

<b>Title: Transposition of the EU ETS Directive: Review of the 2005 UK Greenhouse Gas Regulations.</b>  <b>IA No: DECC00xxx</b>  <b>Lead department or agency: Department for Energy and Climate Change</b>  <b>Other departments or agencies: Environment Agency</b>	<b>Impact Assessment (IA)</b>	
	<b>Date: tbc</b>	
	<b>Stage: Final</b>	
	<b>Source of intervention: EU</b>	
	<b>Type of measure: Secondary legislation</b>	
<b>Contact for enquiries: EU ETS Team, DECC (eu.ets@decc.gsi.gov.uk)</b>		
<b>Summary: Intervention and Options</b>		<b>RPC: N/A</b>

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB in 2009 prices)	In scope of One-In, One-Out?	Measure qualifies as
Option ii) £0 Option 4) £88,000	£1.0m £0	-£0.1m £0	No	N/A

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

The EU ETS is one of the cornerstones of the UK framework to reduce greenhouse gas emissions and thus help prevent dangerous climate change. The framework for the EU ETS is established in the EU ETS Directive (2003). The Directive was amended in 2009 to make provision for the third phase of the EU ETS starting in 2013. The revised Directive needs to be transposed into national legislation by 31 December 2012 to give full legal effect to the ETS within the UK for phase III. Not transposing the Directive would put the UK in breach of EU law and would also cause significant uncertainty for businesses who have already invested in preparation for the next phase of the ETS. This impact assessment underpins the development of UK legislation in the form of a statutory instrument that will come into effect in January 2013.

**What are the policy objectives and the intended effects?**

The proposed statutory instrument (SI) will sit alongside a number of pieces of EU tertiary legislation to provide the legal framework for the EU ETS in the UK. In particular, the SI establishes powers needed for the regulators to implement the system, for example, covering operator's permit conditions and the permit application process, information requirements including how and when operators need to submit to the regulator, and the duties of the regulator. The SI also establishes the powers to impose penalties for non-compliance and the rights for operators to appeal against decisions of the regulator. The objectives are to have in place the necessary legal framework for the effective operation of the EU ETS in the UK, delivering high levels of compliance and overall environmental benefits, while ensuring that the administrative burdens on business of the system are minimised. In respect of penalties, this means a system which is dissuasive, proportional and operated at low cost. Our objectives for the appeals system are that it is relatively low cost both to government and operators, efficient and proportionate to the nature of what is being appealed, and is considered independent, transparent and accessible to operators.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

For the penalty system, Government considered (i) retaining the current system, and (ii) moving to a system of civil sanctions only. Option (ii) is preferred as it is estimated to have lower administrative costs and it also provides the regulator with the discretion to ensure the penalties applied are more proportionate to the offences committed. Furthermore, moving away from criminal sanctions is in alignment with the recommendations of the Macrory report, which Government has fully accepted.

For the appeals system, Government considered (1) retaining the current system, (2) retaining the current system but with a presumption of written appeals, (3) an approach where appeals are heard by the Planning Inspectorate (PIN), and (4) an approach where appeals are heard by the First Tier Tribunal (FTT). Following a review of the options, the final preferred option is that appeals against decisions relating to the GHG regulations in Phase III are handled under the FTT (Option 4), as it aligns with the approach for appeals against government decisions under other environmental and climate policy regulations. Policy alignment will improve FTT capacity and consistency of judgements. The FTT is also more independent of government than the other options, likely to be more efficient in processing appeals, while having lower costs compared to the alternative options.

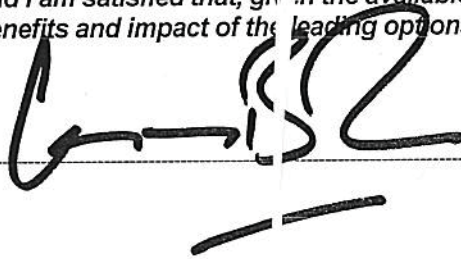
In terms of other general regulatory requirements, Government has undertaken a limited qualitative assessment of a number of relatively minor regulatory changes which aim to simplify the way the regulations are drafted and the procedures for implementing the ETS in the UK. These are likely to offer benefits in the form of small administrative savings for operators and regulators. Responses received as part of the consultation confirmed these benefits.

**Will the policy be reviewed?** It will be reviewed 5 years following date of entry into force (01/2013), consistent with government regulatory guidelines. **If applicable, set review date:** 01 / 2018

Does implementation go beyond minimum EU requirements? The ETS Directive gives member states the discretion to establish penalties and appeals systems. Whilst there are some instances where general UK regulatory provisions go beyond copy out of the Directive text, this is simply to give effect to Directive requirements.			No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro No	< 20 Yes	Small Yes	Medium Yes	Large Yes
What is the CO2 equivalent change in greenhouse gas emissions? (Million tonnes CO2 equivalent)			Traded: -	Non-traded: -	

*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 Minister:



Date:

29.XI.12

## Summary: Analysis & Evidence

## Policy Option – Penalties (ii)

Description: Penalties Option ii: Move to a civil only system.

All costs and benefits presented are relative to Option (i) (status quo).

### FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2012	Time Period Years 9	Net Benefit (Present Value (PV)) (£)		
			Low:	High: £35,000	Best Estimate: £0

COSTS (£)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0		
High	0	-£5,090	-£35,000
Best Estimate	0	0	0

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

Businesses face a reduction in penalties of c. £1.02m (PV) as a result of a more proportionate enforcement system.

Under the high scenario there is also a saving of £5,090 per annum through a reduction in the costs of a custodial sentence under a criminal enforcement regime. This saving is not in the central scenario as it is assumed that compliance rates will continue at current high levels and therefore that even with the retention of criminal offences, operators will not face criminal convictions.

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

There may be some minor cost reductions associated with lower legal costs to operators of defending themselves in civil rather than criminal courts. There may also be a reduction in the costs to government of enforcement through the civil rather than criminal courts, in the event that non-compliance resulted in court procedures.

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

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

There is a £1.02m (PV) reduction in the revenues to government as a result of lower penalties with a more proportionate enforcement system. This is a transfer from government to business and thus does not affect the overall NPV.

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

Businesses will benefit from a more proportionate enforcement system. This is partly a result of a move away from a criminal system (where a criminal record is considered disproportionate to many of the offences) and partly because under the civil system, the application of enhanced regulator discretion will allow regulators to take a more proportionate approach to applying penalties. Improving proportionality is likely to provide an incentive for operators to identify mistakes and make them known to the regulator, thereby reducing instances of underreporting in the future.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5
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The central estimate assumes full compliance with the EU ETS.

The high scenario assumes 1 case per year will result in a criminal penalty being issued. In a change from the consultation IA, the costs and benefits estimates do not include transfers between business and Government. Given that these cancel each other out, there is no change to the NPV as a result.

### BUSINESS ASSESSMENT (Option ii)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: -£0.1m	Benefits: -	Net: £0.1m (benefit)	No	N/A

## Summary: Analysis & Evidence

## Policy Option - Appeals (4)

Description: Appeals Option 4: Move to an appeals system using the First Tier Tribunal.

All costs and benefits presented are relative to Option 1 (the status quo).

### FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2012	Time Period Years 9	Net Benefit (Present Value (PV)) (£)		
			Low: £2,000	High: £209,000	Best Estimate: £88, 000

COSTS (£)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£2,500	-£1,000	-£2, 000
High	£2,500	-£31, 000	-£209, 000
Best Estimate	£2,500	-£13, 000	-£88, 000

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

The central scenario delivers a reduction in the financial cost (of £88, 000 PV) to Government by having a greater proportion of written rather than oral appeals given the lower legal fees these incur. Where oral appeals do occur, these will be heard locally by the First Tier Tribunal (FTT) rather than the Secretary of State thus resulting in lower travel costs.

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

There may be some cost associated with reduced accessibility of the system, where operators feel less willing to appeal because of the risk of having award of costs against them or where a written appeals process is chosen by the tribunal but the operator feels less comfortable with such an appeals process. There may also be a reduction in the cost to operators of the appeals process as a result of more written than oral appeals. There is not sufficient information to estimate this saving and consultation responses did not provide any evidence to estimate this.

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

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

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

The main benefit is that the ETS appeals system will be better aligned with appeals against decisions under other environmental and climate regulations, improving the capacity and judgement of the FTT, and increasing operators' understanding of the process (helping to avoid unnecessary appeals). It is also considered more independent and transparent. The system is also likely to be more efficient in terms of the time taken to deal with appeals.

Key assumptions/sensitivities/risks Discount rate (%) 3.5

The main cost savings are a result of a reduction in the proportion of oral appeals thus incurring lower legal fees. If there was no reduction in the proportion of oral appeals as a result of this policy, then the costs to government would only marginally fall (by c.£2,500 PV).

The central scenario assumes 2.1 appeals per year. If (as under the high scenario) there were 5 appeals per year, the cost savings would increase in proportion (to £209,000).

### BUSINESS ASSESSMENT (Option 4)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 0	Benefits: 0	Net: 0	No	N/A

## **Contents**

A - Background .....	5
B - Options considered .....	8
C - Costs and benefits analysis: the penalties regime for the UK .....	10
D - Costs and benefits analysis: the appeals process for England .....	18
E - Conclusions.....	25
Annex A - Qualitative assessment of the benefits of changes to the regulations (drafting or procedural) that are outside the scope of this IA.....	26
Annex B – Summary of EU ETS civil penalties in phase III .....	28
Annex C – Table 9. Summary of options against criteria .....	31
Annex D – Profile of savings delivered by preferred option. ....	31

## **A - Background**

### **The EU ETS**

1. The Emissions Trading System ETS was launched in 2005 as one of the key policies introduced by the EU to help meet its greenhouse gas (GHG) emissions reduction target of 8% below 1990 levels under the Kyoto Protocol. It works on a “cap and trade” basis, where there is a cap on all the emissions in the installations covered by the EU ETS, and installations within the scheme have tradable allowances to cover their GHG emissions.
2. The framework for the ETS is established in the ETS Directive (2003) and the ETS is now in its second phase running between 2008-2012. In December 2008, the 2020 Climate and Energy package was agreed by the European Council and the European Parliament which included revisions to the ETS Directive to make provision for a third phase starting in 2013. Phase III (2013-2020) of the EU ETS will see the introduction of a centralised, EU-wide cap on emissions, which will decline over time, delivering an overall reduction of 21% below 2005 verified emissions by 2020. The revised ETS Directive also introduces a number of new rules to ensure a more environmentally ambitious and consistent approach to implementing the EU ETS across the EU. This includes the introduction of new sectors and gases, and harmonised rules on free allocation with a move towards greater auctioning of allowances.
3. The legal powers for regulating the EU ETS in the UK are currently set out in the Greenhouse Gas Emissions Trading Scheme Regulations 2005<sup>1</sup>, which provides implementation measures to enable the UK Government to meet the requirements of the ETS Directive 2003.

### **Transposition**

4. Transposition is the process by which the EU’s Member States give force to a Directive by passing appropriate implementation measures, typically by either primary or secondary legislation. This delegated legislation is law made by an executive authority under powers given to them by primary

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<sup>1</sup>[http://www.decc.gov.uk/assets/decc/what%20we%20do/global%20climate%20change%20and%20energy/tackling%20climate%20change/emissions%20trading/eu\\_ets/legislation/1\\_20091023140706\\_e\\_@@\\_greenhousegasetsregs2005.pdf](http://www.decc.gov.uk/assets/decc/what%20we%20do/global%20climate%20change%20and%20energy/tackling%20climate%20change/emissions%20trading/eu_ets/legislation/1_20091023140706_e_@@_greenhousegasetsregs2005.pdf)

legislation in order to implement and administer the requirements of that primary legislation. Most delegated or secondary legislation in the UK is made in the form of a Statutory Instrument (SI).

5. This Final Impact Assessment (IA) follows the completion of a consultation from May to July 2012 on proposed changes to the 2005 Greenhouse Gas Emissions Trading Scheme Regulations (GHG Regulations), needed to fully implement the revised ETS Directive. These proposals represent the outcome of a review of the GHG Regulations that was undertaken by Government to inform preparation of the legislative framework for implementation in the UK of Phase III of the ETS Directive from 2013.
6. This process was undertaken to ensure that UK legislation accommodates the new provisions for Phase III that are set out in the amended 2009 ETS Directive<sup>2</sup>. Hence the scope of the review encompassed EU decisions on allocation rules and the introduction of aviation, as well as EU regulations relating to registries and monitoring, reporting and verification. As such, the UK is now preparing and will lay before Parliament ahead of 2013, a revised SI that will replace the 2005 GHG Regulations and subsequent amendments.

### **Scope of the review of the 2005 GHG regulations**

7. Consistent with the Government's better regulation agenda and in the context of public scrutiny of UK regulations as part of the environment chapter of the 'Red Tape Challenge', a key objective of the Government review of the 2005 GHG Regulations was to identify opportunities for simplifying the existing regulation and reducing the regulatory burdens of the ETS on UK industry. The review sought to ensure that the revised SI contains the measures necessary to facilitate the effective implementation in the UK of Phase III of the EU ETS, but in particular, that those measures are targeted, proportionate and effective. In undertaking the review DECC sought the informal views of other Government Departments, the Devolved Administrations, UK regulators and industry.
8. As many of the key policy decisions relating to the design and functioning of the EU ETS in Phase III have been taken in Europe, the scope of the review was limited to only those areas where the ETS Directive gives interpretive discretion to Member States, or where in order to make ETS Directive requirements implementable, UK regulations have elaborated on the relevant provisions contained within them. The review considers the options for improving the way Government regulates the EU ETS in the UK in three areas:
  - i. The penalties regime for the UK – The ETS Directive requires Member States to put in place a system of penalties for non-compliance with the provisions of the Directive, which is effective, proportionate and dissuasive. The form of the penalties and level of penalties are left to Member State discretion, with the exception of the civil penalties for failure to surrender sufficient allowances and under reporting of emissions<sup>3</sup>. Current UK penalties, for Phases I and II of the EU ETS, are set out in Part 7 of the GHG Regulations.
  - ii. The appeals process for England only - The ETS Directive does not set out specific requirements relating to appeals, but is instead based on the right to a fair hearing which is a general principle of EU law set out at Article 6 of the European Convention on Human Rights (ECHR). Member States must provide the right of appeal against decisions of a competent authority, but appeal procedures are at their discretion, subject to the requirements of the ECHR.  
  
For decisions relating to the EU ETS in England, the appeals procedure is set out in the GHG Regulations Part 5, Schedule 2 and Schedule 4. This establishes that an operator may appeal to

<sup>2</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2003L0087:20090625:EN:PDF>

<sup>3</sup> Under the EU ETS Directive, operators are required to surrender sufficient allowances to cover their verified emissions from the previous year, by 30 April each year. Any operator who fails to comply with this requirement is liable to a civil penalty which is specified in the Directive at €100/tCO<sub>2</sub> not surrendered. This will be imposed by the regulator upon infraction.

the Secretary of State (SoS) as the appropriate authority in England or, where an appeal relates to an offshore installation, to the regulator.

- iii. General regulatory measures providing powers for regulation of the system – The GHG Regulations establish a number of provisions governing the operations of the regulator, and in some cases their powers to act. These are largely technical in nature, for example establishing the process by which or the format in which the regulator can obtain the information needed to enforce the system. In some cases these elaborate further the original provisions of the ETS Directive. This is often necessary because the provisions in the ETS Directive do not contain the level of detail required for implementation. The review analysed all of these instances to ensure that such elaboration was indeed necessary. This process was intended to make the Regulations more accessible to incumbent operators by moving non-essential elements to either a schedule or guidance, deleting them completely or where possible, simplifying the approach.

### **Scope of the impact assessment**

9. This impact assessment focuses on options for policy changes to the current ETS penalties and appeals system. In addition, Government has undertaken a limited assessment of the potential benefits associated with possible ways in which general regulatory measures (as under 8 (iii)) could be simplified. For example, Government is proposing to speed up the application process by requesting applications from operators electronically on a form provided by the regulator and by establishing that the regulator will respond within two months. This is significantly quicker than the 13 week benchmark proposed by Cabinet Office for permitting regimes. Using an electronic form will reduce the risk of the operator failing to provide necessary information, and therefore holding up the process of them being issued with a permit (which could delay them starting operations). Government also wants to align the timings for when operators are required to submit information to the regulators and how long they have to do so.
10. These changes aim to make the Regulations more accessible and largely involve changes to the way the Regulations are drafted, or relate to points of process. They should help to improve the clarity and predictability of the system, which will confer benefits on to operators in the form of small administrative savings or reductions in the amount of time it might take operators to understand the regulatory requirements. In assessing the benefits of such changes, Government has undertaken a proportionate approach at this stage, providing a qualitative description at Annex A. These changes were supported in responses to the consultation.
11. The scope of the analysis relating to penalties (section C) applies to the UK. However, for appeals (section D), each of the Devolved Administrations has their own appeals process and are not covered by this IA. In Wales the system is similar to that of England, in that Welsh Ministers may either refer any matter or question involved in an appeal to an appointed person, and then the Welsh Ministers take a final decision, or alternatively they may appoint a person to determine the appeal (or any matter or question involved in the appeal). Scotland uses their own version of the Planning Inspectorate: the Directorate for Planning and Environmental Appeals (DPEA) is an internal unit which uses salaried or self-employed reporters to hear appeals on behalf of Ministers. In Northern Ireland appeals are heard and determined by the Planning Appeals Commission (PAC). *The fact that the scope of the analysis on appeals in this IA covers England only does not preclude Devolved Administrations from changing their appeals systems in light of the findings of this IA, or on other grounds.*
12. The methodology of this IA remains the same as in the Consultation IA and figures differ only in the sense they have been inflated to real 2012 prices. Consistent with our policy objectives for the review, the options considered and the choice of preferred option has been determined on the basis of a range of criteria to ensure that updated regulations are simple, proportionate and effective.

