Department of Enterprise, Trade and Investment
www.detini.gov.uk

Consultation

Proposed Changes to the Northern Ireland Renewables Obligation – Small Scale Banding Review Consultation

Statutory Consultation for the Renewables Obligation Order (Northern Ireland) 2015

July 2014

Contents

FOREWORD

By Arlene Foster, MLA, Minister of Enterprise, Trade and Investment

As Minister of Enterprise, Trade and Investment, I am pleased to launch this consultation on changes to banding levels for small scale technologies under the Northern Ireland Renewables Obligation (NIRO). In doing so, I want to ensure that we continue to incentivise renewable electricity generation to meet our renewable energy targets in the most cost effective way.

The NIRO has been instrumental in bringing forward ever increasing levels of renewable electricity generation since its introduction in 2005. The Northern Ireland Executive's current Programme for Government includes a target to secure 20% of electricity consumption in Northern Ireland from renewable sources by 2015 and we are well on our way to meeting this target.

Renewables incentivisation policy in Northern Ireland is unavoidably influenced by European and UK energy policy. The closure of the NIRO to new applications in 2017 is due to UK-wide Electricity Market Reform and means that how we incentivise renewables will be changing. Large scale renewable electricity will be supported under a Contracts for Difference mechanism and it is my intention to introduce a Small Scale Feed-In Tariff (FIT) from 2017, similar to that already in operation in Great Britain.

The NIRO has been amended over time to take account of the evolving nature of renewables generation. Perhaps one the most significant changes was the introduction of banding in 2009. A UK-wide Banding Review on large scale renewables concluded last year and saw a reduction in banding levels for most technologies. This was a reflection on technology cost reductions and deployment levels and was the first significant review of the Renewables Obligation Certificate (ROC) levels since banding was introduced in 2009.

The purpose of this latest review is to ensure that incentive levels reflect changes in technology costs and deployment of small scale renewables over time. However, I recognise that there are wider issues around the deployment of renewables. This

includes the ability of the grid to absorb increasing levels of renewable electricity, the impact on the landscape, particularly from single wind turbines, and community involvement. Our aim remains to bring forward renewable technologies to achieve our renewable energy target while delivering value for money for consumers.

This consultation poses a number of specific questions about future banding levels for small scale renewables and I look forward to receiving responses on this or on the wider issues posed by small scale renewable incentivisation policy.

ARLENE FOSTER MLA
Minister of Enterprise, Trade and Investment

INTRODUCTION

Purpose of the consultation

1.1 This consultation sets out proposed support levels under the Northern Ireland Renewables Obligation (NIRO) for small scale onshore wind, hydro and anaerobic digestion generating stations with a maximum installed capacity up to 5 Megawatts and for solar photovoltaic (PV) generating stations up to 250kW. It is proposed that the changes will be made through the Renewables Obligation Order (Northern Ireland) 2015 to come into operation on 1 April 2015. The Department of Enterprise, Trade and Investment (DETI) invites interested parties to submit comments and evidence in response to these proposals.

Northern Ireland Renewables Obligation

1.2 Introduced on 1 April 2005, the NIRO places a legal requirement on electricity suppliers to account for a specified and increasing proportion of their electricity as having been supplied from renewable sources or to pay a buy-out fee that is proportionate to any shortfall. Suppliers provide evidence of compliance by presenting Renewables Obligation Certificates (ROCs) which are issued to generators of renewable electricity for each unit of eligible output. The number of ROCs issued for each MWh unit varies depending on the technology involved and its generating capacity. The NIRO operates in tandem with two similar Obligations in Great Britain – the Renewables Obligation (RO) in England & Wales and the Renewables Obligation Scotland (ROS). ROCs issued in Northern Ireland under the NIRO (NIROCs) are tradeable with those issued under the two GB Obligations (GBROCs) in a UK-wide market for ROCs; both NIROCs and GBROCs are accepted as the necessary evidence under each of the Obligations.

1.3 ROCs (both NIROCs and GBROCs) are issued by the Gas and Electricity Markets Authority, which, in the case of NIROCs, is acting on behalf of the Northern Ireland Authority for Utility Regulation (NIAUR). The Gas and Electricity Markets Authority carry out day to day administration of the both NIROCs and GBROCs through its office (Ofgem).

Proposed Changes

1.4 This consultation sets out changes which we propose to make to the NIRO which will come into operation from 1 April 2015. Changes will be made through the Renewables Obligation Order (Northern Ireland) 2015 contingent on obtaining legislative approval of the Northern Ireland Assembly.

The need for a banding review

1.5 The NIRO has undergone various reforms and improvements since it was introduced in 2005. The most significant of these was the introduction of banding in April 2009 which moved the NIRO from a mechanism which offered a single level of support for all renewable technologies to one where support levels vary by technology according to a number of factors including their costs and level of development.

1.6 Bands need to be reviewed periodically to ensure that support levels are set as cost-effectively as possible and that they help both to bring forward renewable technologies at the capacity needed in an affordable way, delivering good value for money for consumers. The enabling primary legislation for the NIRO[1] requires the Department to carry out a review of the bands before new bands are set. The Renewables Obligation Order (Northern Ireland) 2009 provides that a banding review may be commenced in October 2010 and then at four yearly intervals thereafter. A large scale banding review concluded last year.

1.7 Before making any changes to the levels of support under the NIRO, the Department is required to have regard to a range of matters listed in Article 54B of the Energy (Northern Ireland) Order 2003 and must also consult a range of persons listed in Article 55E of that Order.

Banding review process and methodology

1.8 The NIRO small scale banding review started in November 2013 with the appointment of Cambridge Economic Policy Associates (CEPA) (and their sub-contractors Parsons Brinckerhoff (PB)), to review the market costs of generation and deployment potential of small scale renewable electricity technologies. CEPA's report, which is available on the DETI website at CEPA PB Small Scale NIRO Banding - Jan 2014 forms a key part of the evidence base for the banding review. The approach and methodology undertaken by CEPA and Parsons Brinckerhoff is described in detail in the report.

Banding changes

1.9 Chapter 2 sets out the current and proposed new ROC levels which will apply from 1 April 2015. It is important to note that the new ROC levels will apply to generating stations accredited on or after 1 April 2015 and any additional capacity added on or after that date. **Existing generators will be grandfathered at the level applicable before 1 April 2015.**

[1] Energy (Northern Ireland) Order 2003 as amended by the Energy (Amendment) Order (Northern Ireland) 2009

Consultation Process

1.10 The Consultation will close for responses on **25 September 2014.**

How to respond to this consultation

1.11 Responses to this consultation should reach DETI on or before **25 September 2014** and should be sent, preferably by e-mail, to:

NIRO2015@detini.gov.uk

or by post to:

Renewable Electricity Branch
Department of Enterprise, Trade and Investment
Netherleigh
Massey Avenue
BELFAST
BT4 2JP

All responses should include the name and postal address of the respondent.

Confidentiality & Data Protection

1.12 Your response may be made public by DETI and placed on the DETI website as part of the consultation process. If you do not want all or part of your response or name made public, please state this clearly in the response by marking your response as 'CONFIDENTIAL'. Any confidentiality disclaimer that may be generated by your organisation's IT system or included as a general statement in your fax cover sheet will be taken to apply only to information in your response for which confidentiality has been specifically requested.

