

# EXPLANATORY MEMORANDUM TO THE RENEWABLES OBLIGATION ORDER (NORTHERN IRELAND) 2005

## S.R. 2005 No. 38

1. This Explanatory Memorandum has been prepared by the Department of Enterprise, Trade and Investment and is laid before Parliament by Command of Her Majesty.
2. **Description**
  - 2.1 The Renewables Obligation Order (Northern Ireland) 2005 (“the 2005 Order”) will place a requirement (a “renewables obligation”) on all Northern Ireland licensed electricity suppliers, from 1 April 2005, to provide the Northern Ireland Authority for Energy Regulation (NIAER) with evidence that a specified quantity of the electricity supplied to final consumers has been generated from renewable sources. This specified quantity is set at an increasing percentage of the total electricity supplied by each supplier (Schedule 2 of the 2005 Order) in an Obligation period (one year) and is measured in megawatt-hours (MWh). Evidence of compliance with the Obligation (referred to as the “NIRO”) will be in the form of Northern Ireland Renewables Obligation Certificates (NIROCs) which will be issued to electricity generators by NIAER for each MWh of eligible renewables generation (Article 4). As described at 2.3 below, the 2005 Order will also provide for Renewables Obligation Certificates issued by the Gas and Electricity Markets Authority (GEMA) under similar Renewables Obligation Orders in GB (GBROCs) to be used as evidence of compliance (Article 9).
  - 2.2 The 2005 Order also provides for suppliers, as an alternative to presenting NIROCs or GBROCs (collectively known as “ROCs”), to pay a ‘buy-out’ fee (Article 8) to NIAER for each MWh of the specified quantity of electricity that is not covered by presenting ROCs. Suppliers can therefore comply by either presenting ROCs, or paying the buy-out (or a combination of the two). The ‘buy-out’ fee will, in the first year, be set at £32.33 per each MWh of the obligation not met by a ROC. At the end of each Obligation period the proceeds from buy-out payments are redistributed among suppliers in proportion to the number of ROCs they produced in satisfaction of their Obligation. The existence of this ‘buy-out’ fee taken with an Obligation that is set above the level of current eligible renewables generation gives ROCs a market value. Generators can therefore sell ROCs to suppliers and, indeed, the certificates can be traded between suppliers.
  - 2.3 Essentially, the NIRO will mirror the operation of the Obligations that have been in place in GB since 2002 – one for England and Wales and a separate one for Scotland. Indeed, the Order provides for the NIRO to operate in tandem with the existing GB Obligations to provide for a NIROCs and GBROCs to be mutually recognised and traded on a UK-wide basis (Article 9). It is intended also that the redistribution of the Buy-Out Funds in each of the 3 Obligation areas will be done on the same basis as if there was a single UK Fund (Article 15).

- 2.4 There will, however, be 2 key differences between the operation of the NIRO and its GB equivalents. Firstly, the NIRO will have a lower Obligation level than in GB; and, secondly, Northern Ireland will not operate the mutualisation process that is being introduced to the 2 GB Obligations from 1 April 2005 to provide for shortfalls in the Buy-Out Fund. These 2 differences are described further in Section 7 below.
- 2.5 This market-driven initiative will provide a support scheme to encourage investment in new renewables generation.

### **3. Matters of special interest to the Joint Committee on Statutory Instruments**

None.