## **B - Options considered**

### **The Penalties regime in the UK (see section C)**

13. Two options for the way in which Government might enforce implementation of the ETS from 2013 in the UK were considered. In practice, within the review, Government has analysed all of the existing offences/sanctions to determine what action is most effective in each situation. The review suggested that for effective enforcement of the system Government should continue to recognise all of the offences currently recognised in the sanctions regime.

#### **Option i: Business as usual. Retain the current system**

The current system includes a mixture of both criminal sanctions alongside the two civil penalties (failure to surrender allowances and under-reporting) that are set out in the ETS Directive.

#### **Options ii. Move to a system of civil sanctions only**

In this option criminal sanctions would be replaced with civil ones. Existing civil penalties (as set out in the ETS Directive) would be retained. Penalties will include a fixed maximum level, with regulator discretion as to the level of the penalty they may impose up to that maximum, and, where applicable, an accumulating daily rate.

### **The appeals process in England (see section D)**

14. Three options for the appeals system looking beyond 2013 were considered.

#### **Option 1: Business as usual. Retain the current system**

There are currently two options for conducting appeals in England:

- a) The Secretary of State (SoS) for Energy and Climate Change may appoint a person to hear the appeal and take the decision on his behalf or
- b) The SoS may appoint a person to hear the appeal on his behalf, but still make the final decision himself following receipt of a report from the appointed person.

15. The process of hearing appeals is set out in Schedule 2 of the GHG Regulations, which includes the timeframes for responses under an appeal. An appellant should make clear their preference for an oral or written hearing, meaning that a written hearing will only take place if both parties consent to it. There is no clear process for determining whether appeals are conducted via written or oral procedure. Generally, it is assumed that the more complex the case and the greater the implications of the appeal determination, the more likely an oral hearing is.

#### **Option 2: Option 1 with the presumption of a written appeal procedure**

16. The current system involves the appellant making clear their preference for an oral or written hearing, meaning that a written hearing will only take place if both parties consent to it. Option 2, would be identical to Option 1 with the exception that there would be a presumption of a written hearing unless all Parties agree that there is justification for an oral hearing, for example because of the complexity of the case. All other aspects of the appeals system would remain the same.



### Option 3: Appeals are heard by the Planning Inspectorate

17. All appeals would be heard by the Planning Inspectorate (PIN) for England, which is an executive agency of the Department for Communities and Local Government<sup>4</sup>. Nearly all appeals would be decided by inspectors acting on behalf of the SoS for Energy and Climate Change. In a limited number of cases, the inspector will write a report for the SoS to take a decision but this is only in very contentious cases.
18. The majority of all enforcement appeals are decided by written representations otherwise they are heard orally. Appellants and local planning authorities are invited to identify which appeal procedure they consider to be the most appropriate for each appeal, by reference to published criteria. Costs may be awarded if either side has behaved unreasonably and caused unnecessary or wasted expense.

### Option 4: Appeals are heard by the First Tier Tribunal

19. All appeals would be heard by the First Tier Tribunal (FTT)<sup>5</sup> which is part of Her Majesty's Courts Service covering a range of environmental regulations and has its own procedures. The FTT system is already being used as the appeal body for a range of environmental sanctions under the Regulatory Enforcement and Sanctions (RES) Act and is being considered as an option for the CRC Energy Efficiency Scheme; it is also being increasingly used by Defra<sup>6</sup>. Appeals are heard by trained experts in the field. Parties may request either a written or oral appeal but the Tribunal must hold an oral hearing unless each party consents to a written procedure.
20. As with the PIN, the Tribunal may make a costs order if a party has acted unreasonably in bringing, defending or conducting proceedings. This includes any costs incurred by a party as a result of any improper, unreasonable or negligent act or omission. Hence there is a risk of costs to the regulator but this is likely to be minimal.

### **Summary of Consultation responses**

A public consultation was undertaken which sought views from across the UK and wider (as aircraft operators outside the EU are subject to the EU ETS) on all aspects of the draft regulations. The consultation closed on 31 July 2012 and 23 responses were received from a variety of organisations, including a mixture of stationary and aircraft operators, consultants, industry associations, large power companies and Government bodies.

There was overwhelming support for the proposal to consolidate existing legislation into one single statutory instrument and to align the provisions for aircraft operators with those for stationary installations. There was also complete agreement to the proposal to move to a regime consisting only of civil penalties, and move to an appeals system in England and Wales where the First-Tier Tribunal is the appeal body (the appeal bodies in Scotland and Northern Ireland will remain unchanged from existing arrangements). The suggestion was made that the "nuanced" approach proposed with regard to the penalty for under-reporting emissions be extended so that the regulator took a similar approach for most other offences. With regard to the appeals system, comments received confirmed the analysis that the costs to operators for the different appeals processes considered are marginal. Respondents did confirm that the benefits they felt would be gained in using the First-tier Tribunal lay in the efficiency (and therefore more rapid response times) and flexibility of the system.

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<sup>4</sup> In Wales, the Planning Inspectorate (PIN) is an executive agency in the Welsh Government.

<sup>5</sup> Further details of the First Tier Tribunal procedure can be found at <http://www.justice.gov.uk/guidance/courts-and-tribunals/tribunals/environment/index.htm>

<sup>6</sup> For example, for regulations on Ecodesign for Energy-Using Products, Flood and Coastal Erosion Risk Management and Waste.

Minor issues raised by respondents in how particular elements of the Directive have been interpreted, and specific drafting issues have been addressed through the Government summary of consultation responses. This has been published on the DECC website<sup>7</sup> [need to insert the link when it's on the website].

Overall, consultation responses confirmed support and agreement from a variety of organisations on the approaches proposed. As a result, Government's preferred options remain as set out in the Consultation i.e. Move to a system of civil sanctions only (Option ii) and Appeals heard by the First Tier Tribunal (FTT) (Option 4).

### **C - Costs and benefits analysis: the penalties regime for the UK**

21. Environmental law requires effective enforcement if it is to protect the environment. As such, it needs to deter agents from carrying out illegal activity. Some corporations may have a disincentive to comply with environmental laws or regulations as compliance generally raises their operational costs. Most theories that look at the effectiveness of penalty systems, are based on compliance with environmental law being a function of the expected penalty which, in turn, depends on the probability of punishment and the severity of the punishment if caught. The 2005 UK Select Committee on Environmental Audit<sup>8</sup> highlights the importance of the threat of detection as a deterrent.
22. The importance of the severity of the penalty becomes even more apparent when applied to a corporate body if, as suggested by economic theory, businesses are likely to view the payment of penalties as a cheaper option in comparison to full environmental compliance, and might even set aside funds for this purpose. In order to avoid this practice, the penalty must be sufficiently dissuasive.
23. Whilst the intention is to design a system that provides a sufficient deterrent against non-compliant activity, this must be balanced with ensuring that the stringency of the penalty is proportionate to the offence. It is important to ensure that operators are not unfairly penalised where non-intentional errors occur and to encourage operators that are unintentionally out of compliance to approach the regulator.

#### **Policy objectives**

24. This section examines the costs and benefits of Options i and ii for the UK ETS penalties regime post 2013 in terms of a number of policy objectives that aim to balance the need for dissuasiveness with proportionality:
  - to encourage operators who are non-compliant to become compliant as soon as possible
  - to provide sufficient incentive to dissuade operators from being non-compliant
  - for penalties to be proportionate to the offences committed, for example to accommodate the range of circumstances set out in paragraph 45 below.
  - for the administrative cost of enforcement to be low
  - to ensure fairness and equitability for operators that are compliant

The business as usual scenario (Option i) under which Government retains the current penalties system is considered first. Option ii is then considered relative to Option i.

<sup>7</sup> Insert link when published DECC website

<sup>8</sup> <http://www.publications.parliament.uk/pa/cm200405/cmselect/cmenvaud/136/13606.htm>

**Option (i): Business as usual. Retain the current system including both criminal and civil sanctions**

25. To provide a sufficient deterrent against non-compliance with the EU ETS, in the UK regulators enforce a system of both criminal and civil penalties. This deterrent is enhanced by a programme of monitoring which reduces the chances of operators evading the system. Non-compliance could mean installations contravening legislation through operating without a permit, not purchasing allowances which equal verified emissions (or even selling the ones allocated for free) and not surrendering the required volume of allowances to equal their verified emissions.
26. Aside from the civil penalty for non-surrendering of allowances or under-reporting of emissions, the UK applies criminal penalties for the following offences:
- operating a Schedule I activity without a permit
  - failure to comply with the permit (except where this is because of under reporting or failure to surrender allowances which incur a civil penalty)
  - failure to comply with an enforcement notice
  - failure to provide further information to enable the regulator to process a permit application or to discharge its functions
  - supplying false or misleading information for the processing of a permit application, an application for free allowances or to retain allowances or in response to a request by the regulator for information to enable it to discharge its functions under the GHG Regulations 2005
  - failure to comply with the Registries Regulation – provision of information, notifying changes to that information.
27. The criminal penalties set out in the UK legislation are as follows:
- on summary conviction, a fine not exceeding the statutory maximum or imprisonment not exceeding 3 months.
  - on conviction on indictment, a fine or imprisonment not exceeding two years.
28. Criminal penalties impose costs for non-compliance (in the form of a maximum fine of £5,000 on summary conviction; and at the discretion of the Crown Court on conviction on indictment (therefore unlimited) and/or imprisonment) and other costs such as legal and administrative costs to the firm infracting. Non-compliance costs under the ETS framework could go as far as imprisonment for up to 2 years. The court has full discretion<sup>9</sup> in reaching its decision.
29. In terms of the probability of detection, in England and Wales, the Environment Agency monitors a proportion of installations both directly (i.e. conducting site visits) and through desk based reviews of annual emissions reports (i.e. where the report relates to a large installation or where the verifier has commented). This is based on a risk-based approach. The sample they review is based on size of emissions, complexity and compliance history which means they undertake relatively more auditing on bigger polluters than on installations with low emissions. Bigger or more complex installations might be more inclined to evade the system because of the higher costs of compliance (admin and compliance costs). In addition, all data submitted by operators is subject to third party verification to ensure accuracy and that good monitoring standards are employed. In Scotland, SEPA also undertakes site visits and all annual emissions reports undergo a desk based review.

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<sup>9</sup> Insofar as the offence is not covered by the sentencing guidelines.

30. Regulators have their own policy on enforcement. For example, the Environment Agency in England and Wales has an approach to enforcement driven by the objective of preventing and securing compliance in the context of outcome-focused regulation. This is set out in their Enforcement and Prosecution Policy (EPP) and enforcement and sanctions guidance. The latter states that when considering the appropriate course of action to address offending and to ensure compliance, regulators should aim to follow the penalty principles set out in the Macrory Report<sup>10</sup> and included in the Regulators' Compliance Code:

- aim to change the behaviour of the offender;
- aim to eliminate any financial gain or benefit from non-compliance;
- be responsive and consider what is appropriate for the particular offender and regulatory issue, which can include punishment and the public stigma that should be associated with a criminal conviction;
- be proportionate to the nature of the offence and the harm caused;
- aim to restore the harm caused by regulatory non-compliance, where appropriate; and aim to deter future non-compliance.

31. As such they generally seek to employ discretion in enforcement, providing advice and guidance to assist an operator or individual to come back into compliance before considering sanctions. This advice will normally be provided after an offence is committed or where the Agency considers that an offence is likely to be committed. This compliance assistance may be either verbal or written, but will be recorded. In the event of continued or further non-compliance(s) this may influence the subsequent choice of response. Other factors such as intent, environmental impact, foreseeability and whether it is a repeat offence will also taken into account.

### Dissuading non-compliance/encouraging quick compliance

32. Formal compliance rates in the UK are high, with only 12 operators having been found underreporting emissions in their verified reports (across Phases I and II). No criminal prosecutions have been undertaken so far in the UK either. The extent of sanctions based enforcement in England and Wales has been the substantive concern of 67 warning letters, 26 enforcement notices and 1 formal caution (the preliminary stages in the criminal penalty process) issued by the Environment Agency in 2010-2011 (see Table 1). In addition, 12 civil penalties have been issued. The actions set out in Table 1 appear so far, to have been sufficient to prevent further non-compliance by operators. In other words, the threat of action has been sufficiently effective in encouraging compliance.

Table 1. The distribution of penalties over the last two years

	Warning letters	Enforcement Notices	Formal Caution
2010	22	17	1
2011	43	9	-

33. However, while formal compliance rates are high, this is not the same as saying there has been 100% compliance. It is possible that there have been instances of non-compliance that have perhaps not been identified by either the verifier or through regulator auditing. This proportion is

<sup>10</sup> Regulatory Justice : Making Sanctions Effective (Final Report) November 2006  
<http://www.bis.gov.uk/files/file44593.pdf>

likely to be very small, as is the extent of their impact on the system. For example, it is likely that any undetected errors are minor ones, such as small volumes of unreported emissions. The provision of templates and issuance of clear guidance (cited as best practice<sup>11</sup>) means the chances of under reporting from human error are low and likely to decline over time as the appropriate individuals become more familiar with best practice on monitoring, reporting and verification.

34. There are also reputational costs of non-compliance and installations might be risk averse, which would strengthen the incentive for compliance even under a low penalty framework. For all of these reasons, we are assuming that UK EU ETS installations are highly compliant. This is further supported by independent assessment<sup>12</sup>.

### **Proportionality of the penalties**

35. The use of criminal sanctions needs to be carefully considered. According to HMG guidance<sup>13</sup> there is a need to consider carefully which type of behaviour warrants the intervention of criminal law at all, and what alternatives there may be to criminal offences. According to Professor Macrory, whose recommendations were accepted in full by Government, criminal law is used too readily in regulatory situations. He envisaged that criminal prosecution should be reserved for the breaches of legislation which have serious consequences and that where existing criminal offences exist, consideration should be given as to how often these offences are used.
36. A key consideration when assessing whether to retain the current penalties regime is therefore whether it balances dissuasiveness with proportionality. The threat of imprisonment for example, may well have played a part in ensuring the current high rates of compliance, but it is likely that the Environment Agency's reputation for enforcement and therefore the risk of discovery will have also played a significant role. It can also be argued that criminal sanctions are not necessarily needed when the environmental impact can be rectified by requiring the operator to purchase additional emissions allowances, which in itself would represent a significant cost to an operator and hence be dissuasive.
37. Separately, there is scope to improve the proportionality of the penalty applied for under reporting where operators identify and correct genuine errors in verified emission reports. The €100/tCO<sub>2</sub> penalty for under reporting is set out in the Directive and cannot be amended by Government. Arguably, application of this penalty is excessive in certain instances where an operator discovers a genuine error in their verified report or where the error identified is the result of factors outside the control of the operator. Adjusting the parameters for applying this penalty so that operators are not over penalised where genuine mistakes occur would offer a more proportionate approach. Enhancing regulator discretion in this manner would remove the disincentive for operators to report errors to the regulator under the current regime (where the €100/tCO<sub>2</sub> penalty must be applied in all cases) and to address them. It will be important to retain a penalty level to ensure an incentive is maintained for accurate reporting. This approach to enhanced regulator discretion was supported by the majority of consultation respondents.

### **Costs of enforcement**

38. The costs under the criminal regime are associated with legal and administrative costs to Government of enforcement through the criminal courts, and the costs to operators of defending themselves. The cost of pursuing a criminal conviction is estimated to be around £3,200 per case<sup>14</sup>.

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<sup>11</sup> Ecofys September 2010: Support to the Commission for the review of permits, monitoring plans and verification reports in the EU ETS at the level of Member States for the 2008-2009 compliance cycle.

<sup>12</sup> <http://www.nber.org/chapters/c12140.pdf>

<sup>13</sup> <http://www.justice.gov.uk/guidance/docs/guidance-regulatory-penalties-offences-jan09.pdf>

<sup>14</sup> Estimates from the Ministry of Justice. Estimate assumes 50% of the cases are heard in the crown courts, while 50% are heard in Magistrate courts.

The costs associated with a civil regime involve the administrative costs to Government of enforcing civil penalties, including through the civil courts. However, these costs are not available. While they are expected to be lower than the cost of criminal courts, the lack of accurate estimates means they are not included in the monetised benefits. In addition to legal costs, enforcement through a criminal system could result in a custodial sentence; imposition of the maximum 2 year sentence is likely to cost the Government £40,000<sup>15</sup>.

### **Option ii: Move to a system of civil sanctions only**

39. Under Option ii the existing civil penalties (as set out in the Directive) would remain but criminal penalties would be replaced by civil sanctions. For illustrative purposes, the civil sanctions as set out in the Regulations are set out in Annex B. In general, the penalties shall comprise a maximum fixed penalty level, as well as the possibility for an increasing daily penalty. It is assumed that the civil penalties would provide a deterrent sufficient to avoid any reduction in current rates of compliance. As under Option i, regulator monitoring arrangements would continue in order to maintain the additional deterrent created by the threat of detection.
40. It is not expected that any change to a civil regime will increase the number of penalties imposed compared to the current criminal system. In establishing penalty levels we have endeavoured to ensure they provide a sufficient deterrent for non-compliance, by adjusting the level of the penalty to match the nature and severity of the action, whilst at the same time being proportionate. We therefore expect the civil penalty have the same deterrent effect as a criminal penalty. Furthermore, the regulator's approach to enforcement would continue to be in line with established enforcement policy and principles, and statutory guidance would set out the levels of penalties and the basis for applying them. Statutory guidance would be essential to ensure a consistent approach is taken among UK regulators.

