



Department
for Environment
Food & Rural Affairs

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Emerging Findings from Defra's Regulation Assessment

First update covering 2012

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Contents

Executive Summary	1
Research Approach	4
Overview	4
Information included	6
Research stages.....	6
Estimating costs and benefits.....	8
Emerging Findings	9
Early trends	10
Number of EU regulations and EU cost.....	13
Estimated net cost to business.....	13
Impacts to other parties	13
Estimated benefit-cost ratios	13
Reconciliation with One in One Out.....	15
Summary tables	20
Regulations covered.....	26
Direct costs and benefits to business	26
Total direct costs	26
Direct benefits to business	27
Estimated Net cost to business	27
Direct cost by sector.....	27
Proportion of direct costs accounted for by EU or international regulation	28
Administrative burden.....	28
Direct costs other than to business	28
Direct benefits other than to business	28
Economic and environmental/social	29
Progress against Next steps	29
Review and improve the assessment.....	29
Using the assessment	31
Adaptation to Climate Change	33
Agricultural Management	36
Air Quality	42
Animal Health and Welfare	47

Biodiversity.....	58
Chemicals and GMOs.....	63
Cross-cutting.....	67
Flood Management.....	70
Food.....	73
Land Contamination and Soils.....	77
Landscape and Outdoor Recreation.....	81
Marine.....	85
Noise and Nuisance.....	94
Plants.....	98
Sustainable Products.....	102
Waste.....	105
Annex A – 2011 Baseline Adjustments.....	114

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Executive Summary

The regulatory stock assessment is an ongoing assessment of the costs and benefits of the stock of Defra's regulations. This is the first update covering the period 2012 to 2021 and is presented in 2012 £s. The assessment covers all the regulations for which Defra is responsible where business or civil society (hereafter, references to business should be taken to include civil society) are potentially required to take some action.

Assessing how overall benefits and costs of regulation change is important. We therefore updated the baseline with any new data to ensure that trends reflect genuine changes over time rather than just issues of scope or updated estimates.

Overall benefits and costs of Defra's regulation

Overall there was a small increase in the estimated benefit-cost ratio of Defra's regulation from 2.9 in 2011 to 3.0 in 2012. Whilst there is some uncertainty around the level of this ratio (see below), the increase reflects the introduction of new regulations and the removal of old regulations, with the same estimates used for ongoing regulations. Where we have new or revised data which should have been included in the 2011 assessment, we have made adjustments to the 2011 baseline.

Costs and origins of regulation

This update covers 428 sets of regulations, of which 53% are derived from the EU or international legislations, the remaining 47% are entirely domestic.

The assessment found that the sum of estimated direct cost to business was £6bn and that estimated direct benefits to business are £2bn p.a., giving an estimated net cost to business of £4bn p.a. The direct cost to business (£6bn) is made up of policy costs (86%) and admin burden (14%). Policy costs are the substantive costs of achieving the regulations' results and the admin burdens are the cost to business associated with information obligations such as filling in forms and keeping records. EU and international regulations account for 79% of the estimated (£6bn) direct cost to business. Direct costs to other parties, which is mainly public expenditure, are just above £1bn p.a.

Benefits of regulation

In terms of the value of the benefits generated, where currently monetised, these are estimated at about £10bn p.a. and accrue to parties other than business. These are the benefits to society more widely, and include financial savings to government, environmental benefits and health benefits. The picture for these benefits to parties other than business more widely is partial; estimates are based on 13 of the 17 policy areas. Further, within those policy areas the benefits for only some of the regulations have been assessed.

Changes in the benefits and costs of regulation in 2012

The early insights from comparing 2012 with the 2011 adjusted estimates show that overall; EU derived direct costs to business are estimated to have increased by £73m

p.a.,¹ while at the same time the number of EU regulations fell by six, with sustainable products seeing the largest fall.²

The estimated net cost to business increased by £40m p.a. between 2011 and 2012. This was due to 1) a saving to business of £3m p.a. in scope of One in One Out (OIOO). The OIOO is a Cross Government initiative aimed at bringing the costs of regulation under control. The rule means that every regulation brought in by a government department needs to be matched by savings to business, which may be achieved by removing or recasting existing regulations; and 2) an increase in costs to business of £43m p.a. that was predominantly out of scope of OIOO; of which £42m p.a. of the net costs to business are EU derived. Changes which are out of scope of OIOO can include other regulatory changes such as changes in fees, or non-legislative changes such as simplifying guidance, the removal of transitional impacts or other changes such as behaviour change or changes to market practices such as a regulated substance is no longer used.

