Title:	Impact Assessment (IA)
Changes to Renewable Energy Guarantees of Origin (REGOs)	**URN No:** 10D/980
Lead department or agency: DECC	**Date:** 26/10/2010
Other departments or agencies: Ofgem	**Stage:** Development/Options
	Source of intervention: Domestic
	Type of measure: Secondary legislation
	Contact for enquiries: Birgit Wosnitza

Summary: Intervention and Options

What is the problem under consideration? Why is government intervention necessary?

A number of changes are required to the arrangements governing Renewable Energy Guarantees of Origin (REGOs) by 4th December 2010 under Article 15 of the Renewable Energy Directive (RED). These changes need to be transposed into GB law.

What are the policy objectives and the intended effects?

To transpose a number of mandatory technical changes made by the Renewable Energy Directive 2009 regarding REGOs, making them consistent across Europe. These changes include:

- changes to the definitions of '*renewable energy sources*' and '*biomass*';
- a change to the unit of measurement of a REGO from Kilowatt hour to Megawatt hour;
- expiry of the REGO 12 months is already provided for in Fuel Mix Disclosure Regulations. GB will cancel REGOs on a rolling basis 16 months after production of the electricity for which it is issued.;
- various changes to information to be included in the REGO itself.

What policy options have been considered? Please justify preferred option (further details in Evidence Base)

1) 'Do minimum implementation' (preferred option)

2) Extend REGOs to cover heating and cooling

Option (1) is our preferred option as it will only marginally increase administrative requirements on Ofgem and renewables generators and it will facilitate the comparability of REGOs across Europe. Extending REGOs to cover heating and cooling would require changing reporting and monitorign structure at extra cost. Introdcution of heating and Cooling REGOs will be considered as part of arrangments governing the planned RHI.

When will the policy be reviewed to establish its impact and the extent to which the policy objectives have been achieved?	It will be reviewed 07/2012
Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?	Yes

SELECT SIGNATORY Sign-off For consultation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible SELECT SIGNATORY:..... Date:.....

Summary: Analysis and Evidence — Policy Option 1

Description: Impacts of "do minimum implementation"

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate: n/a**

COSTS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Cost** (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	n/a		n/a	**n/a**

Description and scale of key monetised costs by 'main affected groups'

n/a

Other key non-monetised costs by 'main affected groups'

While the costs would be marginally higher than the costs of the current REGO system, due to the fact that "do minimum" is mandatory, this higher level of costs is treated as counterfactual in this IA. Compared to doing nothing (for illustration only) the compulsory changes to REGOs will marginally increase administrative requirements on Ofgem and renewables generators.

BENEFITS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Benefit** (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	n/a		n/a	**n/a**

Description and scale of key monetised benefits by 'main affected groups'

n/a

Other key non-monetised benefits by 'main affected groups'

A benefit of the "do minimum" option is that it facilitates comparability across Europe, as it is likely that all other European countries will implement "do minimum" instead of any extended REGOs.

Key assumptions/sensitivities/risks — **Discount rate (%)**

Impact on admin burden (AB) (£m):			**Impact on policy cost savings (£m):**	**In scope**
New AB:	**AB savings:**	**Net:**	**Policy cost savings:**	Yes/No

Summary: Analysis and Evidence — Policy Option 2

Description: Impacts of extending REGOs to cover heating and cooling

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate: n/a**

COSTS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Cost** (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	n/a		n/a	**n/a**

Description and scale of key monetised costs by 'main affected groups'

n/a

Other key non-monetised costs by 'main affected groups'

Extending the use of REGOs to heating and cooling causes comparability problems across Europe, should other countries not pursue the same. Furthermore, extending the use of REGOs to heating and cooling would require the development of a reporting and monitoring structure immediately, at extra cost. These extra costs haven't been quantified due to lack of data. Extending the use of REGOs to heating and cooling would be difficult and bring forward the costs associated with the monitoring and reporting system will already be introduced for the RHI. By delaying the issuing of REGOs for heating and cooling until the introduction of the RHI would allow to use the structure in place for RHI purposes.

BENEFITS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Benefit** (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	n/a		n/a	**n/a**

Description and scale of key monetised benefits by 'main affected groups'

n/a

Other key non-monetised benefits by 'main affected groups'

Extending REGOs to heating and cooling would make more technologies eligible for REGOs and therefore allow generators to receive REGOs for previously excluded technologies. However, as REGOs have no monetary value attached, any benefit is limited. Electricity suppliers could potentially have reputational benefits through demonstrating that they have sourced more electricity from renewable technologies.