1.13 Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 1998 (DPA)). If you want other information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

1.14 In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

Copies of the Consultation

1.15 This Consultation document is being produced primarily in electronic form and may be accessed on the DETI Energy website: www.energy.detini.gov.uk or may be obtained from the address above or by telephoning 028 9052 9240.

1.16 If you require access to this Statutory Consultation document in a different format – eg Braille, disk, audio cassette, larger font – or in a minority ethnic language please contact the Department on 028 9052 9240 and appropriate arrangements will be made as soon as possible.

TECHNOLOGY BANDING PROPOSALS

2

Introduction

2.1 Our aims of the current banding review are to:

- Ensure that the NIRO continues to support small scale renewables growth to help meet our 2020 target
- Increase the efficiency of the NIRO to ensure value for money for the consumer
- Contribute to the delivery of wider energy and climate change goals, including Green House Gas (GHG) emissions reductions, decarbonising of the grid and energy security.

2.2 The banding review covers the provisions in the Renewables Obligation Order (Northern Ireland) 2009 as amended[1] which set the levels of support for renewable electricity. Before making any changes to those banding provisions, the Department is legally required to have regard to a number of matters. These are set out in primary legislation - Article 54B of the Energy (Northern Ireland) Order 2003 (as amended by the Energy (Amendment) Order (Northern Ireland) 2009) and are outlined below:

(a) the costs (including capital costs) associated with generating electricity from each of the renewable sources or with transmitting or distributing electricity so generated;

(b) the income of operators of generating stations in respect of electricity generated from each of those sources or associated with the generation of such electricity;

(c) the effect of paragraph 19 of Schedule 6 to the Finance Act 2000 (c.17) (supplies of electricity from renewable sources exempted from climate change levy) in relation to electricity generated from each of those sources;

(d) the desirability of securing the long term growth, and economic viability, of the industries associated with the generation of electricity from renewable sources;

[1] SR 2009/154 as amended by SR 2010/134, SR 2011/169, S.R. 2013 No. 116 and S.R. 2013 No. 174.

(e) the likely effect of the proposed banding provision on the number of renewables obligation certificates issued by the Authority, and the impact this will have on the market for such certificates and on consumers;

(f) the potential contribution of electricity generated from each renewable source to the attainment of any target which relates to the generation of electricity or the production of energy and is imposed by, or results from or arises out of, a Community obligation.

Technologies being reviewed

2.3 The following small scale technologies have been considered as part of the review:

- Onshore Wind – Up to 5MW
- Anaerobic Digestion (AD) – Up to 5MW
- Hydro – Up to 5MW
- Solar Photovoltaic (PV) – Up to 250kW

Grid connection

2.4 Under current arrangements approved by the Utility Regulator, generators connecting to the 11kV distribution network are expected to meet all associated costs. The Department is aware that high grid connection costs and lack of available capacity continue to present barriers to the deployment of renewables in certain locations within Northern Ireland. These issues are particularly acute in the north and west where a number of substations are unable to accept any further connections due to capacity being reached.

2.5 In late 2013, the Utility Regulator granted investment approval to Northern Ireland Electricity (NIE) of up to £2.3m to upgrade 40 primary substations and facilitate additional small scale generation export. These works are ongoing and NIE in conjunction with the Utility Regulator continue to look at ways to provide a solution at least cost to the consumer.

2.6 Whilst the review has considered the increasing costs of grid connection, **the Department is not proposing to increase ROC support in order to compensate for higher grid connection costs.** Providing additional ROC support because of higher grid costs will not solve the current grid constraints and risks over-compensating those generators which do not receive higher than average grid connection charges. Where a grid connection is required, prospective generators are encouraged, as far as is possible, to satisfy themselves that grid connection is available and affordable before undertaking investment.

Changes in assumptions and technology capital costs

2.7 Table 1 below shows how capital costs, the key component, have changed from previous modelling estimates in 2010.[1]

Table 1: Comparison of 2010 and 2013 technology capital costs

Technology	Size Band	Current estimate	2010 estimate	% increase/ (decrease)
Onshore wind	<5	6,500	5,311	22%
	5-50	6,500	3,187	104%
	50-500	3,100	2,656	17%
	500-5000	2,200	1,593	38%
AD	50-500	4,750	4,993	-5%
Hydro	<5	10,000	5,311	88%
	5-50	8,400	4,249	98%
	50-500	6,800	3,187	113%
	500-5000	3,500	2,656	32%
PV	<5	1,640	5,311	-69%
	5-50	1,243	4,568	-73%
	50-500	1,060	4,249	-75%
	500-5000	1,000	3,718	-73%

2.8 As can be seen from Table 1, there has been a significant drop in costs for solar PV and increases for some other technologies. The reasons for these changes are discussed further under each of the relevant technology chapters.

[1] CEPA and PB modelling for DETI

Proposed new ROC banding levels from 1 April 2015

2.9 Table 2 below sets out DETIs existing and proposed ROC banding levels for new generating stations accrediting from 1 April 2015. The rationale for the proposed changes is contained in the subsequent chapters.

Table 2: Existing and proposed new ROC levels

		ROCs/MWh	
Technology	**Size Band**	**Existing**	**Proposed**
Onshore wind	Up to 250kW	4	4
	250kW to 5MW	1	1
Solar PV	Up to 50kW	4	1.6
	50kW to 250kW	2	1.6
Anaerobic Digestion	Up to 500kW	4	4
	500kW-5MW	3	3
Hydro	Up to 20kW	4	4
	20kW to 250kW	3	3
	250kW to 5MW	2	2

2.10 The direction and scale of the change is broadly in line with that for the technology costs. There are no proposed changes for AD, onshore wind or hydro. For solar PV, the reduction in capital costs suggests the need for a corresponding reduction in subsidy levels.