### **4. Legislative Background**

- 4.1 The proposed 2005 Order is the first to be made under primary powers contained in Articles 52 to 55 of the Energy (Northern Ireland) Order 2003 ("the Energy Order") in relation to the imposition of a Renewables Obligation (NIRO) on electricity suppliers. These Articles were amended by the Energy (Amendment) Order (Northern Ireland) 2004 with effect from 8<sup>th</sup> February 2005 and Article 54 was also amended by the Energy Act 2004 with effect from 5<sup>th</sup> October 2004. The NIRO is being introduced as the main support measure to encourage the increased development of renewables generating capacity in Northern Ireland and to increase the proportion of electricity consumption that comes from renewable sources.
- 4.2 The UK-wide dimension referred to above required additional primary provision to be made in the Electricity Act 1989 in GB and, in Northern Ireland, through the amendments to Part 7 of the Energy Order referred to in paragraph 4.1; the Energy Act 2004 was the vehicle for these changes. At subordinate legislation level, the Renewables Obligation Orders in England and Wales and in Scotland, which have been in operation since April 2002, are being amended concurrently with the introduction of the 2005 Order to accommodate the UK-wide market in ROCs and to introduce other necessary changes to the operation of the Obligations in GB.
- 4.3 The 2005 Order does not implement an EC Directive. Nonetheless, it is supportive of the objectives of Directive 2001/77/EC of the European Parliament and of the Council on the promotion of electricity from renewable sources in the internal electricity market (O.J. No. L283, 27.10.2001, p.33) in that it establishes a support scheme aimed at encouraging increases in the amount of electricity generated from renewable sources. Specifically, the 2005 Order will address Article 3(1) of the Directive which states "*Member States shall take appropriate steps to encourage greater consumption of electricity produced from renewable energy sources in conformity with the national indicative targets referred to in paragraph 2. These steps must be in proportion to the objective to be attained*"
- 4.4 The 2005 Order is to be laid before Parliament under paragraph 7(3) of the Schedule to the Northern Ireland Act 2000 which relates to provisions applicable during suspension of the Northern Ireland Assembly.

## **5. Extent**

The instrument applies to Northern Ireland. However, it also accommodates interaction with the GB Renewables Obligations which operate under similar legislation.

## **6. European Convention on Human Rights**

In the view of the Department of Enterprise, Trade and Investment the provisions of the Renewables Obligation Order (Northern Ireland) 2005 are compatible with the Convention rights.

## **7. Policy Background**

- 7.1 The Renewables Obligation is intended to represent the main plank of Northern Ireland's policy to increase the proportion of its electricity that is generated from renewable sources. It would contribute towards achievement of the current target of 12% contained in the Department's Strategic Energy Framework for the proportion of electricity that is generated from renewable sources by 2012. This target is in line with the indicative 2010 target of 10% for the UK as a whole provided for in Directive 2001/77/EC. Currently around 3% of electricity consumed in Northern Ireland is generated from indigenous renewable sources.
- 7.2 Increasing the proportion of electricity generated from renewable sources will also have a positive environmental impact by reducing the harmful emissions generated by the current high level (99.8%) of fossil fuels in Northern Ireland's primary energy mix. Additionally, as an indigenously produced energy source, it can be expected to have benefits in terms of security of supply and longer-term price stability.
- 7.3 As a policy instrument, the Renewables Obligation is a market-led support scheme. The market is established as a result of the shortfall that will exist between the level of the Obligation and the number of NIROCs (issued in respect of eligible renewable generation) available to cover that Obligation in any one year and the payment required of suppliers to meet that shortfall.
- 7.4 The small size of the electricity market in Northern Ireland (at under 9,000 gigawatt hours of consumption per annum and less than 3% of total UK consumption) is not conducive to the effective operation of such a market-led initiative. A policy decision was therefore taken, in agreement with the Department of Trade and Industry in GB, that the NI Obligation should operate as part of a UK-wide Obligation alongside the two existing GB Obligations. This implied the need for a high degree of consistency between the 3 Obligations.
- 7.5 However, concerns about the potential impact on the NIRO on the relatively high price of electricity in Northern Ireland prompted consideration of measures to minimise that impact by decoupling the NIRO level from the renewables target (12% by 2012). In discussion with the GB authorities, a policy decision was agreed that the NIRO level would be set at 6.3% for 2012/13 and that the profile would be sculpted in such a way as to reduce the impact particularly in the initial years of the Obligation.