### **Dissuading non-compliance/encouraging quick compliance**

41. Assuming no reduction in the level of discretion applied by the regulator or the deterrent effect imposed by a civil penalty regime compared to the current system, there should be no reduction in the level of compliance under Option ii compared to Option i. Giving more control to the regulator (as opposed to the courts) may enhance the capacity for the regulator to exercise discretion over the financial penalty applied to an offence that has already occurred.
42. Replacing criminal sanctions with an effective system of civil sanctions (Option ii) would have the benefit of achieving a consistent approach with ETS aviation and other emerging civil sanction schemes under the Regulatory Enforcement and Sanctions (RES) Act. It is in line with the Government's broader agenda on better regulation and challenging the use of criminal sanctions as set out in the Macrory report. Policy alignment on penalties will help operators to understand better the regulatory requirements on them, the implications of non-compliance, and the powers of the regulator which in turn should help reduce instances of non-compliance.

### *Use of a daily penalty*

43. Where it is necessary to apply a penalty, for example, where an operator continues to be non-compliant, regulators' experience on aviation indicates that the use of a daily penalty in addition to a fixed level penalty can provide a greater incentive for the operator to move quickly into compliance. With the introduction of a daily accumulating penalty it may be possible to reduce the scale of the fixed level penalty without reducing the level of dissuasiveness. This would mean the stringency of

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<sup>15</sup> Estimate from the Ministry Of Justice. Estimate assumes 1 year of the sentence is served in prison, and 1 year on probation.

the penalty would in effect start at a lower rate but ramp up over time, consistent with the severity of the non-compliance.

### **Proportionality of the penalties**

44. Whilst the intention is to design a civil system that provides a sufficient deterrent against non-compliant activity, there is a risk that the size of the penalty needed to deter deliberate non-compliance may be disproportionate to the offence in some instances. It may result in overly punitive penalties for those who are in non-compliance for reasons outside their control. It is possible to avoid this by preserving regulator discretion and designing a civil regime that incorporates flexibility in penalty levels to be matched to the severity of the offence.
45. Where appropriate, introducing fixed level penalties – up to a maximum level – together with enhanced regulator discretion in imposing the penalty would give the regulator the capacity to adjust the stringency of the penalty according to the specific circumstances of the case, such as the actions of the individual (e.g. whether the operator has voluntarily come forward) and the impacts of the non-compliant activity on the integrity of the scheme. This will allow the regulator to adjust the penalty to differentiate between, for example:
- cases where the operator has consciously or wilfully been non-compliant as opposed to unconsciously
  - cases where the operator's non-compliant actions have been detected by the regulator as opposed to cases where the operator has come forward
  - actions with very different material impact on the credibility of the system, such as those causing large or relatively significant sources of emissions to go unreported, compared to failure to submit an improvement report. This includes emissions that are not in themselves large but that are significant compared with other emissions from the site
  - cases where misreporting is out of the control of the operator, compared to instances where the operator wilfully provides misleading information or is negligent
46. If operators understand that they are less likely to be severely punished or may even avoid punishment for a genuine mistake or where steps were taken to avoid non-compliance, they are more likely to come forward, potentially improving compliance or avoiding non-compliance.
47. Transferring the responsibility (and the discretion) for determining the appropriate penalty from the courts to the regulator is likely to lead to more consistent decision making, but could also mean more room for operator challenge (but this may be reduced as decision-making becomes more consistent). To mitigate against these issues, the regulators would publish guidance on how they will exercise their discretion in applying the penalty.

### **Costs of enforcement**

#### *Assumptions*

48. For the purpose of this analysis, we have made the following assumptions:
- Central estimates - assume high levels of compliance and thus no use of the criminal courts or custodial sentences.
  - High scenario – for a criminal regime assumes one court case per year, and one 2-year custodial sentence (or multiple sentences totalling 2 years) over the period 2013-20.

#### *Costs analysis*

49. The key change in costs as a result of removing the criminal elements of the system is the possible reduction in legal and administrative costs to government of enforcement through criminal courts and the reduced costs to operators from defending themselves in such a system. As noted above (paragraph 38), it has not been possible to accurately estimate the savings to Government and operators associated with a switch to civil courts.
50. Whilst there will still be costs to Government associated with administering civil penalties, switching to a wholly civil penalty system will eliminate the costs arising from custodial sentences. While perpetrators may be indifferent between custodial and financial penalties, the latter results in a transfer of funds from the perpetrator to Government, while both the government and the perpetrator face a significant cost if a custodial sentence is given. As noted above, these savings have not been included in the central estimates, as it is assumed that even under the status quo, compliance rates remain high in line with historic trends and no criminal prosecutions are made. **As a sensitivity, under the status quo it is assumed that one 2-year sentence (or a combination of sentences totalling 2 years) is applied over Phase III (2013-20). This results in a saving with a NPV of £35,000.** See Annex D for a profile of these savings over the appraisal period.

### Other costs benefits

51. There are a number of other costs and benefits associated with a civil regime (Option ii) that incorporates the elements outlined above (e.g. regulator discretion retained, improved proportionality, variable penalty levels, daily penalty/reduced block penalty):
- Government policy on penalties will be more aligned across climate/environmental policies, providing consistency across these policies.
  - Non-compliant operators may be brought into compliance sooner. A regime with a flexible system of penalties and regulator discretion should result in lower penalties to operators who voluntarily come forward, thereby encouraging more operators to do so. This should improve the environmental benefits delivered by the EU ETS as well as improve confidence in the regulatory system.
  - Greater levels of compliance as a result of a system that encourages operators to identify and correct any errors in their verified emissions report.
  - To date, £2.8m of penalties have been imposed for under reporting emissions. All penalties (of €100/tCO<sub>2</sub>) were imposed in 2010 or 2011. If this level of under reporting was representative of future levels, then there could be around £9.8m (PV)<sup>16</sup> of penalties imposed to 2020. By adjusting the parameters for applying this penalty to allow greater regulator discretion in specific cases where genuine mistakes occur, it is assumed that a proportion of these penalties would be reduced or waived, such that the total level of penalties will fall by 10% (£0.98m).
  - There may be a small increase in the administrative cost to regulators as a result of having a marginally more complex enforcement system. The regulator may need to spend more time trying to understand the cause of non-compliance in order to establish the appropriate level of penalty. However this should be standardised through clear statutory guidance.

### Summary of penalties regime

52. Following a review of Options i and ii against our policy objectives and consultation responses, Government has decided to move to an enforcement system comprising of just civil sanctions

<sup>16</sup> Exchange rate of €1 = £0.868 has been used in line with Complimentary Green Book guidance.



(Option ii). This approach is consistent with broader climate and environment policy and in line with the objectives of better regulation, including the recommendations of the Macrory report to move away from criminal sanctions.

53. DECC analysis suggests that by maintaining the current robust regulator monitoring system and by setting sufficiently dissuasive penalties (Option ii), this will not lead to increased non-compliance. Enhancing the level of regulator discretion and in turn, the proportionality of the penalties applied, may in fact lead to a reduced risk of non-compliance. This is as a result of the regulator being able to treat more fairly those operators who are generally compliant but non-compliant because of issues outside of their control, and operators feeling more confident about not being penalised unfairly for identifying genuine errors. For those operators who are non-compliant, the introduction of daily penalties can encourage compliance more quickly. Respondents to the consultation were in generally supportive of this assessment, and regulator discretion was seen to be a key driver in developing an open and honest relationship between operators and regulators, and encouraging greater compliance (and lessening operator exposure to penalties).
54. Specifically, this more proportionate approach offers estimated savings to business of the order of £1.0m PV, through the application of greater regulator discretion. As these savings are effectively a transfer from Government, they do not affect the NPV. More generally, there will be reduced legal and administrative costs to Government of enforcement through criminal courts. There will also be reduced costs to operators from defending themselves in such a system.

## **Risks, sensitivities and assumptions**

### *Costs of compliance*

55. Note that for the issue above, and all the issues in this IA, there should be no change in the business costs of complying with the EU ETS. This is because under all forms of enforcement, in addition to paying any penalty, operators may also ensure they rectify any errors and comply with the regulations. For example, if an operator was given a penalty associated with an information notice for failing to provide sufficient information to the operator, in addition to payment of the penalty, they would also need to ensure the requested information was provided, thus the costs of information provision will occur in all instances, regardless of the enforcement regime.

### *Rates of compliance*

56. This IA also assumes continued high rates of compliance. The costs to business associated with different penalty levels under the civil system would only apply in the unlikely event that operators are non-compliant. Furthermore, non-compliance does not necessarily lead to the imposition of an additional cost (e.g. associated with a penalty), given regulator discretion.

### *Levels of penalties*

57. Under a lower compliance scenario it would be very difficult to make a comparison of the penalty levels under the two options as the scale of the penalty is dependent on the specific merits of an individual case and the opinion of the courts (Option i) or the regulator (Option ii). Notwithstanding this, we have set out for illustrative purposes, the penalties ranges included in the Regulations under Option ii in Annex B. These aim to balance the need to provide a sufficient deterrent whilst being proportionate to the severity of the offence (e.g. intent and impact).

## **D - Costs and benefits analysis: the appeals process for England**

58. Once the decision has been made to regulate, then some form of enforcement mechanism becomes necessary. As is the case under the ETS, the service of an enforcement notice or the imposition of a civil sanction such as a monetary penalty is almost certainly a determination of an operator's civil rights. Article 6 of the European Convention on Human Rights (ECHR) states that, "*...in the determination of his civil rights and obligations or of any criminal charge against him, everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law.*"
59. Hence enforcement of the EU ETS is supported by an appeals system which allows an operator to lodge an appeal when an operator:
- has been refused the grant of a greenhouse gas emissions permit;
  - has been refused the variation of the provisions of a greenhouse gas emissions permit;
  - is aggrieved by the provisions of his greenhouse gas emissions permit or by a variation notice following an application;
  - whose application for a regulator to effect the transfer of a greenhouse gas emissions permit has been refused or who is aggrieved by the provisions of his greenhouse gas emissions permit to take account of such a transfer;
  - whose application to surrender a greenhouse gas emissions permit has been refused or who is aggrieved by the terms of the notice of surrender; or
  - is aggrieved by the regulator's determination of reportable emissions under regulation 30.

### *Number of appeals so far*

60. There have been eight ETS appeals in England in the last five years: two appeals (on decisions made by the Secretary of State (SoS) on applications to the Phase I missing and late reserve) were determined via oral hearings by inspectors from the Planning Inspectorate, with policy and administrative support from Defra officials (as Defra held policy responsibility for EU ETS at that time).
61. Three appeals on decisions on applications to the New Entrant Reserve (NER) made by the Environment Agency (EA) were determined via written procedure. In these appeals the SoS delegated his power to determine the appeal to an appointed barrister.
62. Three appeals focussed on decisions made by the Agency not to allow rationalisation (transfer of allowances from one site to another). These were determined via oral hearings by an appointed barrister on behalf of the SoS.

### *Number of appeals post 2013*

63. Looking ahead to Phase III, it is difficult to predict in advance the volume of appeals that will arise. The fact that the system will have been up and running for 8 years by the start of Phase III and the rules are being harmonised across Europe, may help to reduce the number of potential appeals. However the allocation rules remain complex with some room for misinterpretation and disagreements between operators and the regulator. In addition, the Phase III cap is tighter than in Phase II and will decline over the phase – as the situation becomes more constrained, this could lead to a greater possibility of appeals. More significantly, the scope of the system will expand significantly in Phase III, with the addition of new gases and sectors in the core ETS and with the

addition of the aviation sector. The total number of operators to be regulated by the UK will increase from c. 960 in Phase II (excluding aviation) to c. 1,260<sup>17</sup> in Phase III (including aviation).

64. For the purpose of this exercise it has been assumed that the number of appeals increases proportionately in line with the increase in the number of operators that are regulated. Thus the number of appeals per year increases to 2.1, relative to an average of 1.6 per year since 2005. As a sensitivity, it has been assumed that the number of appeals is as high as 5 appeals per year. This sensitivity is to reflect the possibility that aircraft operators may have a higher number of appeals than expected, given that a number of cases involving aviation operators are already beginning enforcement procedures, which could lead to the issuance of civil penalties. Thus there is potential for the number of appeals to increase.

### **Comparison of Options 1 and 4 relative to policy objectives**

65. This section examines the relative costs and benefits of Government's preferred option relative to the status quo (i.e. Options 4 and 1) for the UK ETS appeals regime post 2013, in terms of a number of policy objectives namely that the appeals system is (not in order of importance):

- Relatively low cost, both to government and operators
- Efficient, avoiding overly burdensome and complex procedures
- Proportionate to the nature of what is being appealed
- Considered transparent and accessible to operators (requirements are clear)
- Independent

### **Costs of appeals**

#### *Financial costs to government*

66. The estimated cost of an appeal under the different options is shown in Table 2. This is based on experience of appeals to date, and on information provided by the body being considered in each option.

**Table 2. The estimated cost of an appeal for both written and oral procedures for Options 1 and 4 (in real £2012 prices\*)**

Option	Written appeals			Oral appeals			Set up costs
	Env. Agency	DECC	Total	Env. Agency	DECC	Total	
1	19,930	1,220	21,150	30,100	3,050	33,150	-
4	19,930	1,020	20,950	30,100	2,540	32,640	2,540**

\* Prices are estimated at 2012 levels (up to Q2) using the ONS GDP deflator and rounded to the nearest 10

\*\* There is a set up cost of £2,540 associated with the First Tier Tribunal in Option 4

67. The main cost to government of the appeals process in England is for the Environment Agency in preparing the case. Based on past experience, the cost to the Environment Agency of a written appeal is £19,930. This rises by £10,170 to £30,100 as a result of paying legal counsel fees for an

<sup>17</sup> Note this assumes that the UK will regulate c. 250 aircraft operators in line with the number of operators who have been identified as being entitled to some free allocation (i.e. they have submitted verified production data). This figure is different to the c. 1,000 aircraft operators who were included in the Commission's list of those who may be eligible to be regulated by the UK. The latter list is longer as there are a number of operators who are unlikely to be within the scope of the EU ETS as they are unlikely to fly into or out of the EU, while others may have chosen not to apply for free allocation.

oral hearing. Based on previous experience, under Option 1 DECC is likely to face a cost of £1,220 per written appeal, rising to £3,050 per oral hearing. This is to cover the cost of the person appointed to hear the appeal on behalf of the Secretary of State and assumes 2 working days per written appeal<sup>18</sup>, 5 working days per oral appeal and a daily rate of £610.

68. In Option 4, the estimated cost to DECC of the FTT is £1,020 per written appeal rising to £2,540 per oral hearing, plus a start up cost of £2,540 for the first year associated with judicial training around the EU ETS. This estimate was made following discussions with the FTT.

### Assumptions

69. The Consultation IA set out a number of scenarios considering different ratios of hearings that are conducted in writing rather than orally, and a range of potential appeals in order to estimate the potential range of impacts for Government. The table below sets out the assumptions for the proportion of oral to written appeals for the status quo (Option 1) and the preferred Option 4. All respondents agreed that the First-tier Tribunal was the appropriate body to hear and determine appeals, and confirmed that the benefits they felt would be gained in using the First-tier Tribunal (Option 4) lay in the efficiency (and therefore more rapid response times) and flexibility of the system.

**Table 3. The assumptions for the proportion of oral to written appeals**

Option	% Written appeals	% Oral appeals
1	37%	63%
4	87%	13%

70. The assumption that 63% of hearings in Option 1 are heard orally, is in line with historic trends<sup>19</sup>. The assumption that 87% of hearings in Option 4 are written, is in line with the historic proportions seen in the current Planning Inspectorate<sup>20</sup>. The estimated annual and NPV costs of the status quo and preferred options are presented in Tables 4 and 5. Two different scenarios for each option are presented, the former (Table 4) where appeals rise in proportion to number of operators, and the latter (Table 5) where the scheme's expansion leads to a more rapid growth in appeals. The difference between the results of these two options provides a range within which the true value is likely to reside. Note the NPV values include the set up costs of Option 4. See Annex D for a profile of the savings of the preferred option (4) over the appraisal period.

**Table 4. Estimated annual and NPV costs of Options (2.1 appeals per year), (in real £2012 prices\*)**

	Annual costs	NPV (2013-2020)	Net change in NPV relative to BAU
<b>Option 1 BAU</b>	60,200	414,000	-
<b>Option 4</b>	47,190 (plus 2,540 in Year 1)	326,000	- 88,000

\*Prices are estimated at 2012 levels (up to Q2) using the ONS GDP deflator and rounded to the nearest 1000

<sup>18</sup> Made up of ½ day preparation, 1 day per appeal and ½ day preparing a report with the recommendation.

<sup>19</sup> To date, 5 out of 8 (63%) EU ETS hearings have been heard orally.

