

Title: The Storage of Carbon Dioxide (Termination of Licences) Regulations 2011 Lead department or agency: DECC Other departments or agencies:	Impact Assessment (IA)
	IA No: DECC0034
	Date: 14/04/2011
	Stage: Final
	Source of intervention: EU
	Type of measure: Secondary legislation
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Summary: Intervention and Options

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

The Energy Act 2008 provides for a regulatory regime for carbon dioxide storage in the UK offshore area and the Government has now laid the licensing regulations that transpose into UK law the many of the requirements of Directive 2009/31/EC on the geological storage of carbon dioxide. Two provisions of the Directive are still to be addressed. These are Article 18 and Article 20. Article 18 sets out the requirements to be met before the Licensee can be released from the Licence and the state takes responsibility for the site. Article 20 requires a financial contribution for the monitoring obligations for a period of 30 years to be provided to DECC before the transfer takes place.

What are the policy objectives and the intended effects?

The proposed Regulation transposes the requirements of Article 18 and 20 of the Directive and provides a power for the Secretary of State to terminate licences issued under section 18 of the Energy Act 2008.

This completes the licensing regime needed to ensure the safe and economic storage offshore of carbon dioxide. This will help deliver the UK's climate change commitments.

What policy options have been considered, including any "alternatives to regulation". Please justify the preferred option below.

Option 1: do nothing
Failure to transpose the remaining regulations of Directive 2009/31/EC into UK law would open the UK to infraction proceedings for not implementing the EU Directive on geological storage of carbon dioxide.

Option 2: preferred option
Transpose Article 18 and Article 20 of Directive 2009/31/EC into UK law

Will the policy be reviewed? It will be reviewed	If applicable, set review date 2015
What is the basis for this review? duty to review	If applicable, set sunset clause date
Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?	No

Ministerial Sign-off For final stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.

Signed by the responsible Minister: Charles Hendry Date: 10th June 2011

Summary: Analysis and Evidence

Policy Option 2

Description:

Transpose Article 18 and Article 20 of Directive 2009/31/EC into UK law

Price Base Year 2009	PV Base Year 2009	Time Period Years 70	Net Benefit (Present Value (PV)) (£m) - £0.002		
			Low:	High:	Best Estimate: -£0.002

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			
High			
Best Estimate	£0.01	0	£0.002

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

This is the cost of storage licence holders for producing transfer reports. This estimate is based on four demonstration plants each using a different storage site and hence the need to produce four transfer reports, one in 2050 and three in 2080.

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

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			
High			
Best Estimate	0	0	£0

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

No benefits have been identified from these regulations. In order for the licence to be terminated, the licensee must pay a transfer fee, which is estimated to be equal to the cost of monitoring for the following 30 years that would have needed to be carried out by the licensee if the licence had not been terminated.

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

Key assumptions/sensitivities/risks

Discount rate (%)

3

The assumptions are that it would take a manager, an engineer, a lawyer and an accountant one week, working full time to produce the Transfer report required under Article 18.

There is no difference in expertise or efficiency between a business or government carrying the maintenance work on the storage site once the CO₂ stored is deemed to be in a stable state.

Direct impact on business (Equivalent Annual) (£m):			In scope of OIIO?	Measure classified as
Costs: 0.0	Benefits: 0.0	Net: 0.0		

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?	Great Britain				
From what date will the policy be implemented?	2011				
Which organisation(s) will enforce the policy?	DECC/Scottish Ministers				
What is the annual change in enforcement cost (£m)?	0				
Does enforcement comply with Hampton principles?	Yes				
Does implementation go beyond minimum EU requirements?	No				
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:		Benefits:		
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	Micro	< 20	Small	Medium	Large
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

Include the links to relevant legislation and publications, such as public impact assessments of earlier stages (e.g. Consultation, Final, Enactment) and those of the matching IN or OUTs measures.

No.	Legislation or publication
1	Informal unpublished Consultation Document to key stakeholders. Approach agreed by Better Regulation Executive.
2	EU Directive Geological Storage of Carbon Dioxide http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0114:0135:EN:PDF
3	
4	

+ Add another row

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



Microsoft Office
Excel Worksheet

Evidence Base (for summary sheets)

Problem under consideration

The Energy Act 2008 provides for a regulatory regime for carbon dioxide storage in the UK offshore area and the Government has now laid the licensing regulations that transpose into UK law the many of the requirements of Directive 2009/31/EC on the geological storage of carbon dioxide. Two provisions of the Directive are still to be addressed. These are Article 18 and Article 20. Article 18 sets out the requirements to be met before the Licensee can be released from the Licence and the state takes responsibility for the site. Article 20 requires a financial contribution for the monitoring obligations for a period of 30 years to be provided to DECC before the transfer takes place.

Rationale for intervention

Required by EU Directive and to complete the licensing regime for offshore storage of CO₂.

Policy objective

The proposed Regulation transposes the requirements of Article 18 and 20 of the Directive and provides a power for the Secretary of State to terminate licences issued under section 18 of the Energy Act 2008.

This completes the licensing regime needed to ensure the safe and economic storage offshore of carbon dioxide. This will help deliver the UK's climate change commitments.

Description of options considered (including do nothing)

Option 1: do nothing

Failure to transpose Article 18 and Article 20 of Directive 2009/31/EC into UK law would open the UK to infraction proceedings for not implementing the EU Directive on geological storage of carbon dioxide. Thus, Option 1 is not discussed any further in this Impact Assessment.