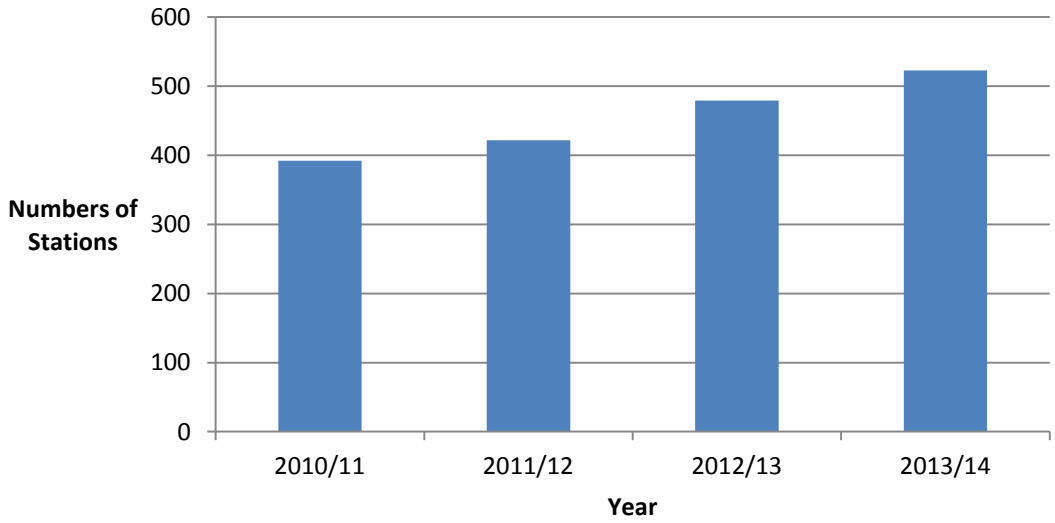
ONSHORE WIND

3

Background

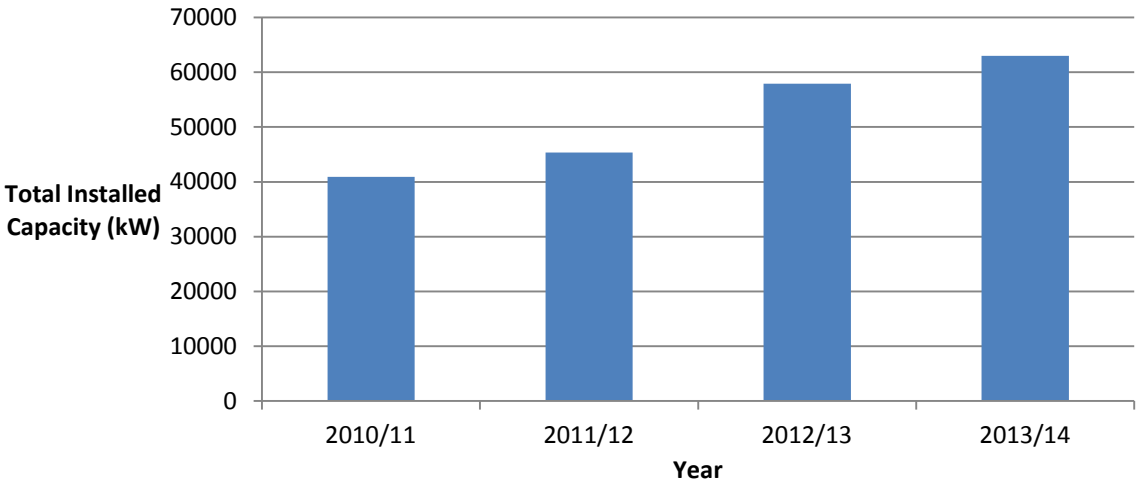
3.1 Since 2010, when DETI introduced higher ROC banding levels for small scale onshore wind, there has been a steady increase in the numbers of stations accrediting under the NIRO. Currently, in Northern Ireland, there are 523 small scale onshore wind generating stations with a total installed capacity of 63 MW[1]. Figure 1 below shows the increase in the numbers of accredited onshore wind generating stations since 2010/11 and Figure 2 shows the increase in total installed capacity of small scale onshore wind since 2010/11.

Figure 1. Numbers of accredited onshore wind generating stations



[1] Statistics sourced from Ofgem Renewables and CHP Register (As of 31 March 2014).

Figure 2. Total installed capacity for small scale onshore wind generating stations by year



Technology costs

3.2 The CEPA study indicates that capital costs for small scale onshore wind have shown some increase since 2010, with the greatest increase being in the 5-50kW band. These are a result of a number of factors including increases in turbine costs, site construction costs and costlier grid connections. A number of stakeholders interviewed during the banding review also commented that second hand turbines are in less supply which has tended to push up average prices. In addition, there are now fewer turbine manufacturers and models at some scales which may have reduced competition and allowed turbine costs to rise.

3.3 It should be noted that there are differences between 2010 and today in the typical turbine sizes used for the 5-50kW and >500kW. In both cases, turbine sizes are now assumed to be somewhat smaller (based on indications of what is most commonly being installed). This is most likely to have increased the cost per kW and contributed to the cost difference observed.

3.4 Future wind capital costs are expected to show some increase over the period to 2017, as a result of on-going increases in equipment costs.

3.5 Table 3 below shows the changes in technology capital costs for onshore wind since 2010.

Table 3 – Changes in technology costs for onshore

Technology	Size Band	Current estimate	2010 estimate	% increase/ (decrease)
Onshore wind	<5	6,500	5,311	22%
	5-50	6,500	3,187	104%
	50-500	3,100	2,656	17%
	500-5000	2,200	1,593	38%

Other considerations

3.6 While the CEPA report argues that costs for small scale onshore wind have risen, there are concerns about the impact on the grid, the effect on the landscape and the effectiveness of the contribution of small scale wind to the renewables target. This could suggest the need for a reduction in ROC levels for small scale wind. For example, the application of the current 1 ROC for generating stations above 250KW should be extended to cover stations above 50kW (below 50kW is microgeneration where the focus is on meeting own demand, resulting in less impact on the grid).

3.7 This would reduce incentivisation levels for small scale wind. However, as there are areas of the grid where capacity is less constrained and landscape issues are considered under current planning guidelines, the CEPA report argues that current ROC levels should be maintained.

DETI Proposal

3.8 DETI considers that although technology costs have increased since 2010, the current support level of 4 ROCs/MWh for generating stations up to 250kW and 1 ROC/MWh for above 250kW – 5MW continues to provide an acceptable rate of return. There is no evidence to suggest that the increase in costs has deterred investment. **DETI therefore proposes to retain the level of 4 ROCs/MWh for generating stations with a maximum installed capacity up to 250kW and 1 ROC/MWh for generating stations with a maximum installed capacity >250kW – 5MW.**

Refurbished turbines

3.9 The review also considered if alternative support levels should be provided to refurbished turbines as the capital costs are likely to be less than for new plant. However, the study concluded that there was no evidence to suggest that a separate band was necessary and that the complexity of introducing a change could not be justified for the remaining two years of the NIRO.

3.10 **We are therefore not proposing any change to the existing policy which allows refurbished turbines to receive the same level of support as new turbines.**

Consultation Questions

1. Do you agree with the proposed retention of the banding level of 4 ROCs/MWh for onshore wind generating stations with a maximum installed capacity up to 250kW?

2. Do you agree with the proposed retention of the banding level of 1 ROC/MWh for onshore wind generating stations with a maximum installed capacity >250kW-5MW?

3. Do you agree that refurbished turbines should continue to be supported at the same level as new turbines?

   If you disagree with the proposals please say why with evidence.