- 7.6 The impact on prices was a critical consideration in the consideration of equality issues particularly with reference to fuel poverty and the vulnerable groups identified in Section 75 of the Northern Ireland Act 1998. The Consultation document contained an Equality Impact Screening Form that concluded there were no significant equality issues but invited comments from relevant organisations. None of the responses however included equality as an issue of concern.
- 7.7 A second difference between the NIRO and the existing GB Obligations will be that the NIRO will not, at this stage, adopt the mutualisation process that is being introduced to the GB Obligations from 1 April 2005. Mutualisation is intended to mitigate the impact of any future shortfalls in the Buy-Out Fund. The idea behind mutualisation is that where a shortfall occurs through supplier default (normally as a result of a supplier going out of business) the remaining suppliers are required to contribute sums to help make up the shortfall. While experience has demonstrated the need for such a process in GB, it was agreed that the absence of an Obligation in Northern Ireland and the small size of the Northern Ireland market is reason to allow a derogation for Northern Ireland from the mutualisation process at this stage.
- 7.8 The Energy Order requires the Department to consult with the NIAER, the General Consumer Council for Northern Ireland, electricity suppliers and generators before introducing a Renewables Obligation. In June 2004 a preliminary consultation outlined the context for and proposed operation of the NIRO. This was followed in October 2004 by the publication of a statutory consultation document. Both documents sought views from a wide range of organisations including the statutory consultees.
- 7.9 The Consultation process confirmed a widespread support for the introduction of a Renewables Obligation in principle. However, both NIAER and the Consumer Council expressed concerns about the impact on electricity prices to consumers and NIAER suggested the use of a zero level Obligation for Northern Ireland until such time as renewable targets were not being met. The Department is satisfied however that, through the lower Obligation level (6.3% in 2012 against 12.4% in GB) together with a slow build up of that level over the early years and a UK-wide market for ROCs, the impact on consumer prices has been minimized. It is estimated that the maximum addition to consumer billings by the end of the current Obligation profile in 2012 should be less than 3%. Additionally some concerns were expressed in the Statutory Consultation about the impact on consumer prices of NI co-operating in a mutualisation process with the GB Obligations to make good any shortfall in the Buy Out Fund as a result of supplier default. Negotiations with the GB authorities have therefore led to an agreement to a temporary derogation for NI from the mutualisation process. The Department is therefore satisfied that the major concerns of consultees have been addressed in the final terms of the Order.

## **8. Impact**

- 8.1 A Regulatory Impact Assessment is attached to this memorandum (Annex A).
- 8.2 The provisions of the Order will impact on all licensed electricity suppliers in Northern Ireland. They will be required to provide evidence of renewables supply, to purchase ROCs or to pay the Buy-Out fee (or a combination of the

two) together with the necessary administrative processes. There will also be an impact on generators of renewables electricity who claim ROCs.

- 8.3 The impact on the public sector is expected to be confined to NIAER's administration of the Obligation. Currently it is anticipated that much of this work will be carried out by Ofgem on behalf of NIAER in view of Ofgem's existing experience and technological resources for administering the GB Obligations.

## **9. Contact**

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# RENEWABLES OBLIGATION (NORTHERN IRELAND) ORDER 2005

## REGULATORY IMPACT ASSESSMENT

### TITLE OF PROPOSAL

This is the Regulatory Impact Assessment (RIA) of the Renewables Obligation (Northern Ireland) Order 2005.

The purpose of the RIA is to assess the impact of the Northern Ireland Renewables Obligation (NIRO). Specifically it considers the potential impact of the NIRO on the environment, particular groups of society and business. Relevant cost and benefit information have been measured, where appropriate and available and quantified in terms of carbon savings.

### *PURPOSE AND INTENDED EFFECT OF THE MEASURE*

#### (i) Issue

Climate change is considered to be one of the greatest environmental threats facing the world. It has been estimated that the world's climate could warm by about 3<sup>0</sup>C over the next 100 years if no action is taken to reduce the greenhouse gas emissions that cause climate change. Climate change is likely to have far reaching effects on all aspects of the world's environment, economy, society and health and this prospect has been given more credence through further research and the experience of changing weather patterns in recent years. Fears for the future have been further heightened by the more recent discussion on the accelerating growth in CO<sub>2</sub> levels in the atmosphere.

Recent assessments focusing specifically on Northern Ireland indicate that average annual temperatures are expected to increase especially in summer and autumn when, by 2080, they are projected as being up to 4% higher than at present. Winters are expected to become wetter and summers drier with a large decrease in winter snowfalls.

Environmental considerations and particularly the need to reduce greenhouse gas emissions therefore provide the main impetus for introducing policies to promote renewable energy not only in Northern Ireland but UK-wide and indeed internationally.