Key assumptions/sensitivities/risks — **Discount rate (%)**

Impact on admin burden (AB) (£m):			**Impact on policy cost savings (£m):**	**In scope**
New AB:	**AB savings:**	**Net:**	**Policy cost savings:**	Yes/No

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England and Wales		
From what date will the policy be implemented?			05/12/2010		
Which organisation(s) will enforce the policy?			n/a		
What is the annual change in enforcement cost (£m)?			n/a		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			n/a		
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 0	
Does the proposal have an impact on competition?			No		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			**Costs:** n/a	**Benefits:** n/a	
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	**Micro** n/a	**< 20** n/a	**Small** n/a	**Medium** n/a	**Large** n/a
Are any of these organisations exempt?	No	No	No	No	No

Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on…?	**Impact**	**Page ref within IA**
Statutory equality duties[1] Statutory Equality Duties Impact Test guidance	No	
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	No	
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

[1] Race, disability and gender Impact assessments are statutory requirements for relevant policies. Equality statutory requirements will be expanded 2011, once the Equality Bill comes into force. Statutory equality duties part of the Equality Bill apply to GB only. The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Evidence Base (for summary sheets) – Notes

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Please fill in **References** section.

References

No.	Legislation or publication
1	**Renewables Obligation Order 2011 consultation document, available at: http://www.decc.gov.uk/assets/decc/Consultations/Renewables%20Obligation/261-statutory-con-renewables-obligation.pdf**
2	**Draft Renewables Obligation Order 2011 Impact Assessment (July 2010)**

Include the links to relevant legislation and publications, such as public impact assessment of earlier stages (e.g. Consultation, Final, Enactment).

Evidence Base

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

Annual profile of monetised costs and benefits* - (£m) constant prices

	Y_0	Y_1	Y_2	Y_3	Y_4	Y_5	Y_6	Y_7	Y_8	Y_9
Transition costs										
Annual recurring cost										
Total annual costs										
Transition benefits										
Annual recurring benefits										
Total annual benefits										

* For non-monetised benefits please see summary pages and main evidence base section

Impact Assessment accompanying Statutory Consultation on changes to Renewable Energy Guarantees of Origin certificates

Background

Renewable Energy Guarantees of Origin (REGOs) are transferable certificates which demonstrate that electricity has been produced from a renewable source of energy within the European Union.

Ofgem administers the REGO scheme in Great Britain. There is a single accreditation process for generators to undergo in order to be able to claim any combination of REGOs, ROCs and LECs. REGOs are issued by Ofgem on a monthly or annual basis when requested by a electricity producer (or by the relevant NFFO / SRO_2 purchaser). Once issued, REGOs remain in Ofgem's Renewables and CHP Register and can be transferred between parties until used.

One REGO is issued per kWh of renewable electricity generated. REGOs are rounded up or down to the nearest whole kWh. REGOs have a unique reference number representing the generating station, technology and country of origin. The REGO also states the period over which the electricity was generated. A REGO can be transferred, usually between the producer (or NFFO/SRO purchaser) and the final electricity supplier or user. REGOs have no shelf life and do not have a value in the way that ROCs or LECs do.

The main purpose of REGOs in GB are as evidence for Fuel Mix Disclosure (FMD) purposes. FMD regulations requires that GB licensed electricity suppliers who supply electricity to customers report the different energy sources used to generate the electricity supplied to their customers. REGOs are used as the main evidence of renewable electricity generation for these purposes.

Suppliers must hold all evidence by 1st July annually, for disclosure by 1st October on customers' bills and through publicity. This means that it is increasingly likely that if a generator is selling electricity to an electricity supplier the supplier may require the generator to provide a REGO to accompany that electricity for FMD purposes.

Problem under consideration

The Renewable Energy Directive mandates a number of changes to REGOs, which would be enacted through amendments to the Electricity (Guarantee of Origin of Electricity produced from Renewable Energy Sources) Regulations 2003 by 4th December 2010. These changes are required under Article 15 of the Renewable Energy Directive (RED). The changes include:

- **changes to the definitions of '*renewable energy sources*' and '*biomass*';**
  - The definition of energy from 'renewable energy sources' will be amended to include energy from Aerothermal and Hydrothermal.
  - The existing definition of tidal energy will be replaced by ocean energy
  - The exiting definition of biomass will now include matter from fisheries and aquaculture.

- **a change to the unit of measurement of a REGO from Kilowatt hour to Megawatt hour;**
  - A REGO will be issued for electricity rounded up or down to the nearest MWh. Therefore 1 REGO will be issued for electricity generation of 0.5MWh or more and generation of 0.49MWh or less will not earn a REGO.