Option 2: preferred option

Transpose Article 18 and Article 20 of Directive 2009/31/EC into UK law

Option 2

Costs

Article 18 requires the owner of the Licensee to prepare a Transfer Report before they can be released from the licence. The information that needs to be contained in the report will be known to the business from their activities undertaken in order to meet the requirements of the licence, therefore the only burden on business will be the preparation of the report.

This cost can be estimated from the cost of a manager, an engineer, a lawyer and an accountant working full time, for one week to prepare the report, which contains information that the Licensee would be expected to have in their possession. The cost is estimated to be approximately £3,500 (calculated using Annual Survey of Hours and Earnings, 2009). The termination of the licence will only occur once injection of CO₂ has ceased and enough time has elapsed so the CO₂ is deemed stable in the storage site, referred to as the post closure phase. Given that the first CCS demonstration plant is planned to start operation in 2014, and the post closure phase is indicatively given as 20 years in the EU Directive, it is possible that the first termination may not occur until 2050, if the injection of CO₂ into the storage site were to cease a few years after funding for the first demonstration project came to an end. The present value of this cost would be approximately £1,050 (base year 2009).

If demonstration projects 2-4 were to be on newly built power plants (either coal or gas), with an assumed operating life of 40 years, and each had its own storage sites, the licences may be terminated around 2080. The collective cost to business for the three transfer reports is estimated to be approximately £10,500. The present value of this cost is approximately £1,300 (base year 2009).

It is not possible at this point to estimate when other storage site licences will be terminated or the number of them. This will all depend on when CCS is deployed commercially, at what rate the CCS industry will develop and whether CCS power plants will share storage sites.

A financial contribution for the monitoring obligations for a 30 year period following the termination of the licence needs to be provided by the Licensee under Article 20. If it is assumed that the payment is correctly estimated to cover the costs of monitoring and minor maintenance (because the licence will only be terminated when it is believed that the site has reached a stage where only monitoring and minor maintenance is required), which the business would have had to carry out under obligations of the licence anyway, there is no additional cost or benefit. This also assumes that there is no difference in expertise or efficiency between a business or government carrying the maintenance work.

Benefits

The benefits for the main affected groups (i.e. the licence holders) of the mechanism for the termination of a Licence is that (except in some special circumstances) it brings a conclusion to the licensees' responsibility for the site as the state takes over responsibility for key liabilities and obligations. If the licence were not terminated, the licensee would have to carry out these monitoring obligations indefinitely.

However, the operator of the storage site must provide a financial contribution to the competent authority before the transfer takes place, to be used to meet the authority's ongoing costs, such as costs in respect of monitoring obligations of the site for a 30 year period. Termination of the licence will enable the operator to commute this open-ended liability to a single payment.

The only way this arrangement would have a benefit to a business, in the form of a cost saving, is if the sum paid to the government was less than the cost that built up over the following 30 years, perhaps work on the storage site unexpectedly becomes more than minor maintenance. It is not possible at this stage to say whether this is likely or not, and if it did happen, the level of the cost saving to the Licensee.

Risks and assumptions

The risk is that the costs to government of monitoring and minor maintenance for 30 years following the termination of the licence will exceed the financial contribution paid by the Licensee. It is not possible at this stage to say whether this is likely or not, and if it did happen, the level of the cost saving to the Licensee.

The assumptions are that it would take a manager and an engineer one week, working full time to produce the Transfer report required under Article 18.

There is no difference in expertise or efficiency between a business or government carrying the maintenance work on the storage site once the CO₂ stored is deemed to be in a stable state.

Summary and preferred option with description of implementation plan

Option 2, which entails transposing Article 18 and Article 20 of Directive 2009/31/EC into UK law is the preferred option. This policy option carries small costs to business.

Option 1, the do nothing option would open the UK to infraction proceedings for not implementing the EU Directive on geological storage of carbon dioxide.

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. *If the policy is subject to a sunset clause, the review should be carried out sufficiently early that any renewal or amendment to legislation can be enacted before the expiry date.* 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), i.e. a sunset clause or a duty to review, or there could be a political commitment to review (PIR)];

Review will be undertaken in association with the review clause of the Regulation, this will be five years from the coming into effect of the Regulation.

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?]

This review will be undertaken in light of a wider review in 2015 by the EU Commission of the effectiveness of the CCS Directive and the need to implement any recommendations.

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]

The review will include examination of the recommendations of the Commission's review and scan of stakeholder views. This approach is to be taken as little data on the effectiveness of the Regulation will have been collected by 2016 as no Storage licence that will have entered into its operation phase would have been terminated under the Regulations provisions that early.

Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured]

None as carbon dioxide storage is a new technology with new untested legislation at this time.

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]

If Commission review makes recommendations on the implementation of Articles 18 and 20 of the Directive, and or stakeholder input requests sensible change, then the Regulation will be amended or redrafted.

Monitoring information arrangements: [Provide further details of the planned/existing arrangements in place that will allow a systematic collection of monitoring information for future policy review]

Licences issued, and terminated, are to be maintained on a public register as required by Regulation 9 of The Storage of Carbon Dioxide (Licensing etc) Regulation 2010. Additionally the licensing Section of DECC will maintain registered file of each licence and its history

Reasons for not planning a review: [If there is no plan to do a PIR please provide reasons here]

N/A

Add annexes here.