The benefits to parties other than business increased by £409m between 2011 and 2012 mainly due to an increase in benefits from sustainable products regulations, whilst costs to other parties increased by £12m p.a.

Reliability of underling evidence (on costs)

The available evidence, used to estimate these impacts, is better in some cases than others and there is significant uncertainty for some of the estimates. To reflect this uncertainty in a consistent way, those providing data rated the quality of evidence, for the costs to business only, according to a five point scale from one to five; with one meaning that impacts are not fully understood and hard to predict, and five meaning that impacts are well understood and all or almost all estimates are evidenced by real-world data. The average reliability rating for the costs to business, used to estimate the indicator, is 3.2; meaning that on average impacts are well understood, but estimates rely largely on expert judgement informed by some real-world data. We are seeking to expand the reliability rating to other variables feeding into the indicator in the 2013 update. The indicator presents central or best estimates with reliability ratings for cost to business rather than attempting to construct ranges for estimates.

Method and uncertainties in estimating benefits and costs

The estimated benefit-cost ratios (and all other figures estimated here) are based on point estimates which, in most cases, are based on the benefits and costs contained in Impact Assessments produced alongside the implementation of the regulation. These figures each have ranges around the estimates reflecting uncertainty in the underlying evidence.

The uncertainty attached to the costs and more especially the benefits is explored in the individual Impact Assessments. For simplicity we have not captured this uncertainty in the regulatory stock assessments to date and is something we want to

¹ This was driven by an increase of £60m p.a. in the costs from EU regulations on sustainable products. EU regulations also increased costs by £6m p.a. in marine due to the Marine Strategy Framework Directive, and by £7m p.a. in animal health and welfare due to a number of regulations.

² For sustainable products, five EU Directives were revoked resulting in an increase in benefits to other parties of £380m p.a.

explore in the future. Producing a range for each of the regulations which will give us a better feel for the uncertainty and the impact this has on the overall measure.

In general, benefits estimates are only available for some regulations and the benefit-cost ratios estimated only include those regulations for which both benefits and cost estimates are available, and there are no significant unmonetised impacts. Thus not all the impacts described below are included in the benefit-cost ratio. In practice, this meant that benefit-cost ratios were estimated for 13 of the 17 policy areas. Based on these policy areas, and keeping in mind the uncertainty in each area, the point estimate of the overall benefit-cost ratio is 3:0. This means that where £1 is spent on regulation (mainly by businesses and public authorities), there is a £3 return to society (mainly economic benefits to business and the public and environmental and health benefits). It seems likely that this ratio may understate benefits compared to costs as, even for those regulations where benefits have been monetised, it is normally the case that some, not all of the benefits, have been assessed; whereas generally all or most of the costs have been monetised.

Research Approach

Overview

This document summarises an ongoing assessment of the costs and benefits of the stock of Defra regulations that was originally completed and published in 2011. This is the first update; this report is the 2012 update. It covers all the regulations for which Defra is responsible where business or civil society (hereafter, references to business should be taken to include civil society) are potentially required to take some action. Information for each regulation covered is held in an excel database which continues to be improved and updated. The database enables more detailed analysis and interrogation than is summarised in this document.

The main changes compared with the 2011 edition are:

- **Adjustments to the 2011 baseline.** This edition takes into account a number of adjustments to the 2011 assessment (see Annex A). Given the ambitious scale of the assessment, some adjustments are to be expected. As the assessment becomes more accurate, it is expected that the number and scale of these adjustments will fall over time.
- **Defra's regulatory stock in 2012.** This update is an assessment of Defra's regulatory stock in 2012. This report identifies the changes to the stock of Defra's regulations from 2011. The assessment discussed in this report now includes those regulations that came into force during 2012 and excludes regulations that were revoked in the same year (see section 'Research Stages' for more detail).
- **Early trends.** In this first update of the regulatory stock assessment we present and discuss the early insights from comparing the 2012 data with the adjusted 2011 data (see section 'Early Trends').