In December 1997, the United Nations Framework Convention on Climate Change (the Kyoto Protocol) was signed by 171 countries including the UK. Under this protocol, the European Union (EU) has a commitment to an 8% reduction of greenhouse gas emissions on 1990 levels by 2010. The UK

agreed to contribute to this target with a 12½% cut in its emissions. Moreover, the UK government set itself an even more challenging domestic target of a 20% reduction in CO<sub>2</sub> emissions below its 1990 levels by 2010. The Kyoto Protocol came into operation on 16 February 2005.

Complementing this, the EU Renewables Directive (2001/77/EC) focused on measures to encourage the promotion of electricity from renewable sources in order that the overall EU indicative target of 12% of gross energy consumption (22% of electricity consumption) to be produced from renewable energy sources is met by 2010.

In Northern Ireland the case for incentivising renewables energy development is heightened further because of the region's dependency on such a high proportion (99.8%) of fossil fuel in its primary energy consumption and the resultant environmental implications in face of a need for compliance with the increasingly challenging requirements on the reduction of greenhouse gas emissions. Furthermore, with the exception of the current small amount of indigenous renewable energy all Northern Ireland's primary energy is imported; this raises important security of supply issues and exposes the Northern Ireland energy sector to the full impact of world prices for fossil fuels. Additionally, the development of a renewables industry in Northern Ireland will offer opportunities for economic diversification particularly in the rural areas of Northern Ireland through, for example, the growing of energy crops and conversion of wastes into energy.

Building an indigenous renewables energy industry makes sound economic, environmental and social sense and is therefore a priority in the Northern Ireland's energy strategy.

## **(ii) Objective**

In line with Kyoto commitments and the EU Renewables Directive, UK Government policy is that 10% of the UK's electricity requirements should be met from renewable sources by 2010 subject to the costs being acceptable to the consumer. In addition, the UK Government is committed to the aspiration of doubling the 2010 level to 20% by 2020. In Northern Ireland, the Department of Enterprise, Trade and Investment's (DETI) Strategic Energy Framework published in June 2004 confirmed a target of 12% for the element of electricity consumption in 2012 that will be provided from indigenous renewable sources.

The Renewables Obligation is highlighted in the Strategic Energy Framework as a key renewables support initiative; it is specifically intended to encourage the uptake of renewable power generation sources by the electricity supply industry, incentivise the development of indigenous renewable sources of generation and, as a result, to reduce the level of emissions of greenhouse gases in Northern Ireland.

## **RISK ASSESSMENT**

The full implications of allowing climate change to happen at its current rate are not fully known but scientists believe that the net effect will be detrimental. Climate models run by the UK's Hadley Centre have indicated that, globally:

- Sea levels are expected to rise by over 40 centimetres by the 2080s causing sweeping changes to coastal communities and environments and the dislocation of millions of people;
- Climate change could adversely affect global food supplies.
- An additional three billion people could suffer increased water shortage.

In Northern Ireland average annual temperatures are expected to increase especially in summer and autumn when, by 2080, they are projected as being up to 4% higher than at present. Winters are expected to become wetter and summers drier with a large decrease in winter snowfalls.

The Northern Ireland Energy Scoping Study for 2002 undertaken by the Carbon Trust indicates that, in that year, the power sector emitted some 1,736 kilo tonnes of Carbon (equivalent to around 6,370 kilo tonnes of CO<sub>2</sub>) representing almost 43% of total energy-related (including transport) CO<sub>2</sub> emissions in Northern Ireland. Failure to focus on the electricity sector for a reduction in harmful emissions would therefore seriously restrict Northern Ireland's ability to contribute to the national and international targets for reduced emissions and, importantly, would have knock-on effects for improving our environment.

During the 1990's, 2 Northern Ireland Non-Fossil Fuel Obligations (NFFO) were imposed on the public electricity supplier (Northern Ireland Electricity). The total generating capacity developed under these NFFO arrangements was relatively small at 40MW. Relying on further NFFO instruments or requiring renewable generators to operate on a merchant (unsupported) basis would substantially increase the risk that the 2012 target for renewable energy would not be met. This was an overall conclusion of the Department's 2001 Northern Ireland renewable energy consultation paper "Realising the Potential"

## **OPTIONS**

### **Identifying the Options**

The evidence above clearly demonstrates that action is needed if Northern Ireland, and the wider global community, is to avoid the serious effects of climate change. The significant contribution of the power sector to total carbon emissions also points to a particular focus on the electricity industry. In determining the way forward, 3 broad options have been identified:

(a) Do nothing

In view of the commitments given by the UK and other countries at Kyoto as well as the Directives imposed by the European Union, the Department does not believe that 'Do Nothing' is a viable option.