<sup>20</sup> Covering the period 2009/10 – 2010-11

**Table 5. Estimated annual and NPV costs of Options (5 appeals per year), (in real £2012 prices\*)**

	<b>Annual costs</b>	<b>NPV (2013-2020)</b>	<b>Net change in NPV relative to BAU</b>
<b>Option 1 BAU</b>	143,280	984,000	-
Option 4	112,370 (plus 2,540 in Year 1)	775,000	- 209,000

\*Prices are estimated at 2012 levels (up to Q2) using the ONS GDP deflator and rounded to the nearest 1000

71. Option 4 delivers significant savings relative to the Business as Usual (Option 1). In the case of a greater number of appeals, these savings would simply increase in proportion. The estimates of savings under a scenario of 5 appeals per year has been used as the “high” estimate on the summary sheets of this IA.
72. Given the relative cost of oral to written appeals, the assumption on the proportion of appeals that are held in writing is crucial to determining the relative costs of the options. As the above proportions are based on historic rates, they are considered reasonable estimates. However, there is a risk that the proportions vary significantly in the future where the appeals that have previously been heard may have been very different in nature to appeals related to the EU ETS.
73. To ensure the preferred option is robust, Table 6 looks at the likely costs of the different options in the event that for all options there is an equal proportion (50:50) of written to oral appeals.

**Table 6. Estimated NPV costs of options with an equal proportion of written to oral appeals (2.1 appeals per year), (in real £2012 prices)\***

	<b>Annual costs</b>	<b>NPV (2013- 2020)</b>	<b>Net change in NPV relative to BAU</b>
<b>Option 1 BAU</b>	57,050	391,500	-
Option 4	56,240 (plus 2,540 in year 1)	389,500	-2,000

\*Prices are estimated at 2012 levels (up to Q2) using the ONS GDP deflator and rounded to the nearest 500

74. Table 6 shows that with the sensitivity analysis, Option 4 remains lower cost to government than Option 1 even when the proportion of oral to written appeals is the same, although the cost savings under this scenario are substantially reduced. The figures in the above table have been used as the low estimates in the summary sheets.
75. An award of costs associated with Option 4 could expose the regulator to the costs of reimbursing the operators’ expenses associated with the appeal if they have been deemed to have not properly exercised their responsibilities or followed due process. However, the risk is likely to be low and outweighed by the benefit of having an incentive against unnecessary appeals by operators. An award of costs does not necessarily follow the outcome of the appeal. An unsuccessful appellant is not expected to reimburse the planning authority for the costs incurred in defending the appeal. Similarly, the planning authority is not expected to reimburse successful appellants<sup>21</sup>.

<sup>21</sup> Most appeals do not result in a costs application, let alone a costs award. Statistics are published by the Planning Inspectorate. In recent years, on average, costs applications have been made in about 20 per cent of hearing cases, 25 per cent of inquiry cases and 4 per cent of written cases. Awards have been made in about 40 per cent of these cases overall.

### Financial costs to operators

76. It has not been possible to estimate precisely how costs to operators are likely to vary across the different appeals systems. Nevertheless, it can be expected that an operator faces a similar set of costs to those faced by the regulator, for example the staff costs of preparing appeals, the cost of hiring external representation and the costs of appearances at the hearing. External legal representation at a location which is likely to be away from the installation/company legal offices is a significant cost concern for some operators.
77. Government considers that the cost of written appeals will be lower than oral appeals owing to lower expected legal fees.
78. With a greater presumption for written procedures and an award of costs under Option 4 helping to provide an incentive towards the most proportionate approach, Option 4 is considered likely to be lower cost than Option 1. Moreover, oral hearings under Options 4 are likely to have lower travel costs as appeals are heard locally rather than in London. So on balance, Option 4 should deliver less cost for operators relative to the status quo. Responses to the consultation confirmed this assessment.

### Efficiency of the process

79. Option 4 is considered likely to be as efficient as Option 1 in terms of the time needed by a qualified barrister to build background knowledge of the case and perhaps more efficient in terms of case handling given that the FTT system has the capacity to handle multiple cases and different types of appeal. This system employs a number of inspectors, including two inspectors who dealt with two previous EU ETS appeals for Defra. Inspectors are supported by administrative staff and a panel of judges and non-legal experts, experienced in environmental regulations including climate policies, is available to hear appeals. Judges are also supported by a well established system of administrative and I.T. support. The QC who has handled the majority of previous EU ETS appeals sits on the FTT, so the existing knowledge that has built up will be transferred. Judges also have the ability to strike out a case if there is no prospect of success. The FTT will also sit in various venues, utilising the existing network of Tribunal venues across the country.
80. Industry has said they would like to see the length of time taken for an appeal reduced, as speeding up the process would in their view, reduce costs. Table 7 sets out the information available on the procedural steps and timings for each appeals process (Options 1 and 4). Option 1 is quite complex compared to Option 4, with different timings for lodging an appeal depending on the regulation that is subject to appeal, and has more steps to go through. The procedures under Option 4 are more streamlined with more time being allowed for operators to lodge an appeal (28 days compared to 15 under Option 1). This is consistent with calls from industry to double the current response times.

Table 7. Procedural steps and timings of the appeals processes under Options 1 and 4.

Stage in process	Option 1 (Status Quo)	Option 4 (FTT)
<b>Lodging an appeal</b>	Ranges between 15 working days and 6 months after the appealable decision depending on the regulation being appealed. There is scope to extend these timings.	Operators are required to lodge an appeal within 28 days of receipt of a notice from the regulator (although this maybe extended) using a standard template available on the FTT website.
<b>Respondent timings</b>	The regulator shall give notice of the appeal within 14 days of receipt of the appeal.  Within 14 days of issuing the notice above, the regulator shall notify the appeal body	Each respondent must send or deliver to the Tribunal a response to the notice of appeal within 28 days after the date on which the respondent received the notice of the appeal.

Stage in process	Option 1(Status Quo)	Option 4 (FTT)
	of who was sent the notice.	
<b>Submission of case by appellant</b>	Representations should be made no later than 17 days after representations by the regulator.  Representations to the appeal body shall be sent to all Parties who then have a further 14 days to make representations on them	Following the response appellant has another 14 days to submit their case.
<b>Provision of information by appellants and regulators</b>		The appellant may make a written submission and provide further documents in reply to a response within 14 days after the date on which the respondent or the Tribunal sent the response to the appellant.
<b>Total time taken for submission of information</b>	c. 12-33 weeks (although experience is at the upper end of this range)	c.12 weeks
<b>Total time taken for decision</b>	31 weeks from date of hearing to decision being issued*	No published indication of timescale for a decision to be made, other than "as soon as possible"

\* Based on average timeframe for the 3 most recent oral hearings

### *Policy alignment*

81. In his report of January 2011, Professor Richard Macrory<sup>22</sup> investigated the appeal arrangements for over 60 pieces of environmental regulation and found that, where an appeal is provided for at all, "there is little in the way of underlying principle in choice of the appeal body". He asserted that "the existence of the Environment Tribunal<sup>23</sup> now provides an opportunity for consolidating environmental appeals across a wide range of existing laws". As such there is an emerging alignment of Government policy on environment and climate regulations appeals processes towards the FTT.
82. Appeals to FTT are obligatory in certain instances. For example in relation to civil sanctions within regulations made under the Regulatory Enforcement and Sanctions (RES) Act 2008 in England or in relation to certain decisions under the Marine and Coastal Access Act 2009. It is also being considered as the appeal body for the Carbon Reduction Commitment Energy Efficiency Scheme. An increased use of the FTT (Option 4) for a range of environmental appeals will help to foster increased experience and knowledge of handling such cases in the FTT, increasing its efficiency over time. This is also likely to improve the consistency of judgement and capacity to handle EU ETS cases.

### **Proportionality**

83. Ensuring the type of appeal hearing is proportionate to the nature of what is being appealed is important to promote efficiency and reduce costs. Oral appeals are more costly for all parties as it requires travel and subsistence of parties and their legal support. The need for an oral hearing should depend on the complexity of the case being heard – where a case is straightforward, it is likely that an oral hearing is not necessary for a fair appeal. Hence, it is likely that the costs of holding an oral hearing would be out of proportion to the benefits derived. Under the FTT (Option 4), there is a greater presumption of a written hearing unless either party requests an oral hearing and there is sufficient justification for one, to keep costs for all parties to a minimum. Option 4 also provides for an award of costs for unnecessary or wasted expense resulting from an appeal. The helps to incentivise the use of the most appropriate hearing procedure.

<sup>22</sup> Refer Footnote 9

<sup>23</sup> Used as shorthand for the environment jurisdiction of the general regulatory chamber of the First Tier Tribunal.

## Transparency and accessibility

84. It is important that the appeals procedure, including grounds for appeal, information requirements and timings are clear, in order to reduce the chances of unreasonable appeals, reduce the burden on all parties (such as the learning costs) and improve the efficiency of the process.
85. The FTT (Option 4) has a well established process with clear and accessible web-based guidance and experienced staff that are on hand to provide advice, which will help to reduce the risk that genuine appeals are deterred by the upfront investment needed to understand the requirements. Moreover, as the FTT (Option 4) is familiar to both operators and regulators for handling environmental cases, it is likely to be less burdensome. The tribunal can also sit at different locations increasing physical accessibility and reducing travel costs.
86. Furthermore, given the possibility under Option 1 for the SoS to delegate the appellate function, the process may be unclear to the appellant, although Government could make this clearer in supporting guidance. Alternatively, Government could move to a process where there is one procedural path, as is the case under Option 4.
87. As Option 4 requires the appellant to justify why a oral hearing is required, there is a small risk that this could reduce the accessibility of a genuine application to receive an oral hearing. While the possibility of an award of costs for unreasonable action or wasted expense may help to ensure that calls for oral hearings are robust, this could also deter genuine appeals. DECC considers this risk is limited, given that it is unlikely that appellants would face this cost<sup>24</sup>.
88. In general, as noted in paragraphs 76-78, the expected financial cost of appealing to the operator is likely be to slightly lower for Option 4 relative to Option 1. Operators will also have more time to lodge an appeal under Option 4, thus further increasing accessibility.

## Independence

89. The current system (Option 1) does allow for the final decision to be made by the DECC Secretary of State. The decisions being appealed will have been made by the Environment Agency. While this is a separate body, it is clearly still an arm of Government, so some have expressed concern over the independence of the appeal process. DECC does not believe that the independence of the system is in question. However, Option 1 could elicit similar comments on the grounds of perceived independence. Option 4 is fully independent of Government however, so the risk of any negative perception on the degree of independence will be less. In addition, the FTT has a clear, established internal onward appeal procedure.

## Summary of appeals process

90. Following a review of the options against set criteria and consultation responses, Government has decided that appeals against decisions relating to the GHG Regulations in Phase III are handled under the FTT (Option 4). Government believes Option 4 is preferable to the other options on the basis of efficiency, proportionality, transparency and independence and cost. A summary of the assessment is provided in Table 9 at Annex C.
91. Whilst it is in Government's gift to improve the proportionality and accessibility of Option 1 (status quo), proceeding with Option 4 is consistent with a broad Government shift towards the use of the FTT for appeals against decisions under environmental and climate policy, in line with the

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<sup>24</sup> In recent years, under the Planning Inspectorate, costs applications have been made in about 20% of hearing cases, 25% of inquiry cases and 4% of written cases. Awards have been made in about 40% of these cases overall. The PIN deals with appeals across the whole planning system and thus is estimated to have a higher number of unreasonable appeals than we would anticipate from the EU ETS.



recommendations of the Macrory Report<sup>25</sup>. This policy alignment will help the FTT to build knowledge and experience over time, promoting consistency of judgement and increased capacity to handle greater numbers of appeals. This is important to improving efficiency and reducing the need for more costly oral appeals. With respect to the latter, Government would work with the FTT to promote the use written procedures wherever possible (as requested by the appellant). The enhancement of capability under the FTT may be particularly important for the EU ETS post 2013, which could see an increase in appeals with the introduction of the aviation sector. The FTT has the additional benefit of being flexible in terms of the type and location of appeals (reducing travel costs), and is independent of Government.

## **E - Conclusions**

### **Government has decided that the UK move to an enforcement system comprising of civil sanctions only (Option ii).**

92. This approach is consistent with broader climate and environment policy and in line with the objectives of better regulation, including the recommendations of the Macrory report to move away from criminal sanctions.
93. Analysis suggests that by maintaining the current robust regulator monitoring system and by setting sufficiently dissuasive penalties (Option ii), this will not lead to increased non-compliance. Enhancing the level of regulator discretion and in turn, the proportionality of the penalties applied, may lead to a reduced risk of non-compliance.
94. A more proportionate approach offers savings to business of the order of £1.02m PV from greater regulator discretion in the application of the €100/tCO<sub>2</sub>e penalty for under reporting.
95. This approach was fully supported in responses to the consultation, including the proposal to enhance the discretion of the regulator.

### **Government has decided that appeals against decisions relating to the GHG regulations in Phase III are handled under the FTT (Option 4).**

96. Option 4 is considered preferable to the other options on the basis of efficiency, proportionality, transparency and the external perception of independence. Overall Option 4 the least costly for Government.
97. Proceeding with Option 4 is consistent with a broad Government shift towards the use of the FTT for appeals against decisions under environmental and climate policy, in line with the recommendations of the Macrory Report. The FTT has the additional benefit of being flexible in terms of the type and location of appeals (reducing travel costs), and is independent of Government.
98. As a result of shifting to Option 4, Government is estimated to save £88,000 (NPV) over the appraisal period.
99. Whilst no evidence on how the costs will vary for appellants across the appeals system was submitted by consultation respondents, the comments received did support the move to use of the FTT (Option 4) based on the efficiency and flexibility of the process.

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<sup>25</sup> Refer Footnote 9

## Annex A - Qualitative assessment of the benefits of changes to the regulations (drafting or procedural) that are outside the scope of this IA.

There are a number of provisions in the UK 2005 GHG regulations, beyond the penalties and appeals regimes, which elaborate further the original provisions of the EU ETS Directive. This is often necessary because the provisions in the Directive do not contain the level of detail required for implementation in the UK. The review identified areas where it is possible to make the regulations more accessible to incumbent ETS operators by either moving non-essential provisions to a schedule of guidance, simplifying the text, or removing the regulation completely. Hence these are not policy changes but changes that simply aim to clarify the regulatory requirements for operators and regulators, and make it easier for operators to provide information to the regulator – the information and regulatory requirements in the new statutory instrument will remain the same as under the current regulations. The review identified the following options for simplification:

- **Change:** Streamline and make clear the permit application process by introducing a requirement for applications to be made on a form provided by the regulator (at present the regulation does not specify how information should be provided). This will be submitted electronically on a form which is compatible with EA data management software unless otherwise agreed with the regulator.

*Benefit:* This will remove a number of the existing regulations in the draft SI regarding the permit application process and provide an opportunity to make the application process clear. By using a standard form available online, the information requirements will be clear for operators – reducing the time spent understanding them. The form can be designed so that it cannot be submitted until all necessary info has been provided, increasing the likelihood of a successful application and reducing permit processing delays associated with inaccurate or incomplete applications. Using a form compatible with EA data management software will bring the permit application process for static operators in line with that for aviation operators, and may lead to administrative savings for the regulator (e.g. through easier information management and reduced paperwork). In the future it is likely that the same information management system will be used for other climate policies (e.g. CRC).

- **Change:** Bring together the timings for operators having to submit information to the regulator. Ensure the timings are practicable.

*Benefit:* This will reduce the number of different deadlines throughout the year for operators and provide them with a reasonable timeframe to respond to deadlines. This will in turn reduce the risk of them missing a deadline and being penalised for doing so. It will reduce the time spent by operators understanding the requirements and help both operators and regulators plan for peaks and troughs in work load throughout the year.

- **Change:** Standardise where possible the timeframe in which the regulator responds to operator. At present there is disparity between the response times for static and aviation operators.

*Benefit:* This will make it clearer both to both the regulator and the operator the requirements of the regulator and when responses can be expected, aiding business planning for both Parties. This approach is in line with the recommendations of the Penfold review which aims to set clear timescales for determining applications, providing greater certainty and reducing delays to business<sup>26</sup>.

<sup>26</sup> <http://www.bis.gov.uk/assets/biscore/better-regulation/docs/i/11-1413-implementation-of-penfold-review.pdf>

- **Change:** Combine all of the duties of a regulator into one section (this is something that regulators have requested) which can be referred to more quickly. At present the requirements distributed throughout the text.

*Benefit:* Whilst this will not change the administrative burden on operators or the regulator, it will make it easier to establish for both regulators and operators the role of the regulator. Potentially, this could reduce the time spent by both Parties in understanding their requirements.

- **Change:** Bring together in one place all the information requirements – both where the regulator requests information from operators, and where the Secretary of State may require the regulator to provide information. Currently, the requirements are distributed throughout the text.

*Benefit:* Whilst this will not change the administrative burden on operators or regulators, it will make it easier for them to establish and meet their requirements, potentially reducing the time spent by both Parties understanding the system requirements.