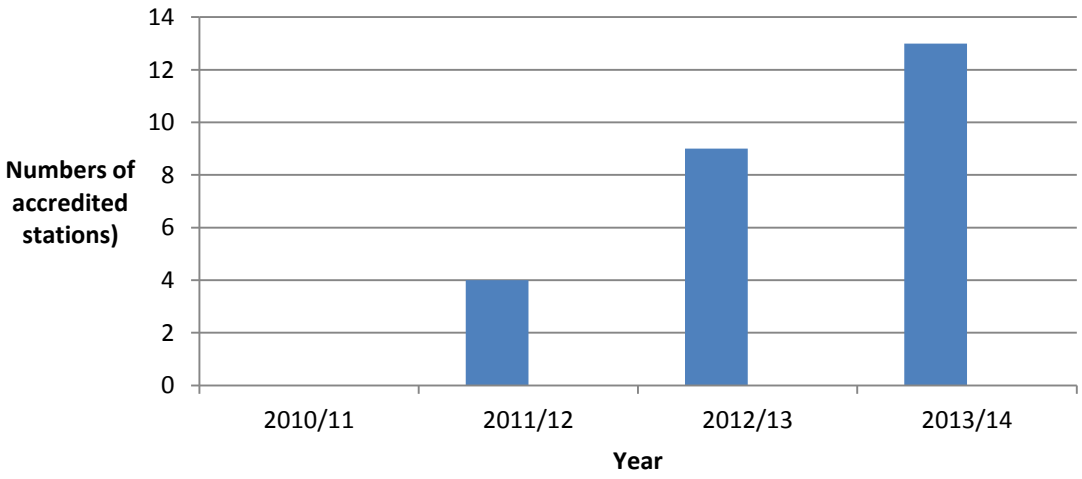
ANAEROBIC DIGESTION

4

Background

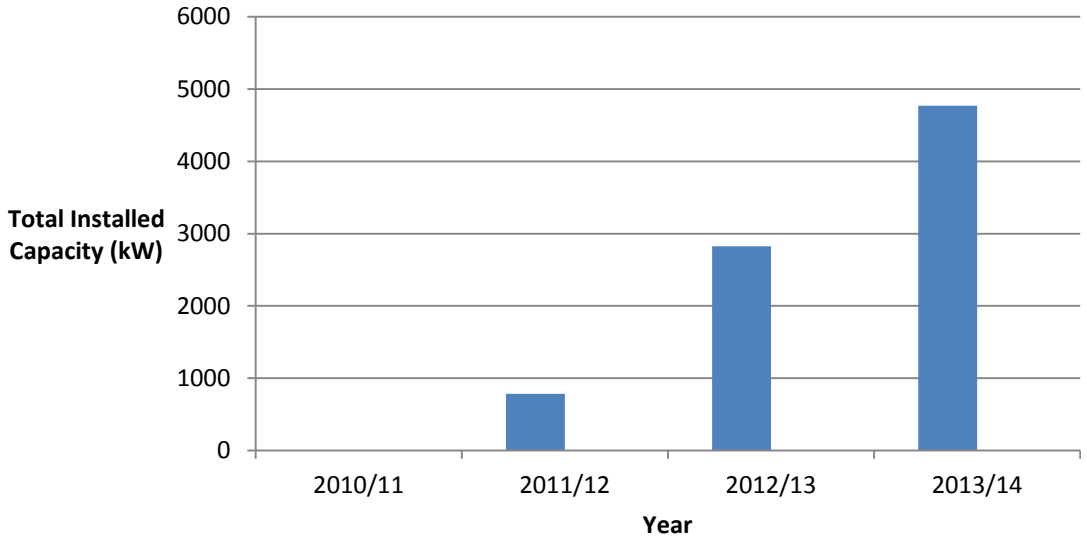
4.1 In 2009, ROC banding levels were increased and emerging technologies, including Anaerobic Digestion (AD), benefited from an increase from 1 ROC to 2 ROCs per MWh generated. Support was subsequently increased in 2011 to 4 ROCs for installed capacity up to 500kW and 3 ROCs for installed capacity above 500kW up to 5 MW. Despite a surge in planning applications for AD generating stations, the actual numbers deployed to date have been relatively low with only 13 stations accredited with a total installed capacity of almost 5 MW. Figures 3 and 4 show the increase in numbers of accredited stations and installed capacity for AD since 2010[1]. In 2010/11, there were no AD generating stations accredited under the NIRO.

Figure 3. Numbers of accredited AD generating stations by year



[1] Source: Ofgem Renewables and CHP Register

Figure 4. Total installed capacity for AD generating stations by year



Technology costs

5.2 Capital costs for AD are slightly lower than those reported in 2010 as indicated seen in Table 4 below. This slightly lower cost is as a result of a maturing market with greater access to established European manufacturers.

Table 4 – Changes in technology costs for AD

Technology	Size Band	Current estimate	2010 estimate	% increase/ (decrease)
AD	50-500	4,750	4,993	-5%

5.3 Future capital costs are expected to remain flat overall. There may be potential for further reductions in equipment costs but equally there may be upward pressure on prices if labour and material prices rise.

DETI proposal

5.4 Whilst slower than anticipated in terms of deploymentAD continues to offer opportunities, particularly for the agricultural and food processing sectors. The evidence from the review suggests that there has been little change in relation to costs for AD since 2010. **Therefore, DETI proposes to retain the banding level of 4 ROCs/MWh for generating stations with a maximum installed capacity up to 500kW and 3 ROCs/MWh for installations between 500kW – 5MW.**

Consultation Questions

4. Do you agree with the proposed retention of the banding level of 4 ROCs/MWh for AD generating stations with a maximum installed capacity up to 500kW?

5. Do you agree with the proposed retention of the banding level of 3 ROCs/MWh for AD generating stations with a maximum installed capacity >500kW-5MW?

   If you disagree with the proposals please say why with evidence.

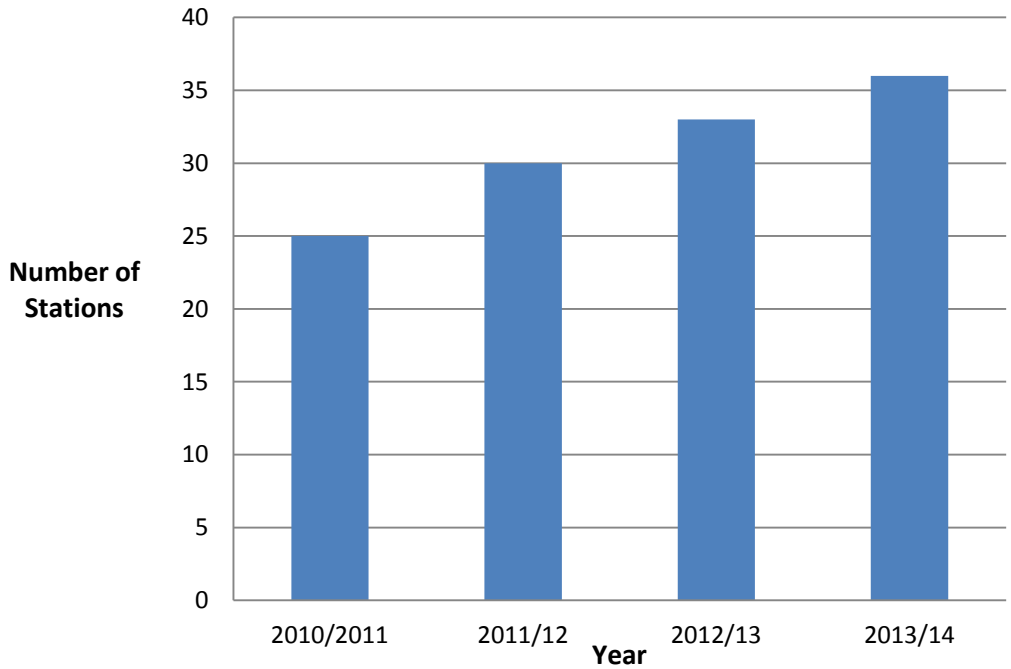
HYDRO

5

Background

6.1 In 2009, prior to the introduction of the higher ROC levels for small scale technologies, there were 24 hydro generating stations accredited under the NIRO. Following the increase in 2010 to 4 ROCs/MWh there has been a relatively conservative increase in the numbers of stations accredited. This slow but steady increase can be seen in Figure 5 below. Presently in Northern Ireland, there are 36 accredited hydro generating stations with a total installed capacity of approximately 3.5 MW[1].