Moreover, the potential benefits to be gained by Northern Ireland through implementing a renewables development programme extend beyond the commitments to Kyoto, the Directives of the European Commission or the UK Government's carbon reduction targets. There are positive opportunities to enhance security of supply, longer-term energy cost stability and energy infrastructure as well as increased employment opportunities in Northern Ireland.

- (b) Implement a Renewables Obligation to operate alongside the GB Obligations  
A Renewables Obligation has the advantages of being a market-led initiative that, when established, can be operated on an ongoing basis. The Obligation as proposed, operating alongside the GB Obligations, involves mutual recognition of the Renewables Obligation Certificates issued under the NIRO ("NIROCs") and those (GBROCs) issued under the GB Obligations and therefore provides a market in NIROCs and GBROCs (referred to generically as ROCs) that the small Northern Ireland electricity industry in itself could not sustain. Also, to minimize the impact on consumer prices, the NIRO decouples the Obligation level (6.3%) from the renewables target for 2012/13 (12%) and from the GB Obligation level (12.4% in 2012/13).
- (c) Implement a standalone Renewables Obligation in Northern Ireland  
A Renewables Obligation with no interface with the GB models has been regarded as not feasible because of the small size of the NI electricity market. In addition, opportunities for minimising the additional cost burden on consumers whilst, at the same time, achieving renewable target levels would be difficult to sustain.
- (d) Implement a separate NI Support Programme other than a Renewables Obligation  
Alternative support mechanisms are possible to encourage renewables development, some of which are already administered in other EU Member States. Indeed, the NFFO arrangements which were the forerunner to the proposed NIRO in Northern Ireland (and in GB), provide one such example. However, any such arrangements, if not based on the NIRO model, would potentially be one-off time bounded arrangements while the NIRO provides an ongoing and dynamic incentive that 'rolls over' from one year to the next.

Over the past few years, the Department has undertaken a number of consultations to determine the preferred way forward. In October 2001 the Department's consultation document on the future of renewables policy (Realising the Potential) sought views on the types of support scheme that would be appropriate for increasing the proportion of electricity generated from renewable sources in Northern Ireland; it described the Renewables Obligation that was at that time due to be introduced in Great Britain and sought views on its appropriateness to Northern Ireland. The intention to consider an obligation was also included in the consultation undertaken in 2002 prior to the introduction of the Energy Order 2003 and indeed that Order now provides the primary legislative basis for the NIRO. Furthermore, the 2003 Consultation on a proposed new Energy Strategy for Northern Ireland highlighted the NIRO as a key feature of future energy policy and identified its introduction as a key action within the strategy.

The outcome of the Preliminary and Statutory Consultations undertaken during 2004 specifically in respect of the introduction of this NIRO Order also pointed to a

Renewables Obligation within a UK-wide market for ROCs as the appropriate mechanism for providing the necessary conditions within which the renewables industry can invest with confidence at least cost to the consumer. This view reflected the outcome of an independent study completed by the London-based consultancy Impax Capital into the effectiveness and efficacy of the proposed NIRO which concluded that the NIRO as structured would represent one of the lowest cost renewables support measures in Europe.

## **ISSUES OF EQUALITY OR FAIRNESS**

The power sector accounts for around 43% of the emissions of energy-related carbon dioxide, including transport, in Northern Ireland each year. The sector has therefore a special role to play as the principal source of carbon dioxide emissions in industry and it is not unreasonable that it should become the focus of measures for reducing emissions. Moreover, as described in the 'Benefits' section below, there are other valid reasons for seeking to increase the level of renewables generation in Northern Ireland.

It is a generally accepted principle that all sectors must play their part in contributing to improving energy efficiency and reducing emissions of greenhouse gases to contribute to meeting our climate change target. It is therefore proposed that the Obligation should impact equally across the whole industry. Nevertheless, within its operation, different electricity suppliers (who will be the focus of the Obligation) can be expected to have differing opportunities to satisfy the Obligation. For example, a supplier that is a green supplier and vertically integrated to a renewables generator will find compliance through NIROCs reasonably easy; others may experience greater difficulties in finding access to renewables generation. However, access to the UK-wide market in Renewables Obligation Certificates will provide increased opportunities to satisfy the Obligation through the presentation of ROCs (be they GBROCs, NIROCs). It is therefore perceived that no supplier will be unduly disadvantaged within the operation of the NIRO.