## Annex B – Summary of EU ETS civil penalties in phase III

100. Currently, criminal penalties set out in the UK legislation are as follows:
- on summary conviction, a penalty not exceeding statutory maximum of £5,000 or a term of imprisonment not exceeding 3 months.
  - on conviction on indictment, a fine (unlimited) or a term of imprisonment not exceeding two years.
  - other costs such as legal and administrative costs to the firm which is in breach.
101. The civil penalties are as follows:
- installations would need to pay a penalty of €100 per tonne of CO<sub>2</sub> under reported or not surrendered plus the cost of purchasing enough allowances to cover their under-reported or not surrendered emissions at the going carbon price.
102. Under Option ii, levels have been set to ensure that they are as dissuasive as criminal sanctions. The penalty levels set out in Table 8 below are those set out in the Regulations. These are based on an assessment of the penalties applied for aviation ETS and considered in the context of the penalties applied elsewhere in the EU. These were subject to our public consultation, and in general supported.
103. The same level of compliance in phase III as in phase II of the EU ETS is assumed. With the exception of the penalty for under reporting, it is not possible to compare phase III civil sanctions with the criminal sanctions under the current regime. It is also not possible to determine with any certainty the court's judgement of a specific case and the resultant penalty. However, with increased flexibility for the regulator to assess the nature of the non-compliance on the basis of factors such as the level of intent and impacts on the integrity of the ETS, a civil system (Option ii) would ensure greater proportionality. The application of the daily rate would help reduce the likelihood of prolonged non-compliance which could lead to additional costs. The regulations also provide for discretion to be exercised by the regulator in setting penalties in different circumstances. This should assist in the award of appropriate penalties for different types of non-compliance e.g. the award of a lower penalty for mistaken as opposed to wilful non-compliance.
104. The approach to be taken by the regulator in exercising their discretion shall be set out clearly in published guidance. Whilst there should be no change in the way the regulator assesses individual cases between Options i and ii, there should be increased consistency of judgement as a result of them assessing all cases rather than the courts, and on the basis of principles established in the guidance.

Table 8. Summary of penalty levels for phase III. [Note: as civil penalties set out under the 2010 Aviation Regulations have been consolidated in the 2012 GHG Regulations unchanged, these are not set out in this table].

<b>Offence</b>	<b>Proposed penalty (for illustrative purposes only)</b>
Carrying out a regulated activity without a permit.	<p>The proposed penalty is <math>A+(B \times C)</math> where:</p> <p>A is the avoided costs of the operator carrying out a regulated activity without a permit in that year</p> <p>B is the estimated amount of reportable emissions from the installation in the period the regulated activity was carried out without a permit. The regulator has discretion to amend B so that operators without permits cannot financially benefit over operators that do hold permits.</p> <p>C is the carbon price for that year.</p>

	<p>This is based on the actual costs the operator has avoided by operating without a permit.</p>
<p>Failure to comply with a condition of a permit</p>	<p>The proposed penalty range is up to £3,750, based on:</p> <ul style="list-style-type: none"> <li>The penalty for the equivalent offence under the aviation EU ETS regulations from 2012 onwards: failure to comply with emission plan conditions, of £3,750.</li> </ul> <p>A daily penalty of £375 up to a maximum of £33,750 would apply if the penalty is not paid by the due date.</p>
<p>Failure to surrender sufficient allowances</p>	<p>The proposed penalty is the sterling equivalent of €100 for each allowance that the operator fails to surrender.</p> <p>This is based on the penalty specified in the EU ETS Directive for operators and aircraft operators who do not surrender sufficient allowances, by 30 April each year, to cover their emissions during the preceding year.</p> <p>Where genuine mistakes occur or errors result from factors outside the control of an operator, and these are notified to the regulator in an amended verified emissions, and the additional allowances are surrendered, the penalty is €20 for each allowance.</p>
<p>Exceeding an emissions target for an excluded installation</p>	<p>The proposed penalty is <math>(A-B) \times C</math> where</p> <p>A is the amount of reportable emissions arising in that year</p> <p>B is the emissions target for that year</p> <p>C is the carbon price for that year</p>
<p>Failure to pay for excess emissions for excluded installations (the small emitter opt out)</p>	<p>The proposed penalty is for a fixed block penalty of 10% of the amount unpaid. A daily rate of £150 for each day that the penalty remains unpaid will be applied, up to a maximum of £13,500.</p> <p>If the excess emissions remain unpaid after one month the installation may be returned to the core EU ETS. The daily rate would continue to accrue to a maximum of £13,500.</p> <p>This proposal is based on the need for flexibility given that the cost of excess emissions may vary from as little as £10 to as much as £250,000 or more. The maximum rates are drawn in comparison to maximums for small emitters in the offence of operating without a permit; the fixed block penalty is reduced by half to reflect the fact that this offence will only ever relate to one compliance year.</p>
<p>Failure to surrender a permit</p>	<p>The proposed penalty is £5,000.</p> <p>This is based on the fact that failure to inform the regulator that the installation has ceased operation could result in allocations being received that the operator is not entitled to. These allowances should be recovered, and consideration of further enforcement action may be needed where an operator has sold these allowances e.g. requirement on the operator to surrender the unrecoverable allowances, failure to do so would attract the €100 per tCO<sub>2</sub> civil penalty set out in the Directive.</p>
<p>Failure to return allowances</p>	<p>The proposed penalty level is £20,000. A daily rate of £1,000 up to a maximum of £30,000 will be applied for each day that the allowances are</p>

	<p>not returned.</p> <p>This is based on the penalty for failure to comply with an enforcement notice. The failure to return allowances that an operator is not entitled to is a similar offence that can be considered a deliberate act of non-compliance with regulator requirements.</p>
Failure to comply with an enforcement notice	<p>The proposed penalty is a maximum penalty of £20,000. A daily rate of £1,000 up to maximum of £30,000 will be applied where the penalty is not paid by the due date.</p> <p>This is based on the seriousness of non compliance with the regulator's requirements following other attempts to procure compliance, as well as the requirements of the permit. The regulator could have discretion to take into account any mitigating factors and reduce this penalty.</p>
Failure to comply with an information notice	<p>The proposed penalty is a maximum penalty of £1,500. A daily rate of £150 up to maximum of £13,500 will be applied where the penalty is not paid by the due date.</p> <p>This is based on the equivalent penalty under the aviation EU ETS regulations and the fact that the block penalty should be set lower than the fixed block penalty for non-compliance with an enforcement notice as the situation is likely to be less critical.</p>
Failure to notify the regulator	<p>The proposed penalty is £5,000.</p> <p>In addition one type of offence under this penalty is failure to inform the regulator that the installation has changed operation. This could result in allocations being received that the operator is not entitled to. These allowances should be recovered, and consideration of further enforcement action may be needed where an operator has sold these allowances e.g. requirement on the operator to surrender the unrecoverable allowances, failure to do so would attract the €100 per tCO<sub>2</sub> civil penalty set out in the Directive.</p>
Providing false or misleading information	<p>The proposed penalty is £1,000. This is based on:</p> <ul style="list-style-type: none"> <li>• under the current EU ETS regulations, this offence attracts a maximum penalty of £5,000 or 3 months imprisonment on summary conviction or an unlimited penalty or 2 years imprisonment on conviction on indictment</li> <li>• the penalty for the equivalent offence under the aviation EU ETS regulations, making false or misleading statements, of £1,000.</li> </ul> <p>The regulator could escalate the penalty through the issuing of an information notice to obtain the correct information, and possibly an enforcement notice.</p> <p>There could be further consequences as a result of this offence: for example incorrect reporting of emissions could require additional surrender of allowances, or an incorrect free allocation could be recovered from the operator's registry account.</p>

**Annex C – Table 9. Summary of Options 1 and 4 against criteria**

Option	NPV costs (2013-20), £2012 Central estimate	Proportionality	Independence	Efficiency	Accessibility
<p><b>1</b></p> <p><b>SoS hearing and decision/ SoS delegates hearing and decision</b></p> <p><b>Presumption of oral hearings</b></p>	<p>414,000</p>	<p>No power to refuse to hold oral hearing if requested</p> <p>No criteria for deciding which procedure</p>	<p>No evidence of any lack of impartiality in any of the existing judgements but the fact that the Secretary of State is ultimately accountable for the working of the ETS in the UK has given rise to challenges about his independence from the process when making judgements.</p>	<p>Dependent on one barrister in terms of availability and judgement</p> <p>Process quite complex with different response times for different issues</p> <p>Some learning time needed for administrative support</p>	<p>Central estimated cost to operators is greater thus on average may deter some appellants.</p> <p>Right for oral hearing will increase accessibility who feel more comfortable through this process</p>
<p><b>4</b></p> <p><b>First Tier Tribunal</b></p>	<p>326,000</p>	<p>No power to refuse to hold oral hearing if requested</p> <p>Award of costs for unreasonable cases, wasted expense</p> <p>Judges can strike out case if no chance of success</p>	<p>Third party – would manage the entire process independently of DECC.</p>	<p>In line with other appeal systems for environmental legislation</p>	<p>Will cost less to appeal but risk of award of costs may deter appellants</p> <p>More time provided to appeal</p>

## Annex D – Profile of savings delivered by preferred Option

### Penalties regime in the UK

#### Option ii: High Scenario savings relative to business as usual (undiscounted)

£2012*	2013	2014	2015	2016	2017	2018	2019	2020
Cost for 2 year sentence (combination)	-5,090	-5,090	-5,090	-5,090	-5,090	-5,090	-5,090	-5,090
<b>Total</b>	<b>-5,090</b>	<b>-5,090</b>	<b>-5,090</b>	<b>-5,090</b>	<b>-5,090</b>	<b>-5,090</b>	<b>-5,090</b>	<b>-5,090</b>

\* Prices are estimated at 2012 levels (up to Q2) using the ONS GDP deflator and rounded to nearest 10

#### Option iii: Net Present Value High Scenario savings relative to business as usual

£2012*	2013	2014	2015	2016	2017	2018	2019	2020
Cost for 2 year sentence (combination)	4,910	4,750	4,590	4,430	4,280	4,140	4,000	3,860
<b>Total</b>	<b>4,910</b>	<b>4,750</b>	<b>4,590</b>	<b>4,430</b>	<b>4,280</b>	<b>4,140</b>	<b>4,000</b>	<b>3,860</b>

\* Prices are estimated at 2012 levels (up to Q2) using the ONS GDP deflator and rounded to nearest 10

### Appeals process for England

#### Option 4: Appeals system using the First Tier Tribunal relative to business as usual (undiscounted)

£2012*	2013	2014	2015	2016	2017	2018	2019	2020
2.1 appeals	-10,440	-12,980	-12,980	-12,980	-12,980	-12,980	-12,980	-12,980

\* Prices are estimated at 2012 levels (up to Q2) using the ONS GDP deflator and rounded to nearest 10

#### Option 4: Net Present Value Appeals system using the First Tier Tribunal relative to business as usual

£2012*	2013	2014	2015	2016	2017	2018	2019	2020
2.1 appeals	-10,090	-12,120	-11,710	-11,320	-10,930	-10,560	-10,210	-9,860

\* Prices are estimated at 2012 levels (up to Q2) using the ONS GDP deflator and rounded to nearest 10



<b>Title:</b> EU ETS Small Emitter and Hospital Phase III Opt-Out  <b>IA No:</b> DECC0068  <b>Lead department or agency:</b> Department for Energy and Climate Change  <b>Other departments or agencies:</b>	<b>Impact Assessment (IA)</b>		
	<b>Date:</b> tbc		
	<b>Stage:</b> Final		
	<b>Source of intervention:</b> Domestic		
	<b>Type of measure:</b> Secondary legislation		
<b>Contact for enquiries:</b> EU ETS Team, DECC (eu.ets@decc.gsi.gov.uk)			

**Summary: Intervention and Options** **RPC:** N/A

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB in 2009 prices)	In scope of One-In, One-Out?	Measure qualifies as
-£33.0m	£39.2m	-£4.6m	No	N/A

**What is the problem under consideration? Why is government intervention necessary?**  
 The EU ETS is a cap and trade system designed to incentivise cost-effective reductions in greenhouse gas emissions (GHG) from carbon-intensive industries and electricity generators. Evidence suggests that the administrative burden (the costs of monitoring, reporting and verification of emissions and fees to regulators) of the EU ETS on smaller emitters is disproportionately large. Article 27 of the EU ETS Directive provides for an opt out from the EU ETS in Phase III (2013-2020) to reduce the administrative burdens on small emitters and hospitals. It requires that opted out installations face measures that achieve an equivalent contribution to emissions reductions as if the installation were still in the EU ETS.

**What are the policy objectives and the intended effects?**  
 The objective in offering an opt-out is to incentivise GHG emissions reductions whilst minimising the regulatory cost burdens to UK small emitters and hospitals. The aim is to achieve this whilst meeting EU legislative requirements, not significantly affecting the emissions reductions achieved by operators in the EU ETS and ensuring that UK industry is not placed at a competitive disadvantage compared to firms in the EU. Within the constraints of the EU ETS Directive, those 243 eligible operators who have chosen to opt-out of the ETS in Phase III will be required to reduce emissions through an alternative measure.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**  
 Four options were considered: Option 1: Do nothing (baseline). UK small emitters and hospitals remain in the EU ETS. Options 2-4: Eligible installations are given the choice of opting out from the EU ETS in Phase III. Opted-out installations are subject to binding emission reduction targets, set according to either (Option 2) the level of EU ETS Phase III free allocations, (Option 3) EU ETS benchmarks, or (Option 4) an installation's historical emissions. Alternatives to regulation would not meet the requirements of the Directive but each of options 2-4 are deregulatory. The final Preferred Option is a combination of options 2 and 4, which has been slightly modified to secure European Commission approval. This offers enhanced flexibility for operators and largely retains the cost savings to UK small emitters and hospitals of the consultation stage preferred option, Option 4, whilst incentivising GHG reductions, and it remains consistent with the approaches of other Member States.

**Will the policy be reviewed?** It will not be reviewed. **If applicable, set review date:** Month / Year

Does implementation go beyond minimum EU requirements?			Yes		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro No	< 20 No	Small Yes	Medium Yes	Large Yes
What is the CO2 equivalent change in greenhouse gas emissions? (Million tonnes CO2 equivalent) (NB figure represents change in effort incl a change in cap)			Traded: -6.7	Non-traded: +1.3	

I have read the Impact Assessment  Date: 27.xi.12

## Summary: Analysis & Evidence

## Preferred Policy Option

Description: Offer an Opt-out policy with target set according to EU ETS Phase III free allocations or an installation's historical emissions

### FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2012	Time Period Years 8	Net Benefit (Present Value (PV)) (£m) – relative to Option 1		
			Low: -33.9	High: -30.0	Best Estimate: -33.0
<b>COSTS (£m)</b>	<b>Total Transition (Constant Price) Years</b>		<b>Average Annual (excl. Transition) (Constant Price)</b>		<b>Total Cost (Present Value)</b>
Low					
High					
Best Estimate	0		10		79.7
<p><b>Description and scale of key monetised costs by 'main affected groups'</b></p> <p>The UK's carbon liability will increase as a result of carbon moving from the traded (EU ETS) to the non-traded sector (NTS) (valued at £77.1m), reflecting higher carbon values in the NTS relative to EU ETS. The Government will also see a fall in EUA auction revenues (£2.6m) owing to the EU ETS cap change.</p> <p>Installations will pay a penalty to government for any emissions over their target (£7.8m). This is a transfer to government and has been offset in the benefits section.</p>					
<p><b>Other key non-monetised costs by 'main affected groups'</b></p>					
<b>BENEFITS (£m)</b>	<b>Total Transition (Constant Price) Years</b>		<b>Average Annual (excl. Transition) (Constant Price)</b>		<b>Total Benefit (Present Value)</b>
Low					
High					
Best Estimate	0		5.8		46.7
<p><b>Description and scale of key monetised benefits by 'main affected groups'</b></p> <p>The opt-out will lower the administrative costs to small emitters of the EU ETS whilst retaining other features of the EU ETS. It is estimated that small emitters and hospitals that take this opt-out option will save £4.7m in administrative costs over the period 2013-2020 (£0.6m annually) relative to Option 1.</p> <p>Installations will also no longer be required to purchase EUAs under the EU ETS representing an estimated cost saving of £42m.</p> <p>Government will receive revenues in the form of penalties from opted-out installations (£7.8m). This is a transfer from industry and has been offset in the costs section.</p>					
<p><b>Other key non-monetised benefits by 'main affected groups'</b></p> <p>UK small emitters will also not be placed at a competitive disadvantage when compared to European counterparts who are offered opt-out schemes. This cost saving has not been monetised.</p>					
<p><b>Key assumptions/sensitivities/risks</b></p> <p>Emissions growth forecasts from Bloomberg New Energy Finance were used to estimate most of the cost impacts in this impact assessment. Installations would have a better idea of their own levels of expected growth and administrative cost savings.</p> <p>The NPV range above reflects sensitivities to carbon prices.</p>					<p><b>Discount rate (%)</b></p> <p>3.5</p>

### BUSINESS ASSESSMENT (Preferred Option)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: -4.9	Benefits: 0	Net: 4.9	No	N/A

## Background

1. The EU Emissions Trading System EU (ETS) was launched in 2005 as one of the key policies introduced by the EU to help meet its greenhouse gas (GHG) emissions reduction target of 8% below 1990 levels under the Kyoto Protocol. It works on a “cap and trade” basis, where there is a cap on all the emissions covered by the EU ETS, and installations within the system have tradable allowances to cover their GHG emissions.
2. In December 2008, a 2020 Climate and Energy package was agreed by the European Council and the European Parliament which included revisions to the EU ETS Directive that will take effect in Phase III (2013-2020). Phase III of the EU ETS will see the introduction of a centralised, EU-wide cap on emissions to ensure a much more ambitious and consistent approach to implementing the EU ETS across the EU. The cap in Phase III will reduce by 1.74% of the average annual 2008-2012 emissions each year, delivering an overall reduction of 21% below 2005 verified emissions by 2020.
3. This Impact Assessment (IA) is an update of the previously published consultation stage impact assessment which estimated the cost and benefits of this policy using estimates of the number of small emitters and hospitals which would choose to opt out of the EU ETS. It is now known that a total of 243 small emitters have chosen to opt-out. This updated analysis concerns only these 243 small emitters and hospitals. Some other changes have also been incorporated into this IA:
4. Updated appraisal values for short-term traded carbon published in October 2012, have been used.<sup>1</sup> These 2012 carbon appraisal values are considerably lower than those used in the 2011 consultation stage IA and are the main reason for the benefits reported in this IA being lower than those reported in the Consultation stage IA. values are expressed in 2012 prices, rather than 2011 prices as in the consultation IA.