Figure 5. Numbers of Accredited Hydro Stations by Year



[1] Source: Ofgem Renewables and CHP Register (Data collected on 31 March 2013)

Technology costs

6.2 Hydro capital costs are higher than reported in 2010 as can be seen in Table 5 below.

Table 5 – Changes in technology costs for hydro

Technology	Size Band	Current estimate (central case)	2010 estimate	% increase/ (decrease)
Hydro	<5	10,000	5,311	88%
	5-50	8,400	4,249	98%
	50-500	6,800	3,187	113%
	500-5000	3,500	2,656	32%

6.3 The CEPA report suggests that there are a number of reasons for this increase:

- Hydro project requirements (and therefore costs) are highly site-specific with only a limited number of potential sites being available. There is a tendency for the most attractive (i.e. lowest cost) sites to be developed first, increasing the average cost for the remaining potential sites which tend to be more remote and have less favourable energy resource characteristics.
- Grid costs are reported by stakeholders to have increased significantly. This reflects a combination of higher grid connection costs in general but also the remoteness of remaining undeveloped sites which as well as higher general construction costs will tend to result in a more expensive grid connection.
- Stakeholders report that the requirements of the planning and consenting process have increased, pushing up development costs.

6.4 Given the site-specific nature of hydro projects, there is a particularly wide range of potential capital costs and this is reflected in the cost ranges reported. There are likely to be projects with costs that are considerably lower than the central case estimate detailed in the CEPA report, but there will also be projects whose costs are significantly higher.

6.5 For the period to 2017, hydro costs are expected to increase slightly as more viable sites are developed. As a mature technology, hydro is not expected to benefit from technology or market improvements that would result in cost decreases.

DETI proposal

6.6 The banding review suggests that costs for hydro have increased since 2010, however costs are very much site specific and can vary greatly.

6.7 **DETI proposes therefore to retain the current ROC banding levels for all three hydro bands of 4 ROCs/MWh for generating stations with a maximum installed capacity up to 20kW, 3 ROCs/MWh for generating stations with a maximum installed capacity of >20kW-250kW and 2 ROCs/MWh for generating stations with a maximum installed capacity of >250kW-5MW.** Whilst we except that costs have increased, this will not be the case for all projects and there is a real risk that

increasing ROC levels will overcompensate some generators and will not lead to any significant increase in overall deployment.

Consultation Questions

6. Do you agree with the proposed retention of the banding level of 4 ROCs/MWh for hydro generating stations with a maximum installed capacity up to 20kW?

7. Do you agree with the proposed retention of the banding level of 3 ROCs/MWh for hydro generating stations with a maximum installed capacity >20kW-250kW?

8. Do you agree with the proposed retention of the banding level of 3 ROCs/MWh for hydro generating stations with a maximum installed capacity >250kW-5MW?

   If you disagree with the proposals please say why with evidence.

SOLAR PHOTOVOLTAIC

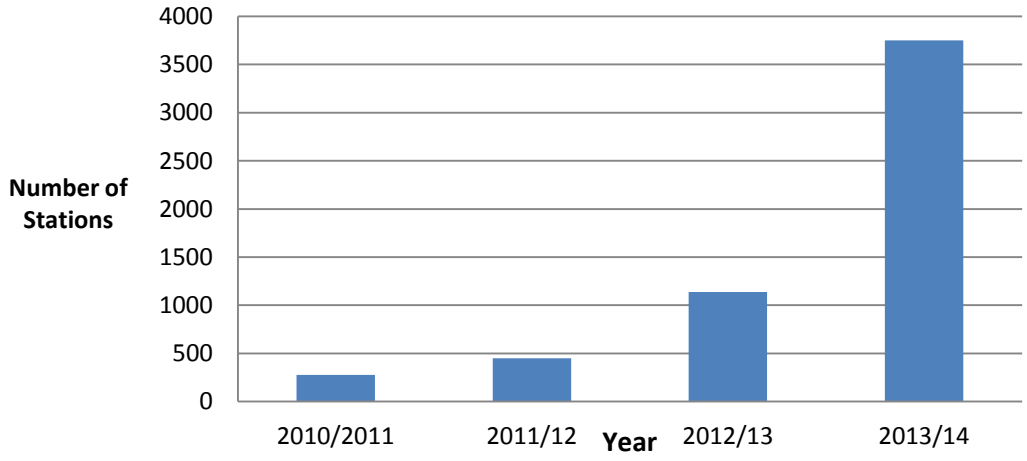
6

Background

6.1 Of all the small scale technologies considered under this review, solar PV has undergone the most significant change. Northern Ireland has witnessed dramatic growth in the small scale solar PV sector since the introduction of 4ROCs/MWh for stations up to 50kW in 2010.

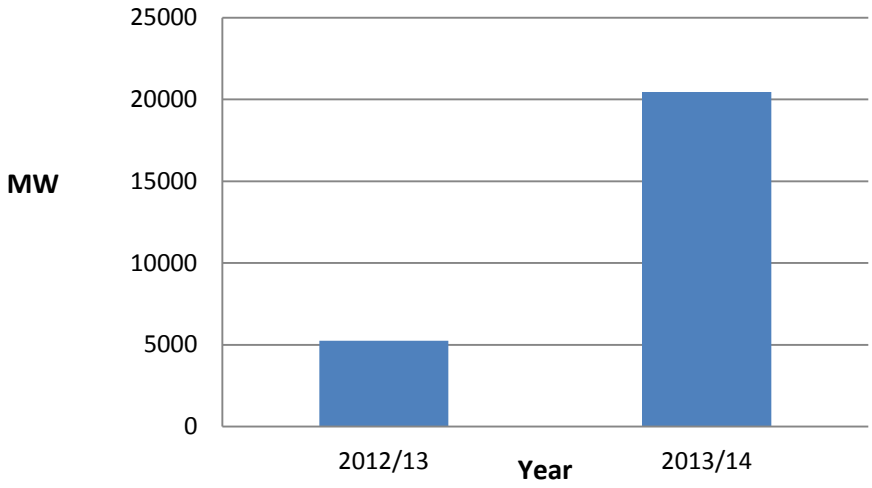
6.2 Figure 6[1] below shows in 2010/11 there were 227 small scale solar PV generating stations accredited under the NIRO with a total installed capacity of just over 1 MW but by 2013/14 there were 3750 stations with a total installed capacity of over 20 MW. Figure 7 shows the most significant and rapid period of growth has been the 12 months between 2012/13 and 2013/14 where there has been an increase from 1138 accredited stations to 3750 and an increase in total installed capacity from 5 MW to 20MW. This is a reflection of decreasing technology costs over the same period.

Figure 6. Numbers of Accredited Solar PV Stations by Year



[1] Source: Ofgem Renewables and CHP Register (Data collected on 31 March 2014)

Figure 7. Total Installed Capacity of Solar PV Stations between 2012/13 and 2013/14



Technology costs

6.3 Capital costs for solar PV are now significantly lower than in 2010, reflecting worldwide cost reductions during that period. For example, in recognition of these reductions, the Department of Energy and Climate Change (DECC) has reduced the GB FIT tariff from 43.3p/kWh in 2010 to 11.73p/kWh[1] in April 2014. The technology costs identified in Table 6 below reflect this reduction.