The likely burden on small businesses in the electricity industry is not considered to be any more onerous, in terms of size, than it would be for larger business although it is recognised that small operators would, in the main, have less administrative capacity to deal with the requirements. However, as detailed in the Cost to Business section below, special provision is being proposed to facilitate small generators involvement in the NIRO.

The impact of the Obligation on costs to the consumer (which is covered in more detail below) raises some issues in relation to equality. Essentially, the intention that the costs of the NIRO will be spread across all consumers in proportion to their level of consumption is an equitable approach. However, as with any price increase whether it is for oil, gas, electricity or some other basic good or service, it can be expected that the impact will be experienced more profoundly by those in lower income brackets and, specifically, fuel poverty issues may be relevant. These issues were highlighted within the Statutory Consultation document but responses to that Consultation did not contain any opposition to the conclusion that the NIRO would not have any significant impact on individuals within the fuel poverty group or other relatively disadvantaged groups within the population.

## **BENEFITS**

### **Identifying the Benefits**

The NIRO will help Northern Ireland to contribute to the UK's legally binding Kyoto target to cut greenhouse gas emissions by 12.5% below 1990 levels by 2008-2012 and move towards the domestic goal of a cut in carbon dioxide by 20% below 1990 levels by 2010.

As well as these critical environmental benefits the NIRO will also help contribute to the UK's indicative target of 10% under the EC Directive on the promotion of electricity from renewable sources (2001/77/EC) for the amount of electricity that is to be generated from renewable sources by 2010. Moreover, the Department believes that the Renewables Obligation will stimulate investment in renewable technologies and assist these industries to compete on the world stage in what will become a significant global industry.

Additionally, as a stimulant to new forms of renewables generation the NIRO is expected to be a catalyst for significant opportunities particularly for the rural community. In this context, development of the use of biomass as a renewable energy source offered a means of enhancing rural diversion through the planting of energy crops.

### **Quantifying and Valuing the Benefits**

The Carbon Trust's Northern Ireland Scoping Study in 2002 indicated that even with electricity consumption increasing to around 10,000 GWh by 2012, a renewables contribution of 1,000 GWh (10%) would lead to a reduction of around 400 kilo tonnes of carbon – equivalent to just under 1.500 kilo tonnes of CO<sub>2</sub>. This would represent a reduction of some 35% in the carbon emissions per unit of electricity compared with 2002 levels and a 23% reduction in the industry's total carbon emissions – a significant environmental saving.

Projections for the Obligation as proposed indicate that, over the first 8 year focal period to 2012/13, up to £80m will be generated directly by the Obligation to stimulate renewables development in Northern Ireland.

In addition, the growth in renewables will have favourable implications for employment, not only in the new generation plant themselves but also in the peripheral businesses – for example, installation and maintenance services as well as rural jobs in the provision of biomass through conversion processes (eg anaerobic digestion) or energy crops.

### **Costs**

#### **Overall Cost to Consumers**

Estimates of the overall direct cost to consumers are shown in the Table below both in absolute terms and as a percentage of total average unit sales; it is based on the value of total NI electricity billings in 2002 as being £600m. The analysis assumes that annual electricity consumption will increase by 1.8% per annum to 9,369GWh by 2012/13 with the 6.3% Obligation in that year accounting for 590GWh (or 590,000 NIROCs). This is regarded as a conservatively high level of total consumption and therefore the analysis is seen as projecting the worst-case scenario in terms of customer impact.