## Rationale for Policy

5. The EU ETS is designed to support installations across the EU to deliver emissions reductions at least cost. In addition to the costs of compliance, operators participating in the ETS are subject to the costs related to monitoring, reporting and verification (MRV) and the fees resulting from competent authorities in Member States' recovering the costs of administering the system. The work of operators and the competent authorities to deliver appropriate MRV is essential to ensuring the validity of emissions reductions and protecting the economic and environmental integrity of the system.
6. However it has been recognised in Europe<sup>2,3</sup> that the administrative costs faced by small emitters under the EU ETS are disproportionately high per tonne of CO<sub>2</sub>, compared to the costs for installations with larger emissions. This has been demonstrated in the UK, following an assessment of the administrative costs to UK operators during Phases I (2005-2007), and II (2008-2012) of the ETS. In the UK, this assessment found that small emitters accounting for 2% of emissions, incurred approximately 20% of the total administrative burden (across the 60% of all installations covered by the assessment). The largest 8% of emitters were responsible for 60% of emissions and incurred 45% of the administrative burden. Per tonne of CO<sub>2</sub> emitted, the estimated administrative costs for UK small emitters exceeded £1, while costs for UK large

<sup>1</sup> <http://www.decc.gov.uk/assets/decc/11/cutting-emissions/carbon-valuation/6667-update-short-term-traded-carbon-values-for-uk-publ.pdf>

<sup>2</sup> Commission guidance for Phase II National Allocation Plans emphasised the need to ensure or improve the cost-effectiveness of the ETS for small installations.

<sup>3</sup> The Climate and Energy Package Impact Assessment states: “It is likely that the costs of inclusion and compliance (in terms of monitoring, reporting and verification rather than costs of complying by buying allowances) outweigh the benefits of including these small emitters..”

emitters were estimated to be £0.04. Almost all UK hospital installations are also small emitters and therefore face the same disproportionate administrative cost burden per tonne of CO<sub>2</sub>.

*EU ETS Directive, Article 27 – opt-out of small emitters and hospitals*

7. In recognition of the disproportionate administrative burdens of the EU ETS on small emitters and hospitals, Article 27 of the revised 2009 EU ETS Directive gives Member States the option to exclude them from the EU ETS in Phase III (2013-2020). This is provided installations face equivalent measures in Member State law. The requirement for equivalence seeks to ensure that the environmental goals of the EU ETS are preserved, namely the delivery of GHG emissions savings.
8. According to Article 27, small emitters are defined as having annual emissions that are less than 25,000tCO<sub>2</sub>e and a thermal capacity not exceeding 35MW per year in 2008, 2009 and 2010. Hospitals may be opted out irrespective of their emissions or thermal capacity relative to the thresholds. The Directive does not provide for new entrants to the ETS during Phase III to opt out from the EU ETS. If an opted-out installation's emissions rose above 25,000tCO<sub>2</sub> per year the installation would re-enter the EU ETS.
9. The UK was required to gain approval for its opt out policy from the European Commission, which reserves the right to object to Member States' opt-out proposals if it does not believe they are in line with the Directive. Member States wishing to offer an opt-out were required to submit their alternative policy proposal and a list of opted-out small emitters and hospitals for Commission scrutiny. In reaching an agreed opt out policy, the Commission requested a number of small changes to the UK's opt-out proposal (described below).

*UK approach to opt-out of small emitters and hospitals*

10. Consistent with the UK Government's 'Better Regulation' agenda, we are seeking to better target EU ETS policy in the UK and offer UK small emitters and hospitals an optional, lighter-touch policy alternative.
11. The Government considered a number of options for an optional scheme that would lower the cost burdens on small emitters and hospitals compared to the EU ETS, whilst incentivising reductions in carbon emissions. The options were developed with input from other government departments, devolved administrations, UK competent authorities, UK industry and the European Commission. Considering these options, we have also sought to balance:
  - Designing a proposal that will not be rejected by the European Commission
12. Given the Commission has the power to object to Member States' opt-out lists, in designing UK proposals we have taken into consideration whether they are likely to gain Commission approval. Non regulatory options would not meet the requirements of the Directive, including to ensure installations comply with ETS monitoring and reporting and that installations with emissions exceeding 25,000tCO<sub>2</sub> per year re-enter the EU ETS.

- Simplification of the climate policy landscape
13. To help minimise policy complexity, consideration was given to utilising existing UK domestic climate policies as alternative measures, namely the CRC Energy Efficiency Scheme (CRC) and Climate Change Agreements (CCA), which also incentivise industrial emission reductions. However, feedback from industry and the Commission has shown that neither the CRC nor the CCA is suitable as an opt-out policy, largely on the basis of equivalence<sup>4</sup> with the ETS and, in the case of the CRC, the costs to operators<sup>5</sup>. The main options considered (options 2-4) therefore used the framework of the ETS, which is now well understood by participants, to provide a lighter touch alternative.
- Avoiding putting UK industry at a competitive disadvantage compared to the rest of the EU
14. Other Member States including France, Germany and Spain have also developed proposals for opting-out small emitters and hospitals from the EU ETS. Spain and Germany have submitted a proposal based on installation-based targets set according to a baseline of historical emissions and France submitted a final proposal to opt-out hospitals given targets according to preliminary levels of free allocation. We worked closely with these Member States to minimise the risk of creating intra-sectoral distortions within the EU by adopting significantly different approaches. A key consideration was the need to avoid taking a more stringent approach in the UK compared to other Member States which could have penalised those UK firms competing internationally and reduced the overall benefit of a UK opt-out.

## Options considered

15. The following options were considered for UK implementation of Article 27 of the revised ETS Directive:

Option 1: Do nothing. UK small emitters and hospitals are not able to opt out from the EU ETS in Phase III.

All incumbent small emitters and hospitals would remain in the EU ETS and any small emitters and hospitals that are new entrants would join the EU ETS from the start of Phase III.

Options 2-4: Eligible installations and hospitals may choose to be excluded from the EU ETS over Phase III. Opted-out installations and hospitals would be subject to binding emission reduction targets.

16. Eligible installations that choose to opt out of the ETS would be required by UK regulation to meet a binding emission reduction target. A fixed penalty for non-compliance would be imposed on emissions above the target. The level of the penalty would equal the price of an EU allowance (EUA). The reduction in regulatory cost burden associated with this proposal largely depends on how the target is set. Options 2-4 offer different methodologies for setting the target; other provisions in the proposal are the same.
17. Options 2-4 are voluntary on the basis that operators would have a better understanding (than government) of the cost and time implications of participation. This is supported by feedback from industry.

<sup>4</sup> Both of these policies will place a price on carbon emissions, but neither will set the price according to the EUA price. Moreover, neither policy covers all EU ETS emissions as they do not address process emissions.

<sup>5</sup> The CRC scheme places a price on all emissions whereas under the EU ETS operators receive an allocation of allowances for free. For example, an average hospital would pay £65,000 more under the CRC than the EU ETS in 2013. This additional cost will decline to £40,000 in 2020 as EU ETS free allocation levels decline.

18. These options represent a shift away from a system based on trading, to installation-specific emissions targets and penalties for non-compliance. Opted out Installations (Opt-outs) would not receive any free allocation of EUAs, they would be exempt from the requirement to surrender allowances for their emissions and to hold an active registry account. Aside from this, opt-outs would in general be required to comply with the same conditions as EU ETS installations. For example, they would continue to monitor and report annually according to EU ETS regulations but they would be exempt from EU ETS provisions on third party verification. Instead, opt-outs would fall under a risk-based auditing scheme. They would still be required to hold a permit for carrying out the GHG emitting activities covered by the EU ETS<sup>6</sup> but this would be modified to reflect the requirements of the opt-out.

### **Risk-based auditing scheme**

19. Annual emissions reports would be audited by UK regulators (e.g. the Environment Agency) in place of third party verification. Opted-out installations would be audited at least twice during Phase III. However, all annual reports would undergo a risk analysis and, where they match predefined risk criteria, it is likely they would be audited more frequently. Installations with emissions above 20,000tCO<sub>2</sub> per year would be audited annually. Operators would face penalties for misreporting, as they do under the EU ETS.

#### Option 2: Target set according to EU ETS Phase III free allocation

20. Targets would be set in 2013 according to the level of allowances an installation would have been allocated for free under the EU ETS in Phase III, before any reduction in allocation that may result if the cross sectoral correction factor is applied.<sup>7</sup>
21. For sectors not at risk of carbon leakage,<sup>8</sup> this would mean a target set according to free allocation levels of 80% of the relevant product benchmark in 2013 declining to 30% of benchmark in 2020 as would occur in the EU ETS. For sectors deemed to be at significant risk of carbon leakage, the target would be set according to free allocation of 100% of the product benchmark with no decline.
22. The application of benchmarks and preliminary free allocations for UK installations is set out in the UK's National Implementation Measures (NIM) which were published in December 2011<sup>9</sup>.

#### Option 3: Target set according to EU ETS product benchmark

23. Targets would be set in 2013 at 100% of the relevant product benchmark for the installation, as set out in the Community Implementation Measures<sup>10</sup>. Product benchmarks reflect the average greenhouse gas performance of the 10% best performing installations in the EU producing that product.
24. For sectors at risk of carbon leakage, targets would not decline over the period 2013-2020. For sectors not at risk of carbon leakage, targets would decline by 1.74% per year over the period 2013-

<sup>6</sup> The EU ETS Directive requires installations carrying out activities regulated by the Directive, as specified in Schedule 1, to hold a greenhouse gas emission permit. This requirement will be retained in UK regulation for opted out installations.

<sup>7</sup> The European Commission may be required to issue a cross-sectoral correction factor, as set out in Article 10a(5) of the EU ETS Directive, to ensure that the total allocations given to EU ETS installations does not exceed the cap determined by the Commission in 2010. Such a factor would reduce free allocations to installations by the determined proportion, and may vary annually throughout Phase III.

<sup>8</sup> [http://ec.europa.eu/clima/documentation/ets/leakage\\_en.htm](http://ec.europa.eu/clima/documentation/ets/leakage_en.htm)

<sup>9</sup> <http://www.decc.gov.uk/assets/decc/11/cutting-emissions/eu-ets/3846-uk-nat-imp-measures-phase3-euets.pdf>

<sup>10</sup> <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2011:130:SOM:EN:HTML>

2020 in line with annual reductions in the EU ETS cap. The cross sectoral correction factor would not be applied to the opt-out targets (for more details see the section on Compliance costs - Option 2).

25. For the eligible installations that are in sectors at risk of carbon leakage, targets set under Options 2 and 3 would be the same. For those in sectors not at risk of carbon leakage, emissions targets under Option 3 would be less stringent than those under Option 2.

#### Option 4: Target set according to historic emissions

26. The proposal, agreed with the European Commission was that emissions targets for small operators would be based upon their historic average annual emissions measured over the period 2008-2010. As with the EU ETS, the emissions cap is set to undergo an annual linear tightening of 1.74 percentage points in each year from 2010, leading to a cumulative 5.22% reduction in the three years to 2013<sup>11</sup>.
27. For sectors at risk of carbon leakage, targets would not decline over the period 2013-2020. For sectors not at risk of carbon leakage, targets would decline at 1.74% per year over the period 2013-2020 in line with annual reductions in the EU ETS cap. The cross sectoral correction factor would not be applied to the opt-out targets (see section on Compliance costs - Option 2). Targets under this option would be less stringent than those in Option 2 or 3.
28. Of the options considered, an approach based on targets set according to historical emissions (Option 4) offered the greatest regulatory cost savings to UK small emitters and hospitals. This option was preferred at consultation stage as it was in alignment with the approach of other Member States although as it set targets in a way that differed to levels of free allocation, there was a risk that the Commission could reject the UK's proposal as not delivering equivalence to the EU ETS. Industry indicated an appetite for some risk in putting forward a proposal to the Commission on the basis that some level of uncertainty that the proposal would be approved is preferable to the risk of putting UK firms at a competitive disadvantage.

#### *Consultation and agreement with the Commission*

29. The Opt-out scheme was developed in consultation with industry stakeholders. Formal and informal consultation showed a clear preference for an opt out being offered to reduce administration burden and simplify applicable regulations and that the scheme should be voluntary. This feedback was incorporated into the options discussed above.
30. Since the consultation stage impact assessment discussions have been held with the Commission to agree an acceptable UK opt-out Scheme. As the starting point for these discussions the UK submitted to the Commission a voluntary scheme, as described above, which gave operators a choice in the method for setting installation-based binding emissions reduction targets either according to an historical baseline (Option 4) or according to the preliminary level of Phase III free allocations (Option 2). These options maximised costs savings and flexibility for industry. The Commission largely accepted this proposal but sought one small modification to Option 4 on the grounds that this would improve equivalence. This modification is set out below.
31. Eligible operators were provided with an application period to consider the final policy and decide whether they wished to opt out from the EU ETS and take up Opt-out Agreement Scheme instead. Operators of 243 installations chose to opt out, from a total of 320 installations which provided data to demonstrate that they were eligible.

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<sup>11</sup> The EU ETS directive states that the Phase III cap will reduce annually by 1.74% of the average annual Phase II (2008-12) cap. Following EC guidance, the 2013 cap is compared to 2010 emissions (the midpoint of 2008-2012) and will therefore represent a tightening of 5.22% ( $3 * 1.74\%$ )

*Preferred Option, as agreed with the European Commission*

32. The Preferred Option retains all of those features common to Options 2 and 4 of a voluntary scheme that includes individual binding emission reduction targets and exemptions from requirements to surrender allowances, holds an active registry account or undertakes third party verification. The ability for operators to choose between a target set according to historic emissions or preliminary levels of free allocation is also retained. However, there has been one modification, in response to a request from the Commission, in relation to setting targets according to historic emissions. This modification means that all installations will face targets which decline by 1.74% of the baseline per year (irrespective of whether those installations are at risk of carbon leakage or not).
33. In the application process 231 operators chose a target set according to historic emissions (Option 4) and 12 operators chose a target set according to the preliminary level of free allocation in the EU ETS (Option 2).



## Scope of the UK EU ETS opt out

34. A national data collection exercise was carried out in June 2011 and further data was collected through the application process. This exercise highlighted that 320 installations meet the small emitter eligibility criteria (including hospitals) and wished to have the opportunity to choose whether to opt out of the EU ETS.<sup>12</sup>
35. The 243 installations opting out are estimated to represent 24% (243 of 1010 operators) of the total number of UK EU ETS installations, but only 0.8% (2MtCO<sub>2</sub> of 265MtCO<sub>2</sub>) of UK EU ETS emissions in 2008.

Table 1 shows the industrial sectors for the operators choosing to opt out.

Table 1: Industrial sectors of operators opting out

Industrial sector	Number of operators which chose Option 2 Allocation	Number of operators which chose Option 4 Historic Emissions	Total number of installations opting out	%
Mineral Products	0	45	45	19%
Food and Drink	0	31	31	13%
Others	9	43	52	21%
Ceramics	1	26	27	11%
Pulp & Paper	2	9	11	5%
NHS	0	71	71	29%
Chemicals	0	5	5	2%
Other	0	1	1	0%
<b>Total</b>	<b>12</b>	<b>231</b>	<b>243</b>	<b>100%</b>

## Cost and benefit analysis

36. This section examines the costs and benefits for the final agreed Opt-out scheme. The do nothing scenario (Option 1) under which UK small emitters and hospitals are not able to opt-out of the ETS is presented first. The final Preferred Option will then be presented in relation to Option 1 so as to examine the relative costs and benefits of the preferred option.