Table 6 – Changes in technology costs for solar PV

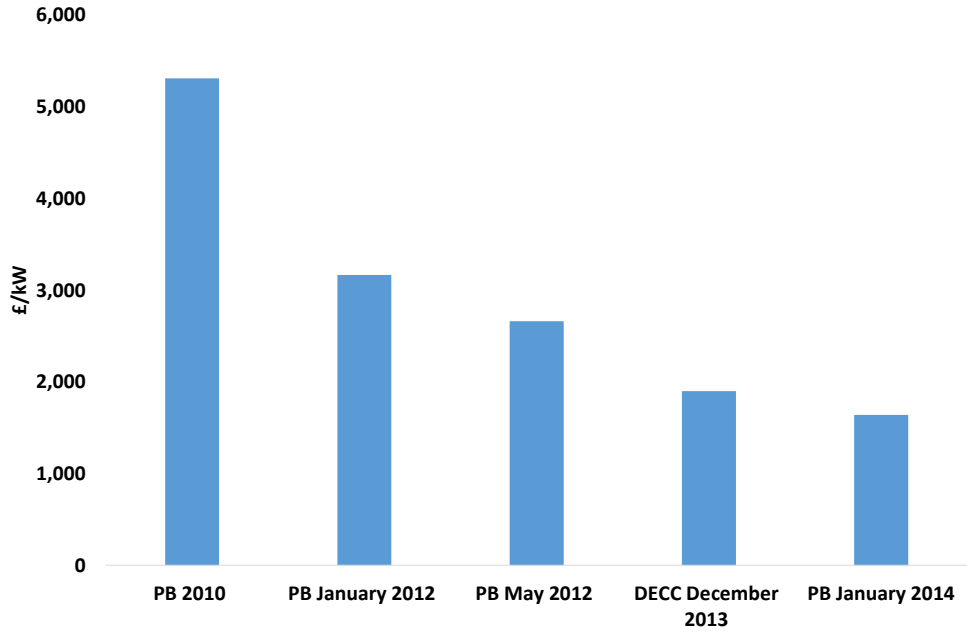
Technology	Size Band	Current estimate £/kW (central case)	2010 estimate £/kW	% increase/ (decrease)
PV	<5	1,640	5,311	-69%
	5-50	1,243	4,568	-73%
	50-500	1,060	4,249	-75%
	500-5000	1,000	3,718	-73%

6.4 Future solar PV capital costs are expected to continue to decline in the period to 2017, albeit at a slower rate than seen in the 2010-2013 period. This reflects a combination of the ongoing competition in the global PV module market and better, lower-cost technical solutions.

6.5 Figure 8, which was prepared for DETI by CEPA using previous reports published by Parsons Brinkerhoff (PB) and the Department of Energy and Climate Change (DECC), shows a significant reduction in solar PV costs since 2010.

[1] 11.73p/kWh is the tariff for the medium rate >4-10kW

Figure 8: Trend in PV[1] costs over time



6.6 Work undertaken by PB in GB as part of the review of the GB FIT and large scale banding review show that DETI's estimates are not out of line with those from DECC and are on a continuing downward trend.

Current support levels

6.7 The Department has noted a significant increase in the numbers of small scale solar PV accrediting under the NIRO in the past 12-18 months. In June 2013 there were 942 installations accredited and as of the end of March 2014 this had increased to 3750. This rapid increase and analysis presented in CEPA's report strongly suggests that the current level of 4 ROCs is overcompensating generators as it gives a return for domestic installations (where the majority of new stations re being installed) of approximately 15% (real) whereas a 3-5% return is more appropriate.

DETI proposal

6.8 Based on the evidence presented in the banding review, DETI is of the opinion that the current 4 ROCs/MWh banding level for solar PV up to 50kW is overcompensation. **Therefore, DETI is proposing to reduce banding support for solar PV up to 250kW to 1.6 ROCs/MWh in line with the CEPA report recommendations. It is the Departments intention to amalgamate the current bands to create a single band for ground-mounted and building-mounted solar PV generating stations up to 250kW installed capacity.**

6.9 It may appear unusual that we are is proposing the same ROC banding level for all solar PV up to 250kW, as typically subsidy per kW and kWh increases as

[1] Figures shown are capital costs for <=4kW installation. Figures are in current prices. Source: PB, DECC

technology reduces. This logic is guided by to two factors: increasing capital cost per kW as size reduces and also, reductions in load factor reflecting the economies of scale. However, in relation to the first, Table 6 shows that there is a lot less difference in capital cost per kW as size reduces, than, for example, onshore wind. And the CEPA study suggests that the load for solar PV is the same for all sizes up to 250kW, whereas for onshore wind it increases with size.

6.10 In addition, it is assumed that small scale solar PV needs less subsidy due to different discount rates and the avoided costs of electricity purchases. Typically, domestic discount rates are assumed to be lower than those of businesses, because households have relatively unattractive alternative possible investments. This essentially means that households require less subsidy to deliver acceptable financial returns. In relation to avoided electricity cost, a much higher proportion of the output from smaller solar PV installations is used on-site than for larger installations.

Impact on consumer bills

6.11 In calculating the potential impact on consumer bills, it should be noted that the proposed amendment amounts to a change to small scale solar PV which currently[1] contributes just over 25MW. It is expected that the proposed reduction will result in a saving to the consumer of approximately £2-3 million per annum over the remaining lifetime of the NIRO depending on future deployment.

Consultation Questions

9. Do you agree with the proposed reduction from 4 ROCs/MWh to 1.6 ROCs/MWh for solar PV generating stations with a maximum installed capacity up to 250kW?

10. Do you agree with the conclusion that solar PV technology costs, in terms of per kWh installed are approximately the same for all sizes? If you disagree with the proposals please say why with evidence.

Grace Periods

6.12 Following the conclusion of the UK-wide banding review of large scale renewables in 2012, all three Renewables Obligations introduced six month grace periods for projects which were delayed due to either grid connection delays or radar upgrades. The grace periods, with defined eligibility criteria, were provided to ensure projects would not be prejudiced or jeopardised by delaying factors outside of the developer's control.

6.13 There is a strong possibility that some solar PV generators may not meet the 31 March 2015 date to accredit at the 4 ROCs/MWh banding level due to grid connection delays beyond their control. **DETI therefore proposes to introduce a 6**

[1] Figure given as of 31 March 2014 – Source: Ofgem Renewables and CHP Register

month grace period for small scale solar PV (i.e. up to 250kW) projects which are unable to accredit under the NIRO prior to the introduction of new ROC banding levels on 1 April 2015 due to grid connection delays.

6.14 In order to be eligible for the grace period, generators must have accepted Northern Ireland Electricity's (NIE) grid connection offer and NIE must have received payment of the required deposit prior to 1 April 2015. Generators must then receive full accreditation under the NIRO by 1 October 2015 to ensure eligibility for the pre 1 April 2015 ROC level.

Consultation Questions

11. Do you agree with the proposed introduction of a 6 month grace period for small scale solar PV generating stations that meet the eligibility criteria?

12. Do you agree with the eligibility criteria proposed by DETI?

    If you disagree with the proposals please say why with evidence.