#### **Cost of NIRO to Consumers in 2012/13 (2002 Prices)**

	2012/13
<b>Electricity Sales (GWh)</b>	9,369
<b>Profile of NIRO Obligation (%)</b>	6.3
<b>Profile of NIRO Obligation (GWh = '000 ROCs)</b>	590
<b>Maximum Direct Costs (£m)</b>	17.71
➤ <b>% of Average Unit Sales (%)</b>	2.5
<b>Proceeds from NFFO – NIROCs (£m)</b>	0.60
<b>Net Direct Costs (£m)</b>	17.11
➤ <b>% of Average Unit Sales</b>	2.4

The cost to the consumer is a direct function of the Buy-Out price which, in line with the GB Obligations is assumed as £30 (2002 prices) and the MWh value of the Obligation, which in 2012/13 is projected as 590GWh. The maximum impact on customer billings in 2012/13 would therefore be £17.71m (£30 x 590,000MWh) representing 2.5% of total customer billings. Moreover, if the proceeds from the auction NIROCs related to electricity produced under NFFO contracts (which will not be allocated to the respective generators under the NIRO) are set against the cost to consumers the net impact will be 2.4%.

Like its counterparts in GB – the Scottish Renewables Obligation and the England & Wales renewables Obligation – the introduction of the NIRO is subject to the price impact being acceptable to the consumer. The impact of the NIRO on consumer prices has therefore been a prime consideration in developing the NIRO and has been a critical issue raised in responses to the NIRO Consultation processes. This consideration is reflected, in the first instance, in the decoupled Obligation which, at 6.3% in 2012/13, is half the level of both the Obligation in GB and the target for renewables generation in NI in that year and effectively reduces by almost one-half the potential impact on prices of a stand-alone NIRO with a 12% Obligation level by 2012. Moreover, it is anticipated that funds generated by the auction of NIROCs relating to electricity generated under NFFO contracts will also be used in part or in whole to reduce the impact on consumer prices. The Table above demonstrates the impact of these proceeds in 2012/13; however, the level of NFFO-NIROC proceeds in 2012/13 reflects the fact that many of the NFFO contracts will have expired. There is potential for much greater saving in earlier years – specifically, for each of the first 4 years of the NIRO, these proceeds will be around £4m.

## **Compliance Costs for Business**

### ***Business Sectors Affected***

The Renewables Obligation will primarily affect the following types of business:

- Licensed electricity supply companies; and
- Generators of renewable energy.

Currently there are 6 businesses – active licensed suppliers - that will be required to comply with the Renewables Obligation. In addition, there are some 35 renewable generators. Many of the generators are small businesses. However, the proposals for the NIRO anticipate special treatment for smaller generators – those with capacity of 50Kw or less in that they will have the opportunity of applying for NIROCs on an annual basis rather than the standard monthly basis that applies to larger companies. This flexibility will not only reduce the administrative cost of compliance but will also enable some to earn a greater number of NIROCs which are only awarded in 1MWh

units with 0.5MWh being rounded upwards; therefore a small generator with less 0.5MWh eligible output in a single month would not be eligible for NIROCs distributed on a monthly basis but would be eligible on an annual basis.

### ***Compliance Costs for Business***

The compliance costs of the Renewables Obligation fall into two categories:

- Initial start up costs; and
- Recurrent costs of complying with the obligations imposed by the Order.

Initial start-up costs for businesses are likely to include:

- Time spent in planning and preparing for the new Renewables Obligation;
- Changes to existing administrative and computer accounting systems;
- Training of staff; and
- Any consequential printing and stationery costs.

Recurrent costs would include:

- Providing the evidence as required by NIAER;
- Maintaining records and accounting systems to enable the NIRO to be complied with; and
- Purchasing Renewable Obligation Certificates (NIROCs) and providing these to NIAER.

At this stage it is difficult to assess the cost of compliance on eligible suppliers and generators. In the case of generators, however, it can be expected to be marginal in view of the accreditation procedures already in place in respect of the issue of Levy Exemption Certificates under the Climate Change Levy programme.

### **CONSULTATION WITH SMALL BUSINESSES**

It is expected that introduction of the NIRO will have 2 broad impacts on small business. First, as electricity consumers, they may be exposed to the increased costs associated with the NIRO. In this context, the Confederation of British Industry (CBI) in its response to the Statutory Consultation noted what it termed the 'existing intolerable burden' of electricity prices in Northern Ireland and cautioned the addition of further increases as a result of the NIRO.