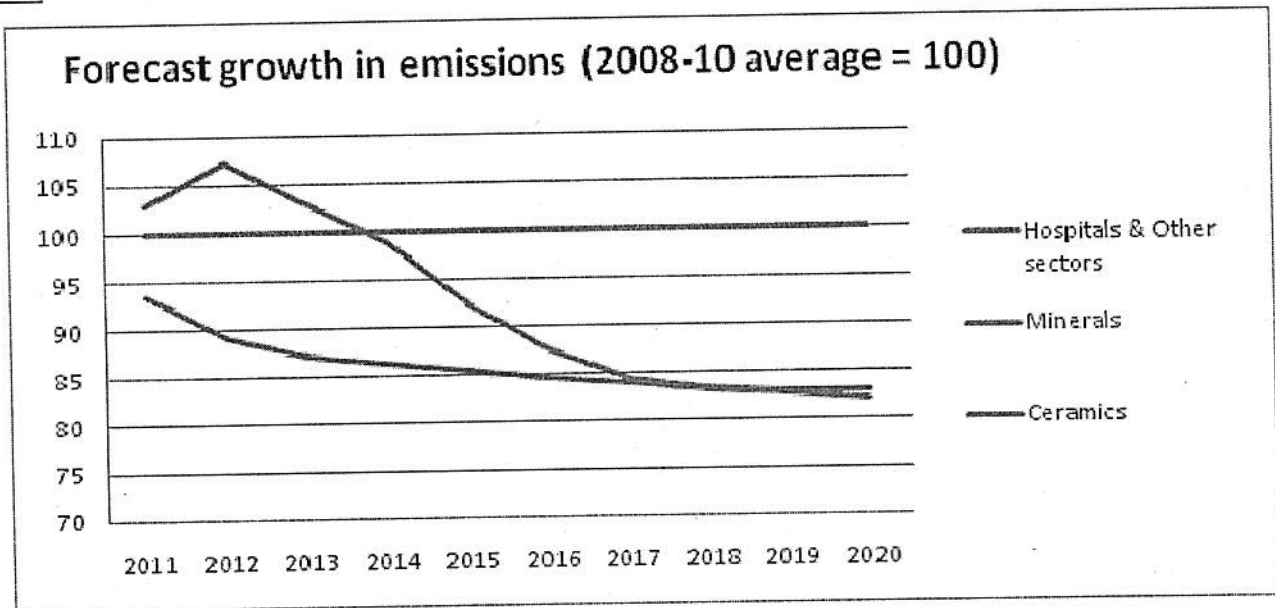
**Option 1: Do nothing. UK small emitters and hospitals are not able to opt out from the EU ETS in Phase III.**

<sup>12</sup> Numbers of eligible installations and associated emissions are drawn from the 2011 UK NIMs data collection, which asked eligible installations to indicate whether they would like to consider the opt out and asked all non-electricity installations for verified emissions data. As this exercise did not include electricity producers, the total EU ETS installations and emissions are from the Report on 2008 UK EU Emission Trading System emission data, DECC, September 2009:

([http://www.decc.gov.uk/assets/decc/what%20we%20do/global%20climate%20change%20and%20energy/tackling%20climate%20change/emissions%20trading/eu\\_ets/publications/1\\_20090924140921\\_e\\_@@\\_euetsreport2008.pdf](http://www.decc.gov.uk/assets/decc/what%20we%20do/global%20climate%20change%20and%20energy/tackling%20climate%20change/emissions%20trading/eu_ets/publications/1_20090924140921_e_@@_euetsreport2008.pdf)).

37. Option 1 is a 'do nothing' option. In this option, an opt-out from the EU ETS is not offered and all small emitters and hospitals remain in the ETS. The EU ETS is designed to achieve emissions reductions in the most cost-effective way. This is done by capping the total level of emissions. Installations within the EU ETS trade emissions permits and the market is then able to find the cheapest available emissions abatement required to meet the cap.
38. There are two methods for providing emissions permits (allowances) in the EU ETS: auctioning or giving allowances to installations for free (free allowances). In Phase III of the EU ETS, non-electricity producers will be allocated some free allowances according to a production benchmark.
39. Installations in sectors deemed to be at risk of carbon leakage will be given 100% free allowances up to their benchmark for every year of Phase III. For installations not at significant risk of carbon leakage, the proportion of the allowances they receive for free will decline over time from 80% in 2013 to 30% in 2020. Once the free allocation of allowances to EU ETS operators has been finalised, the Commission may apply the cross sectoral correction factor (CSCF) if the total number of free allowances exceeds the EU ETS cap. The CSCF will reduce the level of allowances allocated to individual installations for free by equal proportions, until the total free allocation is equal to the EU ETS cap.
40. The diagram below (Figure 1) shows the assumptions for projected changes in emissions used in this impact assessment<sup>13</sup>.

Figure 1: Projected change in emissions over the period 2011-2020 for Ceramics, Minerals, Hospitals and other sectors



41. Installations that will emit at levels greater than the amount they receive in free allowances (if any) can choose to either undertake abatement or purchase allowances from the market. Table 2 below illustrates the expected emissions and abatement for UK small emitters and hospitals which have selected to opt out of the EU ETS over the period 2013 to 2020. The cost of non-

<sup>13</sup> Projected emissions for mineral products (48 installations) were taken from the DECC's Emission Projections model, with "non-metallic minerals production" used as a proxy for the sector. Projected emissions for the ceramics sector (44 installations) were taken from Bloomberg New Energy Finance's Global Energy and Emissions Model. No projections were available for other sectors. We therefore assumed no growth in emissions from 2008-10 average levels

administrative compliance (the cost of undertaking abatement and purchasing EUAs) is then calculated<sup>14</sup>.

Table 2: Compliance and administration costs to UK small emitters and hospitals under a 'do nothing' scenario (Option 1).

<b>Option 1 – do nothing (all costs over 2013-2020 expressed in Present Value terms in 2012 prices)</b>	<b>Total</b>
Number of installations	243
Estimated Emissions without abatement 2013-20 (MtCO <sub>2</sub> )	16.0
Estimated Abatement (MtCO <sub>2</sub> )	0.07
Free allocation MtCO <sub>2</sub>	8.75
EUAs purchased (MtCO <sub>2</sub> )*	7.15
Abatement costs (£m)	0.2
EUA Purchase costs (£m)	41.2
<b>Total compliance costs (£m)</b>	<b>41.4</b>
<b>Total administration costs (£m)</b>	<b>13.7</b>

\* (Emissions – Abatement - Allocation)

42. Small emitters also face administrative costs associated with participating in the EU ETS. Based on a study carried out for DECC surveying 178 installations (55% of which were emitters of less than 25ktCO<sub>2</sub>), these administrative costs have been estimated at approximately £7,600<sup>15</sup> per installation per annum (£8,200 in 2012 prices<sup>16</sup>). Included in this figure are a range of costs faced by operators in meeting their administrative obligations including monitoring and reporting, third party verification and other internal costs such as understanding the requirements of the EU ETS.
43. The requirement that annual reports are verified by an independent third party represents one of the largest EU ETS administrative costs. The average annual cost of verification for a small emitter, including verifier fees and supporting verifier activity, is £2,600<sup>17</sup> (£2,800 in 2012 prices).
44. The total administration costs also include fees paid to regulators to cover ETS implementation costs. For example, regulators charge ETS operators to recover the costs of issuance or variation of an emissions permit (including MRV requirements) and annual subsistence fees (Table 3).

<sup>14</sup> Estimates for allocation levels and historic emissions have been derived from data collected from installations in order to submit the UK's National Implementation Measures for Phase III.

<sup>15</sup> Estimates taken from Aether (2010) work for DECC. Full report can be found at [http://www.decc.gov.uk/en/content/cms/emissions/eu\\_ets/publications/publications.aspx](http://www.decc.gov.uk/en/content/cms/emissions/eu_ets/publications/publications.aspx)

<sup>16</sup> Inflated to 2012 prices using ONS GDP Deflator (Quarters 1 and 2 only)

<sup>17</sup> Aether 2010

Table 3: Examples of administrative costs charged to UK operators by UK regulators<sup>18</sup>.

Charge type	Definition	Emissions (ktCO <sub>2</sub> )	Charge (£)
New permit	The regulator will estimate the emissions likely to be emitted by the installation in a calendar year, and installation will be charged accordingly. The charge covers the opening of a registry account.	Less than 50	1,340
		50kt - 500	2,500
		More than 500	5,970
Annual subsistence	The cost of ongoing management of a permit is recovered through the annual subsistence charge it also covers on-going use of the registry.	Non-emitter	980
		Less than 50	2,550
		50kt – 500	3,320
		More than 500	4,080
Permit variation	This charge will only be incurred by installations that require at technical assessment to carry a variation of the provisions of a permit		430

45. DECC estimates that the total paid in administrative costs by all the UK small emitters and hospitals opting out would be £13.7m (PV) between 2013 and 2020.

46. **Preferred Option: Eligible small emitter and hospital installations may choose to be excluded from the EU ETS over Phase III and be subject to binding emission reduction targets instead.**

47. The Preferred Option includes all 243 operators that chose to opt out and is a combination of Option 2 and Option 4 as set out in the Consultation IA. The costs and benefits of the Preferred Option are assessed relative to the 'do nothing' scenario set out in Option 1. The costs and benefits fall on 1) installations and 2) government (including regulators) and are examined in turn.

#### **Costs to installations**

48. The opt-out imposes two types of costs on installations: administrative costs and compliance costs.

#### **Administrative costs**

49. It is estimated that under the final preferred opt-out option the total net annual administration costs to individual UK ETS installations will fall by £2,800 (2012 prices) per installation<sup>19</sup>. This is as a result of not requiring third party verification. Annual administration cost savings are estimated to be the same, regardless of which approach for setting the target is chosen.

50. Third party verification is not required under the opt-out options, so verification costs are assumed to be zero.

51. All other administrative costs are assumed to remain substantially unchanged. The Environment Agency has consulted on fees and charges for 2013 - 2015 and these are proposed to be set at the same level as for small emitters that remain in the EU ETS.<sup>20</sup> Monitoring and reporting requirements for small emitters under the opt-out will be the same as for EU ETS installations, excepting a potentially small saving for some installations from a specific rule for monitoring of small emission sources. We have therefore assumed no change in monitoring and reporting costs.

52. There may be other small, non annual costs and savings for opted out installations. For example, they would not face one off fees associated with changes to registry accounts, i.e. a change in

<sup>18</sup> For example, [http://www.environment-agency.gov.uk/static/documents/Business/ETS\\_scheme\\_2011-12.pdf](http://www.environment-agency.gov.uk/static/documents/Business/ETS_scheme_2011-12.pdf) Charges in Northern Ireland vary slightly: the fee for a new permit (50-500ktCO<sub>2</sub>) is £1357, with annual subsistence fees of £2584 [http://www.doeni.gov.uk/niea/pollution-home/emissionstrading/fees\\_and\\_charges-3.htm](http://www.doeni.gov.uk/niea/pollution-home/emissionstrading/fees_and_charges-3.htm)

<sup>19</sup> This figure was estimated from discussions with the Environment Agency and based on their experience as regulators in UK carbon markets.

<sup>20</sup> <https://consult.environment-agency.gov.uk/portal/ho/finance/charges2012>

the authorised representative (£55) but there may be additional short term costs associated with learning the requirements of the opt-out scheme. These are likely to be small given that the scheme largely operates under the same rules as the EU ETS and almost 80% of eligible installations are EU ETS incumbents. Moreover, these costs will be minimised through the provision of specific guidance for opted out installations to help them understand the requirements of the scheme.

*Option 2: Target set according to the preliminary level of EU ETS Phase III free allocation*

53. For the 12 installations who have selected to opt out in this way, administrative savings for these installations amount to an estimated £0.23m (PV) over the period 2013 to 2020.

*Option 4: Target set according to historic emissions*

54. This approach to setting targets was by far the most popular option with 231 small emitters choosing to opt out with targets set according to historic emissions. Total administrative cost savings for these installations amount to an estimated £4.44m (PV) over the period 2013 to 2020.
55. Overall administrative costs savings accrued for all 243 installations is estimated to be £4.7m (PV) between 2013 and 2020.

### **Compliance costs**

56. Opted out installations will need to undertake abatement in order to comply with their emission reductions target. Installations that fail to comply will be required to pay a penalty for any emissions over their target level. These compliance costs are set out in more detail below in respect of the two approaches for setting targets.

*Option 2: Target set according to the preliminary level of EU ETS Phase III free allocation*

57. This option for setting installation targets has been designed to mimic the EU ETS except in respect of the administrative requirements and trading and surrender of allowances. The level of the target is the same as the level of free allocation under the EU ETS. The exception to this is where the Cross Sectoral Correction Factor (CSCF) is applied in the EU ETS<sup>21</sup>. Under these circumstances, the costs of compliance could be lower for opted out installations compared to the EU ETS (Option 1) because the CSCF would reduce the number of allowances allocated to ETS installations for free and in effect, increase the stringency of their effort.
58. For the 12 installations that have selected to opt out and have their target set at the preliminary level of Phase III free allocation, the net effect on their compliance costs relative to the 'do nothing' scenario, is zero. The reason is that whilst these installations will see compliance savings from no longer having to purchase EU ETS allowances (estimated to be £0.03m over the 2013-2020 period), they are also faced with the prospect of penalties if emissions exceed their target.

*Option 4: Target set according to historic emissions*

59. Under this option targets are set according to the installation's historical emissions with regards to the period 2008-2012. The average emissions over this period are reduced by 5.22% in line with the reduction in the overall EU ETS cap to give an emissions level for 2013. The targets then decline by 1.74% of the baseline per year over the period 2013-2020 (again in line with annual reductions in the overall cap).

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<sup>21</sup> The application of the CSCF is highly uncertain and will depend on the levels of free allocation in all other Member States. Its application be established in 2012. Bloomberg New Energy Finance estimate that the CSCF will not apply until 2019 and will only marginally reduce free allocation in 2019 and 2020. If these figures are correct, they will not affect the robustness of the results in this IA. However some installations may be particularly risk averse and choose to opt out rather than facing a potentially declining number of emission allowances in the EU ETS.

60. For the 231 installations opting out under this approach, total compliance cost savings are estimated to be of the order of £4.3m per annum (£34.6m PV total) driven mainly by no longer having to purchase allowances under the EU ETS (£42m saving)<sup>22</sup> which is partially offset by penalties imposed for any emissions exceeding their target (£7.8m costs).
61. Table 4 sets out details of all the costs and benefits for the operators opting out of the EU ETS via each option. Overall, cost savings accrued by the businesses selecting to opt out via Option 2 are due entirely to changes to the administrative charges<sup>23</sup>. In respect of Option 4 the key driver of cost savings to businesses is a result of reduced compliance costs from no longer having to purchase ETS allowances. Consequently, overall total savings for all the 231 UK installations in question are estimated to be £39m over the period 2013-20.

Table 4: Summary of impacts on emissions, compliance and administration costs to UK small emitters and hospitals opting out of the EU ETS.

Preferred Option - Combination of Option 2 and Option 4 (all costs Present Value in 2012 prices)	Preferred Option		
	Option 2 Allocation	Option 4 Historic Emissions	Total (rounded)
Number of installations opting out	12	231	243
Estimated Emissions of opted out installations (Mt)	0.3	15.7	16
Total Compliance Cost relative to Option 1 (£m)*	0.0	-34.6	-35
<i>of which:</i>			
(i) Cost change from no longer purchasing EUAs (£m)	0.0	-42.0	-42
(ii) Penalties paid for emissions over target (£m)	0.0	7.8	8
Total Admin Costs relative to Option 1 (£m)	-0.2	-4.4	-5
Net impact on Business (£m)	0.2	39.0	39

\*Including savings from abatement costs (£0.4m)

22 There is an estimated additional £0.4m reduction in abatement costs. See section on Greenhouse & Carbon Target Costs for further detail

23 The carbon price could in theory lower as a result of this measure, given that installations opting out were expected to be net buyers of allowances. However the effect should be minimal (given the size of those opting-out compared to the emissions remaining in the EU ETS). This effect has not been estimated.

## Costs to Government/Regulators

62. Government and regulators face three costs and benefits of the EU ETS: the administrative costs of running the scheme, revenues raised from auctioning allowances and the governmental liability in terms of Carbon Budgets management. The effect of these options is discussed in turn.

### *Administrative costs to government*

63. The Environment Agency, Scottish Environment Protection Agency and Northern Ireland Environment Agency and DECC are responsible for administering and enforcing the EU ETS and will also be responsible for implementing the UK's voluntary opt-out scheme (the Preferred Option). Regulators charge fees to operators in the EU ETS to recover the costs of implementing the system. Hence any reduction in costs will also result in a reduction in charges the installations face – thus the change in regulator costs and revenues will be neutral while installations opting out will face lower administrative charges, as outlined above.

64. Under the Preferred Option, regulator costs are expected to fall as opted out installations will no longer be required to hold a registry account or surrender allowances and the regulator will no longer be required to maintain these accounts. Regulator costs will increase as a result of increased auditing effort in implementing the risk based auditing programme. The expected changes in costs and fees are set out above in the fees to regulators section.

65. For the purpose of this impact assessment, it is assumed that all costs to the regulators are variable, so a reduction in the number of installations being regulated will not affect the charges to other installations. In practice, there may be some fixed costs associated with running the EU ETS. Under such a scenario, a reduction in the number of ETS installations may result in increased charges to ETS operators to cover the fixed costs. Thus the savings to business may have been overestimated in this analysis.

### *Reduction in fiscal revenues from the EU ETS / increase in fiscal revenues from the opt-out measure*

66. In Phase III around 60% of allowances will be auctioned across the EU. The Commission has indicated that the UK will receive 10.2% of all auction rights, in line with the UK's share of historical EU ETS emissions (2005-2007)<sup>24</sup>. Table 5 presents DECC estimates of the reduction in auction revenues to UK government from auctioning allowances to EU ETS participants (including those outside the UK) as a result of the estimated number of installations opting out in both of the options<sup>25</sup>.

67. In order to estimate the penalties installations pay<sup>26</sup> we have looked at the difference between their projected emissions (minus estimated abatement undertaken in the option) and their target, and multiplied this by an amount equivalent to the EU ETS carbon price (see Table 7).

