This feedstock does not suffer from the lack of transparency and auditability in which other biofuels have recently become embroiled. The use of this fuel has been inhibited by the lack of financial incentives to switch fuel type, high capital investment and, from the local authority perspective, the costs of separate food waste collections. The Government should consider how tax or duty incentives could provide this certainty.

## Chapter 7

### **Q27: How can we best ensure that our use of biomass is sustainable?**

A27: The use of waste derived biomass solves many of the issues surrounding sustainability associated with other forms of biomass. In fact, the use of waste enhances the sustainability of biomass supply as it represents a sustainable waste management option as well as the provision of energy, so long as any additional collection services leave a net energy gain over alternative forms of waste treatment. Therefore use of waste derived biomass should be encouraged through policy and fiscal measures.

Stronger incentives still could be offered for facilities providing Combined Cooling, Heat and Power (CCHP).

### **Q29: Should the Government take further regulatory measures to discourage biomass waste, including food waste, from going to landfill? If so, which types? What, if any, other measures should be taken to encourage its use to generate bioenergy?**

A29: The Government should discourage biomass waste from entering landfill. A landfill ban will encourage new capacity to come forward if developers perceive that the material will become available for contract. Any change in regime needs clarity in terms of policy and enforcement if this is to be achieved in a timely manner without creation of major market dislocation and potential failure. However, any change to the regulatory regime in respect of biomass to landfill, over and above the existing Landfill Allowance Trading Scheme (which seeks to minimise biodegradable waste in general from landfill), would need to be signaled well in advance, have clear implementation dates which are adhered to and a robust enforcement regime as mentioned above.

**Q30: What more could the Government or other parties do to help to ensure the provision of sufficient Waste Incineration Directive-compliant combustion capacity to burn available waste wood alongside other biomass, and what else might constrain the development of this capacity?**

A30: The Government could consider the following options:

Reduce the qualification as biomass from its current level of 90% to a lower level such as 85%; this would provide operators with greater confidence that ROCs would be available.<sup>3</sup>

Encourage Ofgem to relax the regime for demonstrating the biomass level exceeds the 90% level.

Introduce a mechanism or policy to ensure that waste wood is not landfilled or used as engineering material in landfills.

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<sup>3</sup> If a facility is burning waste it can be designated as a 'biomass combustion plant' and therefore eligible for a higher level of ROCs if it can demonstrate that more than 90% of the material inputs are biomass (previously the requirement was for 98% of the inputs to be biomass).

## GLOSSARY OF TERMS

**Bioenergy**, i.e. the production of energy from biomass, which in the context of the UK Renewable Energy Strategy refers to a range of fuel sources derived from organic matter, including:

- Electricity generation from landfill gas (gas formed from the decomposition of organic material in landfill)
- Sewage gas
- Gas or energy from the biodegradable portion of municipal solid waste
- Wood (either from virgin timber, forestry management wastes or recovered wood waste)
- Specially grown energy crops such as short rotation coppice or miscanthus grass
- Sometimes this biomass is co-fired with fossil fuels

**CHP or Combined Heat and Power** is the simultaneous generation of usable heat and power (usually electricity) in a single process. Through the use of an absorption cooling cycle, Combined Cooling Heat and Power (CCHP) or “tri-generation” schemes can also be developed. Combined Heat and Power is a fuel-efficient energy technology that, unlike conventional forms of power generation, puts to use the by-product heat that is normally wasted to the environment. CHP can increase the overall efficiency of fuel use to more than 75%, compared with around 50% from conventional electricity generation. (Source, Defra).

CHP is an important element in the government's new energy policy, as set down in the Energy White Paper.

**Enhanced Capital Allowances (ECAs)** enable a business to claim 100% first-year capital allowances on their spending on qualifying plant and machinery. There are three schemes for ECAs:

- Energy-saving plant and machinery
- Low carbon dioxide emission cars and natural gas and hydrogen refueling infrastructure
- Water conservation plant and machinery

Businesses can write off the whole of the capital cost of their investment in these technologies against their taxable profits of the period during which they make the investment. This can deliver a helpful cash flow boost and a shortened payback period.

**The EU Emissions Trading Scheme (ETS)** is one of the key policies introduced by the European Commission to help meet the EU's 8% greenhouse gas emissions reduction target under the Kyoto Protocol. The Scheme covers energy activities (e.g. boilers, electricity generation, CHP); production and processing of ferrous metals, mineral industries, and pulp and paper industries. The Scheme operates through the allocation and trade of greenhouse gas emissions allowances throughout the EU, where one allowance represents one tonne of CO<sub>2</sub> equivalent. An overall limit or 'cap' is set by each Member State on the total number of allowances to issue to installations in the Scheme, based on the member state's Kyoto and/or national emissions reduction target.

**Feed-in tariff (FIT)** - is a premium electricity tariff (price per unit of electricity) available to an electricity customer for electricity generated by a small-scale (renewable energy) grid-connected system. A FIT system provides an incentive for generators to invest in renewable energy. The system usually applies to a range of generators including small scale generators such as community groups, businesses and even householders who produce electricity which is in excess of the household's consumption. To receive the incentive, the electricity must be returned to the grid. With a feed-in tariff system, a fixed price is paid for the electricity produced from renewable energy sources, usually with different prices levels set for different technologies. Funding mechanisms can vary, but in Germany the difference in tariffs paid is funded from a small levy charged on all electricity consumers. The electricity that is generated is bought by the utility company at above market prices. Under a FIT system, regional or national electricity companies are obligated by governments to buy renewable electricity at above market rates.

**Good Quality CHP (GQ CHP)** - refers to CHP generation that is energy efficient in operation. The CHP Quality Assurance programme (CHPQA) launched in May 2000 determines that quality by providing a practical method for assessing all types and sizes of CHP scheme.

**The Kyoto Protocol** is an international agreement made under the United Nations Framework Convention on Climate Change (UNFCCC) which sets targets for countries to cut their greenhouse gas emissions. These gases are considered at least partly responsible for global warming - the rise in global temperature which may have catastrophic consequences for life on Earth. The first target period for emissions reductions is the period between 2008 and 2012. Countries that ratify the Kyoto protocol commit to reduce their emissions of carbon dioxide and five other greenhouse gases, or engage in emissions trading if they maintain or increase emissions of these gases. The Kyoto Protocol now covers more than 160 countries globally and over 55% of global greenhouse gas (GHG) emissions.

**The Renewables Obligation (RO)** is the main support scheme for renewable electricity projects in the UK. It places an obligation on UK suppliers of electricity to source an increasing proportion of their electricity from renewable sources.

A **Renewables Obligation Certificate (ROC)** is a green certificate issued to an accredited generator for eligible renewable electricity generated within the United Kingdom and supplied to customers within the United Kingdom by a licensed electricity supplier. One ROC is issued for each megawatt hour (MWh) of eligible renewable output generated.

The Renewables Obligation, the Renewables Obligation Scotland and the Northern Ireland Renewables Obligation are designed to incentivise renewable generation into the electricity generation market. These schemes were introduced by the Department of Trade and Industry, the Scottish Executive and the Department of Enterprise, Trade and Investment respectively and are administered by the Gas and Electricity Markets Authority (whose day to day functions are performed by Ofgem).

**Solid Recovered Fuel (SRF)** - fuel derived from waste, sometimes referred to as RDF (refuse derived fuel). SRF may produced after recyclable material is extracted from 'black bag' waste and the residue stabilised and dried at a mechanical biological treatment (MBT) plant.

**Report Ends**