Annex A –Consultation Questions

Consultation Questions

Onshore wind

1. Do you agree with the proposed retention of the banding level of 4 ROCs/MWh for onshore wind generating stations with a maximum installed capacity up to 250kW?

2. Do you agree with the proposed retention of the banding level of 1 ROC/MWh for onshore wind generating stations with a maximum installed capacity >250kW-5MW?

3. Do you agree that refurbished turbines should continue to be supported at the same level as new turbines?

   If you disagree with the proposals please say why with evidence.

Anaerobic Digestion

4. Do you agree with the proposed retention of the banding level of 4 ROCs/MWh for AD generating stations with a maximum installed capacity up to 500kW?

5. Do you agree with the proposed retention of the banding level of 3 ROCs/MWh for AD generating stations with a maximum installed capacity >500kW-5MW?

   If you disagree with the proposals please say why with evidence.

Hydro

6. Do you agree with the proposed retention of the banding level of 4 ROCs/MWh for hydro generating stations with a maximum installed capacity up to 20kW?

7. Do you agree with the proposed retention of the banding level of 3 ROCs/MWh for hydro generating stations with a maximum installed capacity >20kW-250kW?

8. Do you agree with the proposed retention of the banding level of 3 ROCs/MWh for hydro generating stations with a maximum installed capacity >250kW-5MW?
   If you disagree with the proposals please say why with evidence.

Solar PV

9. Do you agree with the proposed reduction from 4 ROCs/MWh to 1.6 ROCs/MWh for solar PV generating stations with a maximum installed capacity up to 250kW?

10. Do you agree with the conclusion that solar PV technology costs, in terms of per kWh installed are approximately the same for all sizes?

    If you disagree with the proposals please say why with evidence

Grace period

11. Do you agree with the proposed introduction of a 6 month grace period for small scale solar PV generating stations that meet the eligibility criteria?

12. Do you agree with the eligibility criteria proposed by DETI?

    If you disagree with the proposals please say why with evidence.

General

13. Are there any wider issues you think the Department should take account of in setting small scale renewables policy?

Annex B –Equality Assessment

Under section 75 of the Northern Ireland Act 1998, the Department is required to have due regard to the need to promote equality of opportunity:

- between persons of different religious belief, political opinion, racial group, age, marital status or sexual orientation;
- between men and women generally;
- between persons with a disability and persons without; and
- between persons with dependants and persons without.

In addition, without prejudice to its obligations above, the Department is also required, in carrying out its functions relating to Northern Ireland, to have regard to the desirability of promoting good relations between persons of different religious beliefs, political opinions or racial group.

We have carried out an equality screening exercise in relation to these proposed changes to solar PV ROC banding levels and found that it does not have any significant equality impact. A full Equality Impact Assessment, therefore, is not required. The equality screening form is attached at Annex A.

Annex C - DETI Equality Screening Form

Part 1. Policy scoping

The first stage of the screening process involves scoping the policy under consideration. The purpose of policy scoping is to help prepare the background and context and set out the aims and objectives for the policy, being screened. At this stage, scoping the policy will help identify potential constraints as well as opportunities and will help the policy maker work through the screening process on a step by step basis.

Public authorities should remember that the Section 75 statutory duties apply to internal policies (relating to people who work for the authority), as well as external policies (relating to those who are, or could be, served by the authority).

Information about the policy

Name of the policy – Northern Ireland Renewables Obligation

Is this an existing, revised or a new policy? Revised

What is it trying to achieve? (intended aims/outcomes)

The policy will introduce amendments to support levels for small scale onshore wind, solar photovoltaic (PV), anaerobic digestion and hydro which will support the continued development of renewable electricity in Northern Ireland.

The proposed policy will be introduced into a new consolidated Renewables Obligation Order (Northern Ireland) 2015 by setting new Renewable Obligation Certificates (ROC) levels for electricity generated from small scale solar PV

Are there any Section 75 categories which might be expected to benefit from the intended policy?
If so, explain how.

No. This policy will apply equally to all.

Who initiated or wrote the policy?
DETI

Who owns and who implements the policy?
DETI own and implement the policy. Energy is a transferred matter and DETI is responsible for energy policy within NI. The overall policy of increasing renewable energy is also driven by EU Directives which are taken forward at Member State i.e. UK level and implemented, as appropriate, by Whitehall and the Devolved Administrations. DETI has worked closely with Department of Energy and Climate Change (DECC), the Scottish Government, the Utility Regulator and Ofgem to ensure the that the policies in NI are consistent with those in the rest of the UK so far as is possible. DETI will also consult with the Utility Regulator and Consumer Council for NI as part of the policy development process.

Implementation factors

Are there any factors which could contribute to/detract from the intended aim/outcome of the policy/decision? Yes

If yes, are they

☐ financial

☒ legislative

☐ other, please specify _____

Main stakeholders affected

Who are the internal and external stakeholders (actual or potential) that the policy will impact upon?

☐ staff

☐ service users

☐ other public sector organisations

☐ voluntary/community/trade unions

☒ other, please specify The impact of the policy will be on renewable electricity generators, suppliers and ultimately, all consumers.

Other policies with a bearing on this policy

• what are they?
1. Renewable Energy Directive (RED)
2. Strategic Energy Framework

• who owns them?
1. European Union
2. Northern Ireland Executive

Available evidence

Evidence to help inform the screening process may take many forms. Public authorities should ensure that their screening decision is informed by relevant data.

What evidence/information (both qualitative and quantitative) have you gathered to inform this policy? Specify details for each of the Section 75 categories. There is no relevant data in respect of Section 75 groups. The issues addressed in the policy relate mainly to those generating and supplying renewable electricity in NI and are therefore technical in nature. As such, it is felt the policy changes will not have any differential impact on any of the equality groups. Data is collected by Ofgem in terms of the number of generators in NI accredited under the NIRO and the number of Renewable Obligation Certificates (ROCs) issued.

Section 75 category	Details of evidence/information
Religious belief	N/A – See above
Political opinion	N/A – See above
Racial group	N/A – See above
Age	N/A – See above
Marital status	N/A – See above
Sexual orientation	N/A – See above
Men and women generally	N/A – See above
Disability	N/A – See above
Dependants	N/A – See above

Needs, experiences and priorities

Taking into account the information referred to above, what are the different needs, experiences and priorities of each of the following categories, in relation to the particular policy/decision? Specify details for each of the Section 75 categories N/A - There is no relevant data in respect of Section 75 groups.

Section 75 category	Details of needs/experiences/priorities
Religious belief	N/A – See above
Political opinion	N/A – See above
Racial group	N/A – See above
Age	N/A – See above
Marital status	N/A – See above
Sexual orientation	N/A – See above
Men and women generally	N/A – See above
Disability	N/A – See above
Dependants	N/A – See above

Part 2. Screening questions

Introduction

In making a decision as to whether or not there is a need to carry out an equality impact assessment, the public authority should consider its answers to the questions 1-4 detailed below.

If the public authority's conclusion is **none** in respect of all of the Section 75 equality of opportunity and/or good relations categories, then the public authority may decide to screen the policy out. If a policy is 'screened out' as having no relevance to equality of opportunity or good relations, a public authority should give details of the reasons for the decision taken.

If the public authority's conclusion is **major** in respect of one or more of the Section 75 equality of opportunity and/or good relations categories, then consideration should be given to subjecting the policy to the equality impact assessment procedure.