68. The overall net impact to the UK exchequer of the Preferred Option is positive. This is because;
- a. The reduction in the UK auction pot is only 10.2% of the reduction in the overall EU ETS auction pot; and more significantly,
  - b. Any installation with emissions above their allocation will pay a penalty directly to the UK exchequer instead of purchasing allowances from other installations across the EU,

<sup>24</sup> Our understanding is that the total (EU) auction pot is likely to decline by the amount of auction allowances that were associated with the relevant installations. So if installations considered at risk of carbon leakage opt out, there will be no decline in the auction pot as there are no auction allowances associated with these installations.

<sup>25</sup> DECC Carbon values for appraisal have been used to estimate the loss in revenues and the penalties. The average price of carbon value over the period 2013-20 is £6.70/ tCO<sub>2</sub> (2012 prices)

<sup>26</sup> For installations the penalties under the opt-out represent a transfer in payment. Under the EU ETS installations have to purchase allowances for emissions over their free allowance allocations. Under an opt-out these payments no longer go to market participants but rather are collected by HMG. These figures account for the fact that industry will undertake some levels of abatement under all options as detailed above.

69. Under the Option 2 Allocation the revenue raised from penalties is lower than the reduction in revenues raised from auctions, so the net impact on fiscal revenues is negative

Table 5: Estimated changes in fiscal revenues to UK government over the period 2013-2020 under the Preferred Option (2 and 4) compared to "do nothing" (Option 1).

Preferred Option £m (2012 prices) All NPV	Change in fiscal revenues from the EU ETS	Fiscal revenues from the opt- out	Net impact on fiscal revenues
Option 2 Allocation	-0.09	0.03	-0.07
Option 4 Historic Emissions	-2.53	7.86	5.33
<b>Total</b>	<b>-2.62</b>	<b>7.89</b>	<b>5.26</b>



## Greenhouse Gas & Carbon Target costs

### *Carbon budgets management – lost abatement*

70. The penalty per tonne of CO<sub>2</sub> for missing the target will be set in line with the EUA price. Any installation with expected emissions above their target will face the same incentive to abate as if they were in the EU ETS; in such a situation, one would expect the installation to undertake abatement if the cost of abatement is less than the carbon price and to pay the penalty if the cost of abatement was above the EUA price.
71. Unlike in the EU ETS, installations with emissions at or below their target will not be able to gain financially from lowering their emissions even further and thus will not face the same incentive to abate. Hence in all of the options considered, the incentive to abate is limited to emissions above the target, unlike the EU ETS, in which rational firms should undertake any abatement costing less than the carbon price, regardless of their level of emissions.
72. Therefore, the policies will produce the same level of emission reductions as long as cost effective abatement potential is equal to or not greater than effort required by the target. The tougher the target set under the preferred option, the more emissions will be subject to an incentive to abate and the less risk that there will be “lost abatement” relative to the EU ETS.
73. In order to assess the amount of abatement undertaken in each option, this IA has examined the difference between modelled emissions with and without a carbon price to look at the amount of abatement brought on by the carbon price<sup>27</sup>. The amount of abatement is then applied as a percentage to business as usual emissions. This results in an implicit assumption that a defined percentage of abatement occurs for emissions above a target level. The level of ‘lost’ abatement has been estimated by considering the number of installations with targets that are set above their forecast level of emissions. It is assumed that these installations will not undertake any abatement and thus the emission reductions that would have been brought on by the EU ETS may not be realised.
74. This approach has been used because marginal abatement cost data is not available for the small emitter subset. Table 6 below shows the estimated ‘lost’ abatement for 2013 to 2020 when compared to that undertaken in the EU ETS. These figures compare to estimated abatement of 0.07 MtCO<sub>2</sub> in the EU ETS from installations eligible to opt out and equates to a value of £0.4m in abatement cost savings.

Table 6: Lost abatement for 2013 to 2020 under the Preferred Option (2 and 4) compared to that under the “do nothing” (Option 1).

‘Lost’ abatement (MtCO <sub>2</sub> e)	Preferred Option		
	Option 2 Allocation	Option 4 Historic Emissions	Total
Central estimate	0.0	0.07	0.07

<sup>27</sup> For the ceramics sector, it is estimated that the carbon price reduces emissions by 2.5% below the level of emissions without a carbon price. This was estimated from the Bloomberg New Energy Finance GE<sup>2</sup>M model. For all other sectors, the level of abatement resulting from the carbon price was estimated to be 0.1% lower, based on the estimated change in UK industrial emissions with and without a carbon price in the DECC energy model. While not ideal, the use of estimated abatement from different sources is justifiable as it is important that the abatement potential is estimated consistently with the BAU projections.

*Impact on the costs of the liability in terms of UK carbon targets*

75. While emissions in an opt-out scheme are still subject to a carbon price, they fall outside the EU ETS cap. For UK carbon budgets accounting and carbon accounting under the EU Effort Share Decisions, emissions from the UK opt-out scheme for small emitters and hospitals will shift to the non-traded sector.
76. In moving emissions from the EU ETS to the non traded sector (NTS), the overall allowed EU emissions will remain constant – any reduction in the overall EU ETS cap will be exactly offset by an increase in the UK's targets for the NTS under the EU's Effort Sharing Decision (ESD). This ensures that the overall environmental ambition of the Climate and Energy Package is maintained. However the shift in emissions does have an impact on the UK's carbon budgets and the costs to the UK of meeting greenhouse gas reduction targets.
77. The overall EU ETS cap for Phase III is determined on the basis of an average annual reduction from the Phase II average annual cap. To account for small emitters being opted out of the EU ETS, this notional "Phase II cap", which is used to set the Phase III cap, will be adjusted downwards<sup>28</sup> in line with historic (2008-10) emissions for the installations being opted out of the EU ETS.
78. The UK's GHG target for the Non Traded Sector, as determined by the EU ESD, will increase by the same amount as the EU ETS cap is reduced. Note that this increase in ESD target is only dependent on the number of installations that are opted out and is not dependent on the targets set for specific installations.
79. Based on the projections outlined above, it is estimated that the emissions moved to the UK's Non Traded Sector will be greater than the increase in the NTS budget under the ESD, even after abatement is taken into account. This implies an increase in the required effort (abatement) from elsewhere in the Non Traded Sector such as additional abatement from the transport, residential or agricultural sectors.<sup>29</sup> Any impacts to business associated with this effort will be assessed separately as part of the development of new policies as required.
80. This increase in NTS effort has been valued at the marginal cost of abatement for the NTS<sup>30</sup> (an average cost of £62/tCO<sub>2</sub> over 2013 – 2020 (2012 prices). Note that it is not possible to say exactly where this cost will fall, as government will have a number of policy options to achieve greater abatement and it is not clear which option would be followed. In this impact assessment two methods for estimating the change in NTS effort have been used, thereby creating a range to reflect the uncertainty.
81. The first method assumes that the EU's GHG targets provide the primary constraint on the UK's emissions either because UK Carbon Budgets are adjusted in line with the Commission's adjustment of the UK's non-traded sector target under the Effort Share Decision (ESD) or because the EU target is more stringent than UK carbon budgets (see Table 7).
82. The second method for valuing the change in liability to the UK is to assume that the carbon budgets provide the primary source of binding effect on the UK's emissions and are not adjusted. In such an instance, any increase in emissions under carbon budget accounting<sup>31</sup>, must be made

<sup>28</sup> Note the actual Phase II cap will not change as a result of this policy. It will simply be the notional Phase II cap which is used to determine the Phase III cap which will be adjusted. This is identical to the way the Phase III cap has been adjusted to include new sectors which are not covered by the EU ETS in Phase II.

<sup>29</sup> Note there is also a reduction in the EU ETS effort (quantity of allowances purchased). However this reduction is already captured in the business benefits so is not included here to avoid double counting.

<sup>30</sup> [http://www.decc.gov.uk/en/content/cms/about/ec\\_social\\_res/iag\\_guidance/iag\\_guidance.aspx](http://www.decc.gov.uk/en/content/cms/about/ec_social_res/iag_guidance/iag_guidance.aspx).

<sup>31</sup> Carbon budgets account for EU ETS emissions by simply looking at the total number of (free and auction) allowances the UK receives.

up through additional effort in the NTS<sup>32</sup>. This figure is higher than method 1 as the reduction in the number of EU ETS allowances the UK receives as a result of the opt out, is less than the increase in NTS targets under the EU's Effort Sharing Decision. The results of this valuation for each option are shown below in Table 8.

83. The net fall in UK traded sector emissions is estimated to be 6.7MtCO<sub>2</sub> which is the difference between the change in traded sector emissions of 15.9MtCO<sub>2</sub> and the decrease in the UK's traded sector cap of 9.2MtCO<sub>2</sub>.

Table 7: Valuing emissions on the assumption that carbon budgets are adjusted in line with EC adjustment of the UK Effort Share Decision target (Method 1).

Preferred Option	Projected change in NTS emissions (MtCO <sub>2</sub> ) 2013-2020	Change in UK NTS target* (MtCO <sub>2</sub> ) 2013-2020	Change in NTS abatement effort (MtCO <sub>2</sub> ) 2013-2020	PV of costs of increased abatement effort 2013-2020 nearest £m (2012 prices)
Option 2 Allocation	0.3	0.3	0.03	2
Option 4 Historic Emissions	15.6	14.3	1.31	75
<b>Total</b>	<b>15.9</b>	<b>14.6</b>	<b>1.34</b>	<b>77</b>

\* Under the EU's Effort Sharing Decision

Table 8, Valuing emissions on the assumption that carbon budgets are not adjusted. Any change in UK emissions (as accounted for in carbon budgets) results in a liability for the non-traded sector (Method 2).

Preferred Option	Projected change in NTS emissions (MtCO <sub>2</sub> ) 2013-2020	Change in UK traded sector emissions cap* (MtCO <sub>2</sub> ) 2013-2020	Change in NTS abatement effort (MtCO <sub>2</sub> ) 2013-2020	PV of costs of increased abatement effort (2013-20) nearest £m (2012 prices)
Option 2 Allocation	0.3	-0.6	-0.3	-16
Option 4 Historic Emissions	15.6	-8.6	7.0	352
<b>Total</b>	<b>15.9</b>	<b>-9.2</b>	<b>6.7</b>	<b>336</b>

\* As accounted for under carbon budgets

84. Carbon budgets for 2008 to 2022 are set in UK legislation but may be amended in the future, for example in the event that the EU moves to a more ambitious 2020 target and following subsequent effort share negotiations amongst Member States. In such a situation, the carbon budgets are also likely to be adjusted to ensure that they align with the EU targets up until 2020.

85. In the event that the UK's share of the EU's GHG targets are more stringent than the UK's legislated carbon budgets<sup>33</sup>, method 1 for estimating the increase in effort should be used. This is because in such a scenario, the UK GHG emissions will be limited by the EU targets, with

<sup>32</sup> Because under carbon budget accounting rules, the UK is unable to reduce its emissions in the EU ETS. It is this reason, why the UK may wish to adjust its carbon budgets to align them with the actual number of ETS allowances the UK will receive.

Carbon Budgets not placing an additional constraint on UK emissions. Internal analysis suggests that it is more likely that targets will bind and therefore method 1 is used as the central estimate of the GHG costs.

### Summary of costs and benefits of the Preferred Option

86. The following tables summarise the costs and benefits of Options 2 and 4 relative to Option 1 (do-nothing), including how these are distributed between businesses and government/regulators.
87. Table 9 provides a breakdown by costs and benefits to the UK as a whole, whereas Table 10 uses a sectoral approach comprised of the net impact on UK operators and on the UK Government.

Table 9: Summary of costs and benefits to UK of the Preferred Option for a voluntary opt-out for eligible UK installations compared to the "do nothing" scenario (Option 1).

	Preferred Option					
	Option 2 Allocation		Option 4 Historic Emissions		Total	
Costs/benefits (2012 £m)	Average Annual	Total (NPV)	Average Annual	Total (NPV)	Average Annual	Total (NPV)
Change in EUA auction revenues	-0.01	-0.09	-0.3	-2.5	-0.3	-2.6
Change in NTS abatement effort	-0.23	-1.82	-9.4	-75.2	-9.6	-77.1
<b>Total impact on costs to UK</b>	<b>0.24</b>	<b>1.92</b>	<b>9.7</b>	<b>77.8</b>	<b>10.0</b>	<b>79.7</b>
Change in admin costs for operators	-0.03	-0.23	-0.6	-4.4	-0.6	-4.7
Change in cost of ETS EUA purchases	-0.003	-0.027	-5.2	-42.0	-6.2	-42.0
<b>Total impact on savings/benefits to UK</b>	<b>0.03</b>	<b>0.26</b>	<b>5.8</b>	<b>46.4</b>	<b>6.7</b>	<b>46.7</b>
<b>Change in TOTAL NPV</b>	<b>-0.21</b>	<b>-1.66</b>	<b>-3.9</b>	<b>-31.4</b>	<b>-3.2</b>	<b>-33.0</b>

88. The loss of EUA auction revenues and the cost of a fall in non traded sector abatement effort is mitigated to some extent by the reduction in administrative and EUA purchase costs for operators. Nevertheless the overall impact of the policy is a reduction in the net present value relative to option one of £33m.

<sup>33</sup> When the carbon budgets were set in 2009, the intention was to align them with the UK's likely share of the EU's target. However there were uncertainties regarding key assumptions which mean that the targets will not necessarily exactly align.

Table 10: Summary of distribution of costs and benefits to operators (businesses) and government/regulators of the Preferred Option for a voluntary opt-out for eligible UK installations compared to the "do nothing" scenario (Option1).

	Preferred Option					
	Option 2 Allocation		Option 4 Historic Emissions		Total	
Costs/benefits (2012 £m)	Average Annual	Total	Average Annual	Total	Average Annual	Total
Change in Admin costs	-0.03	-0.2	-0.55	-4.4	-0.6	-4.7
Change in Compliance costs	-0.00	-0.0	-4.32	-34.6	-4.3	-34.6
<b>Net impact on UK operators' costs</b>	<b>-0.03</b>	<b>-0.2</b>	<b>-4.87</b>	<b>-39.0</b>	<b>-4.9</b>	<b>-39.2</b>
Change in auction revenue	-0.01	-0.1	-0.32	-2.5	-0.3	-2.6
Change in penalty revenue	0.00	0.0	0.97	7.8	1.0	7.8
<b>Net impact on government costs</b>	<b>0.01</b>	<b>0.07</b>	<b>-0.66</b>	<b>-5.27</b>	<b>-0.65</b>	<b>-5.2</b>
Change in abatement costs	0.00	0.0	0.05	0.4	0.0	0.4
<b>GHG costs (NTS liability)</b>	<b>0.23</b>	<b>1.8</b>	<b>9.41</b>	<b>75.2</b>	<b>9.6</b>	<b>77.1</b>
<b>Change in TOTAL NPV</b>	<b>-0.21</b>	<b>-1.66</b>	<b>-3.9</b>	<b>-31.4</b>	<b>-3.2</b>	<b>-33.0</b>

89. This table clearly shows the significant reduction in costs that will benefit UK operators who are the main beneficiaries of this policy. There is also some benefit to Government where the increase in revenues from penalties outweighs the reduction in auction revenues.

## Sensitivities/Risks/Assumptions

90. The above analysis is reliant on a number of assumptions: most notably the change in emissions for small emitters and the carbon price. Table 11 below shows the high-level results using high and low carbon price values from DECC's traded carbon values<sup>34</sup>.

Table 11: Total impact of Preferred Option under different Carbon Price Scenarios

NPV of Preferred Option Relative to Option 1 £m for Low, Central and High Carbon Prices	Carbon Price Scenario		
	Low	Central	High
Total Impact on Business Costs	-4.7	-39.2	-75.7
Total Impact on Government Costs	-0.0	-5.2	-10.7
Change in Abatement Costs	0.0	0.4	0.8
Change in GHG Costs	38.5	77.1	115.6
<b>Overall Change in NPV</b>	<b>-33.9</b>	<b>-33.0</b>	<b>-30.0</b>

*\*As a result of rounding figures in columns do not necessarily add up to totals*

91. From this, it can be seen that higher carbon prices increase the savings to business and the revenues to government. However higher carbon prices also increase the liability of increasing NTS emissions, so the overall impact of higher carbon prices is to reduce the overall NPV of the policies.

### Competitiveness Impacts in the UK

92. A key rationale for this policy is to avoid putting UK industry at a competitive disadvantage compared to the rest of the EU. There is a risk of creating intra-sectoral distortions within the EU if different approaches are adopted. These avoided costs have not been quantified.
93. This measure may also have a negative impact on competition within the UK. Under the rules of the Directive, new entrants will miss the opportunity to opt-out of Phase III. This could potentially create a barrier to market entry for sectors where existing competitors benefit from an opt-out scheme that is no longer available. This could also be a barrier to expansion. No consultation responses on these impacts were received and it has not been possible to quantify this effect.

### Business Costs

94. Compared to the current regulatory framework, offering small emitters and hospitals an opt out will lead to significant benefits through administrative savings and savings on emissions abatement costs for these operators.
95. Under the Preferred Option (2 and 4), there are total estimated business savings of £4.9m per year, amounting to £39.2m (NPV) when assessed over the 8 year appraisal period to 2020.

<sup>34</sup> [http://www.decc.gov.uk/en/content/cms/about/ec\\_social\\_res/analytic\\_projs/carbon\\_values/carbon\\_values.aspx](http://www.decc.gov.uk/en/content/cms/about/ec_social_res/analytic_projs/carbon_values/carbon_values.aspx)