- **'Use' of the REGO 12 months after production of the electricity for which it is issued and the requirement for REGOs to be cancelled once used;**
  - The 12 month time-limit for a 'use' of a REGO is already adequately provided for in FMD Regulations. The RED requires that REGOs should be cancelled after they are used. In GB introduction of a 16 month rolling cancellation allows Ofgem's current administrative arrangements for FMD to continue whereby REGOs are held by electricity suppliers against the appropriate FMD period which runs from April to March annually to be redeemed by Ofgem at midday on the 1 July following that period each year.

- **various changes to information to be included in the REGO itself;**
  - Generators will be required to provide the following information to be recorded on the Ofgem Renewables and CHP Register:
  - When and from which renewable energy source the electricity was produced
  - The identity, location and capacity of the station
  - Whether and to what extent the installation has benefited from investment support
  - Whether and to what extent the unit of energy has benefited from any other national support scheme
  - The date the installation became operational
  - The date and country of issue and a unique identification number.

Rationale for intervention

The EU Renewables Directive sets out mandatory technical changes to Renewable Energy Guarantees of Origin (REGOs) to make them consistent across Europe.

The rationale for having REGOs is a evidence of renewable energy generation . In GB REGOs provide evidence to customers on the electricity sourced from renewable technologies as part of the Fuel Mix Disclosure that requires GB licensed electricity suppliers to report the different energy sources used to generate the electricity supplied. REGOs are also used as evidence of Green House Gas emissions in the UK.

Policy Objectives

The policy objective is to transpose the changes required to REGOs by the Renewable Energy Directive into GB law.

Options

1) Do minimum – make the changes listed in the four bullet points above
2) Extend REGOs to cover heating and cooling (as currently REGOs are only given for renewable electricity).

Costs and benefits

1) A benefit of the "do minimum" option is that it facilitates comparability across Europe, as it is likely that all other European countries will implement "do minimum" instead of any extended REGOs.

   The costs of "do minimum" (i.e. making the mandatory changes as listed in the four bullet points above) would be marginally higher than the costs of the current REGO system. Costs haven't been monetised due to lack of available data.

   The costs and benefits of implementing the "do minimum" option compared to doing nothing are considered below for illustration:

   Costs
   The compulsory changes to REGOs will marginally increase administrative requirements on Ofgem and renewables suppliers and generators. This is the case as Ofgem and generators will have to incur a one off administration cost for including the new requirements as mentioned above in their IT systems. The changes to REGOs are unlikely to require new IT programs or ongoing increased operational costs for generators, suppliers or Ofgem.

   There will be a small cost to those electricity suppliers who get rounded down to a whole number of MWh of generation for fuel mix disclosure purposes, whereas without the changes, they would be rounded to a higher number of kWh of renewable electricity.

   Benefits
   The compulsory changes to REGOs will facilitate the comparability of REGOs across Europe, i.e. if the whole of the EU applies the mandated REGO changes but the UK doesn't, REGOs

issued in the UK would not be comparable. In addition, by changing REGOs, the UK foregoes having to pay a fine for not complying with EU regulation.

Through making more technologies eligible for REGOs, electricity suppliers may benefit in terms of Fuel Mix Disclosure (FMD) purposes as they might be able to report a higher share of their different energy sources as being renewable. This might have beneficial reputational effects.

The new rounding arrangements, i.e. receiving 1 REGO for electricity generation of 0.5MWh or more and generation of 0.49MWh or less, might be slightly beneficial for some electricity suppliers as they might be able to disclose a higher amount of REGOs for their fuel mix. This might have beneficial reputational effects.

A further benefit from implementing the minimum changes listed above is more transparency due to more information included in REGOs the changes to REGOs may benefit some producers / consumers. This is considered to be of limited value.

2) Compared to “do minimum” the second option considered in this IA, i.e. extending the use of REGOs to heating and cooling, would require the development of a reporting and monitoring structure immediately, at an extra cost. It is likely to require an extended IT program and possibly might incur ongoing operational costs.

   It will be beneficial to delay the issuing of REGOs for heating and cooling until the introduction of the RHI, which will be accompanied by the development of a monitoring and reporting structure for heating and cooling for RHI purposes. Such a system could then be used to issue REGOs for heating and cooling at little additional costs.

Weighing the costs and benefits of the options explored in this IA indicates that “do minimum” is the preferred option.

Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

Annex 1: Post Implementation Review (PIR) Plan

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

Basis of the review: [The basis of the review could be statutory (forming part of the legislation), it could be to review existing policy or there could be a political commitment to review];
Review objective: [Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?]
Review approach and rationale: [e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach]
Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured]
Success criteria: [Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives]
Monitoring information arrangements: [Provide further details of the planned/existing arrangements in place that will allow a systematic collection systematic collection of monitoring information for future policy review]
Reasons for not planning a PIR: [If there is no plan to do a PIR please provide reasons here]