If the public authority's conclusion is **minor** in respect of one or more of the Section 75 equality categories and/or good relations categories, then consideration should still be given to proceeding with an equality impact assessment, or to:

- measures to mitigate the adverse impact; or
- the introduction of an alternative policy to better promote equality of opportunity and/or good relations.

In favour of a 'major' impact

a) The policy is significant in terms of its strategic importance;
b) Potential equality impacts are unknown, because, for example, there is insufficient data upon which to make an assessment or because they are complex, and it would be appropriate to conduct an equality impact assessment in order to better assess them;
c) Potential equality and/or good relations impacts are likely to be adverse or are likely to be experienced disproportionately by groups of people including those who are marginalised or disadvantaged;
d) Further assessment offers a valuable way to examine the evidence and develop recommendations in respect of a policy about which there are concerns amongst affected individuals and representative groups, for example in respect of multiple identities;
e) The policy is likely to be challenged by way of judicial review;
f) The policy is significant in terms of expenditure.

In favour of 'minor' impact

a) The policy is not unlawfully discriminatory and any residual potential impacts on people are judged to be negligible;
b) The policy, or certain proposals within it, are potentially unlawfully discriminatory, but this possibility can readily and easily be eliminated by making appropriate changes to the policy or by adopting appropriate mitigating measures;
c) Any asymmetrical equality impacts caused by the policy are intentional because they are specifically designed to promote equality of opportunity for particular groups of disadvantaged people;
d) By amending the policy there are better opportunities to better promote equality of opportunity and/or good relations.

In favour of none

a) The policy has no relevance to equality of opportunity or good relations.
b) The policy is purely technical in nature and will have no bearing in terms of its likely impact on equality of opportunity or good relations for people within the equality and good relations categories.

Taking into account the evidence presented above, consider and comment on the likely impact on equality of opportunity and good relations for those affected by this policy, in any way, for each of the equality and good relations categories, by

applying the screening questions detailed below and indicate the level of impact on the group i.e. minor, major or none.

Screening questions

1 What is the likely impact on equality of opportunity for those affected by this policy, for each of the Section 75 equality categories? minor/major/none		
Section 75 category	Details of policy impact	Level of impact? minor/major/none
Religious belief		None – The issues addressed in the policy relate mainly to those generating and supplying renewable electricity in NI and are therefore technical in nature. As such, it is felt the policy will not have any differential impact on any of the equality groups.
Political opinion		As above
Racial group		As above
Age		As above
Marital status		As above
Sexual orientation		As above
Men and women generally		As above
Disability		As above
Dependants		As above

2 Are there opportunities to better promote equality of opportunity for people within the Section 75 equalities categories?		
Section 75 category	If **Yes**, provide details	If **No**, provide reasons
Religious belief		No, this policy will apply equally to all.
Political opinion		As above
Racial group		As above
Age		As above
Marital status		As above
Sexual orientation		As above
Men and women generally		As above
Disability		As above
Dependants		As above

3 To what extent is the policy likely to impact on good relations between people of different religious belief, political opinion or racial group?		
Section 75 category	Details of policy impact	Level of impact minor/major/none
Religious belief		None, this policy will apply equally to all.
Political opinion		As above
Racial group		As above

4 Are there opportunities to better promote good relations between people of different religious belief, political opinion or racial group?		
Good relations category	If **Yes**, provide details	If **No**, provide reasons
Religious belief		No, this policy will apply equally to all.
Political opinion		No, this policy will apply equally to all.
Racial group		No, this policy will apply equally to all

Additional considerations

Multiple identity

Generally speaking, people can fall into more than one Section 75 category. Taking this into consideration, are there any potential impacts of the policy/decision on people with multiple identities?
(*For example; disabled minority ethnic people; disabled women; young Protestant men; and young lesbians, gay and bisexual people).*

No, this policy will apply equally to all.

Provide details of data on the impact of the policy on people with multiple identities. Specify relevant Section 75 categories concerned.

None, this policy will apply equally to all.

Part 3. Screening decision

If the decision is not to conduct an equality impact assessment, please provide details of the reasons.

The introduction of the policy changes should enhance renewable electricity generation across NI and contribute to the security of supply for all consumers. The introduction of this policy will have no adverse impact on any of the Section 75 categories as the legislation will apply equally to all.

If the decision is not to conduct an equality impact assessment the public authority should consider if the policy should be mitigated or an alternative policy be introduced.

N/A

If the decision is to subject the policy to an equality impact assessment, please provide details of the reasons.

N/A

All public authorities' equality schemes must state the authority's arrangements for assessing and consulting on the likely impact of policies adopted or proposed to be adopted by the authority on the promotion of equality of opportunity. The Commission recommends screening and equality impact assessment as the tools to be utilised for such assessments. Further advice on equality impact assessment may be found in a separate Commission publication: Practical Guidance on Equality Impact Assessment.

Mitigation

When the public authority concludes that the likely impact is 'minor' and an equality impact assessment is not to be conducted, the public authority may consider mitigation to lessen the severity of any equality impact, or the introduction of an alternative policy to better promote equality of opportunity or good relations.

Can the policy/decision be amended or changed or an alternative policy introduced to better promote equality of opportunity and/or good relations?

If so, give the **reasons** to support your decision, together with the proposed changes/amendments or alternative policy.

N/A

Timetabling and prioritising

Factors to be considered in timetabling and prioritising policies for equality impact assessment.

If the policy has been **'screened in'** for equality impact assessment, then please answer the following questions to determine its priority for timetabling the equality impact assessment.

On a scale of 1-3, with 1 being the lowest priority and 3 being the highest, assess the policy in terms of its priority for equality impact assessment. N/A

Priority criterion	Rating (1-3)
Effect on equality of opportunity and good relations	
Social need	
Effect on people's daily lives	
Relevance to a public authority's functions	

Note: The Total Rating Score should be used to prioritise the policy in rank order with other policies screened in for equality impact assessment. This list of priorities will assist the public authority in timetabling. Details of the Public Authority's Equality Impact Assessment Timetable should be included in the quarterly Screening Report.

Is the policy affected by timetables established by other relevant public authorities?

If yes, please provide details

Part 4. Monitoring

N/A

Public authorities should consider the guidance contained in the Commission's Monitoring Guidance for Use by Public Authorities (July 2007).

The Commission recommends that where the policy has been amended or an alternative policy introduced, the public authority should monitor more broadly than for adverse impact (See Benefits, P.9-10, paras 2.13 – 2.20 of the Monitoring Guidance).

Effective monitoring will help the public authority identify any future adverse impact arising from the policy which may lead the public authority to conduct an

equality impact assessment, as well as help with future planning and policy development.

Part 5. Disability Duties

Under the Disability Discrimination Act 1995 (as amended by the Disability Discrimination (Northern Ireland) Order 2006), public authorities, when exercising their functions, are required to have due regard to the need:

- to promote positive attitudes towards disabled people; and
- to encourage participation by disabled people in public life.

5. Does this policy/legislation have any potential to contribute towards promoting positive attitudes towards disabled people or towards encouraging participation by disabled people in public life? If yes, please give brief details.

No. This policy will apply equally to all.

Department of Enterprise, Trade and Investment
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Your views on this document are welcome.

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