Nevertheless, as described above, the Department has sought to constrain and indeed minimise this impact on consumer costs through the low decoupled Obligation level and the sculpted profile of that level in the early years. Additionally, the market for green electricity in Northern Ireland is fully open and a number of different green tariffs, available from various supply companies, are available to business customers. This leads to potentially lower costs and, in addition, exemption from Climate Change Levy payments. Increasing the amount of green electricity available in Northern Ireland will provide increased opportunities for businesses to take advantage of these benefits.

The second broad impact relates to the potential for new opportunities for small businesses both within the sector and in the supply chain as a result of the incentivisation of the renewables sector. A study (A Study into the Renewable Energy Resource in the Six Counties of Northern Ireland) commissioned in 2004 by Action Renewables, the organisation with responsibility for the promotion of renewables in Northern Ireland, estimated that there was potential for some 109 full-time jobs in the operation and maintenance of renewable energy projects within

Northern Ireland, a figure that excludes the associated construction jobs or opportunities in support businesses.

### **ENVIRONMENTAL IMPACT**

Projections used in the Carbon Trust's Northern Ireland Energy Scoping Study would suggest that, in stimulating a 12% level of indigenous renewable by 2012, the Renewables Obligation would save around 400 kilo tonnes of carbon – equivalent to just under 1,500 kilo tonnes of CO<sub>2</sub> - by the year 2012. This represents a reduction of 10% in the 2002 level of emissions in the energy-related (including transport) emissions.

These savings will clearly make an important contribution towards meeting the UK's climate change targets and improving the environment in Northern Ireland.

### **RESULTS OF CONSULTATIONS**

A Preliminary Consultation on the Renewables Obligation was undertaken in June/July 2004 followed by a Statutory Consultation that closed in December 2004. Main issues arising in the responses to these Consultations were:

- ❑ The need to minimise the impact on consumer costs particularly in view of the existing relatively high costs in NI
- ❑ A preference for a high degree of consistency with the GB Obligations
- ❑ The level and profile of the NIRO – while there was widespread support for the proposed low levels there were some suggestions that a zero level should be followed to reduce further the impact on prices.
- ❑ Widespread support in the Preliminary Consultation for a Single UK Buy-Out Fund or a Single Recycling Mechanism to achieve consistency across the UK. However, the implications of Mutualisation on a UK-wide basis (as suggested in the Statutory Consultations both here and in GB) prompted some respondents to reconsider and there was a small level of support for NI having a separate Buy-Out Fund.
- ❑ Some concerns expressed about the impact of any Mutualisation procedures in GB on NI suppliers as well as on costs to consumers. As a result, it has been agreed that Northern Ireland will have a derogation from the Mutualisation process that is being proposed for GB.
- ❑ The auctioning of NIROCs relating to electricity generated under NFFO arrangements and the use of the proceeds of these auctions particularly in relation to reducing the costs of the NIRO on consumers.
- ❑ The treatment of electricity generated outside the UK but supplied exclusively and directly to Northern Ireland.

### **ENFORCEMENT, SANCTIONS, MONITORING AND REVIEW**

The Renewables Obligation will be administered by the Northern Ireland Authority for Energy regulation (NIAER) who may enter into arrangements with their GB counterpart the Gas and Electricity Markets Authority (OFGEM) for the latter to undertake some or all of the functions. Administration of the NIRO will include the

issuing of NIROCs, maintaining a NIROC register, management of the Buy-Out Fund and responsibility for any enforcement proceedings that may need to be effected. NIAER will monitor the activities of the NIRO and will report annually to DETI on progress.

The impact on consumer prices is expected to be an important element of the monitoring process.

It is intended that the operation of the NIRO alongside the existing GB Obligations will be considered as part of the 2005 Review being carried out by the Department of Trade and Industry and the Scottish Executive on the GB Obligations. However, given the NIRO's limited period of operation at that time it is expected that a further specific review will be undertaken when the NIRO itself has settled into operation for a period of time.

## **SUMMARY AND RECOMMENDATIONS**

Although additional costs are likely to be incurred by the power sector, business and the public as a result of the introduction of the Renewables Obligation, the Department strongly believes that the economic, environmental, social and health benefits to be gained significantly outweigh these costs. Moreover, the Department has sought, in choosing the NIRO as the prime renewables support mechanism in Northern Ireland and especially in linking it to the much larger GB electricity market, to cushion the consumer from the effects of further rises in what are already relatively expensive electricity prices in Northern Ireland.

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