Table 1 below summarises the key changes. In Table 1, the 2012 findings are compared with the adjusted 2011 figures.

Table 1: Early trends 2011-2012, where monetised, by Defra policy area

Policy area	Number of EU regs	Number of domestic regs	Net costs to business, £m p.a.	Admin burden %	Benefit-cost ratio ³	Reliability of cost estimates (1-5)
Adaptation to climate change	0	0	-1	-15%	n/a	0
Agriculture management	0	0	0	0%	n/a	0
Air quality	0	0	-1	0%	0.0	0
Animal health and welfare	0	0	5	-2%	0.1	0
Biodiversity	0	-1	0	0%	0.0	0
Chemicals and GMOs	0	0	-1	-7%	1.0	0
Cross-cutting	0	0	0	0%	0.0	0
Flood management	0	0	0	0%	0.0	0
Food	0	0	0	0%	n/a	0
Land and soil	0	0	0	0%	n/a	0
Landscape and outdoor recreation	0	0	0	0%	0.0	0
Marine	0	2	-22	-1%	0.0	0
Noise and nuisance	0	0	0	0%	0.0	0
Plants	0	0	0	1%	1.4	0
Sustainable products	-5	0	60	0%	0.4	-1*
Waste	-1	-1	1	0%	0.0	0
Water quality and quantity	0	1	-1	0%	0.0	0
Totals	-6	1	40	-1%	0.1	0**

* For Sustainable products the fall in the reliability rating is due to 2012 figures being provided for the whole policy area rather than by each regulation; this means that we cannot attribute the fall to a particular regulation (or regulations).

** Note that the total is not the sum of the reliability ratings since the total reliability rating equals (reliability rating for each regulation multiplied by direct cost to business for each regulation) divided by total direct cost to business for all regulations.

³ In general benefits estimates are only available for some regulations and the benefit-cost ratios reported here only include those regulations for which both benefits and costs estimates are available, and there are no significant unmonetised impacts. The two columns to the right show the total level of benefits and costs on which the ratio is based.

Information included

The following main categories of information are held on the database:

- **Direct costs to business.** The **policy costs** (the substantive costs of achieving the regulations' results, for example investing in pollution control equipment) and the **administrative burden** (the cost to business associated with information obligations such as filling in forms and keeping records) are identified separately.
- **Direct benefits to business.** These include the benefits resulting directly from action the regulations require accruing either to those taking the action or any others. This might include financial savings (for example from more efficient use of energy) or increased economic activity (for example from more rational use of marine resources).
- **Direct costs to other parties.** These will normally be the costs to regulators and other public agencies.
- **Other direct benefits.** This will include the direct benefits other than those accruing to business and civil society, such as financial benefits that accrue to households and contributions to a better environment, improved health and well-being.
- **Benefit-cost ratios.** This shows the overall comparison between benefits and costs taking account of all available monetised information in the four categories above.
- **Un-monetised impacts.** Some costs and benefits are harder to quantify and monetise, but are nevertheless important to understanding the impact of policy. The database therefore identifies, in narrative terms, those un-monetised impacts.
- **Apportionment of costs by business sector.** This shows how the direct costs to business and civil society fall by the different Standard Industrial Classification (SIC) codes.⁴
- **Whether EU/international or domestic.** This identifies whether regulations derive from EU (or other international) legislation or are entirely domestic. There is also a field to capture what proportion of the costs of EU/internationally-derived legislation is necessary to deliver the basic requirements. This proportion is based on analysts' judgement in the absence of existing analysis.
- **Regulator.** This identifies which regulator/s enforces the regulations.

The information above was provided for each regulation where available. In some cases – particularly where it is hard to separate out the effect of a single regulation – estimates were provided for the impact of a group of regulations.

Research stages

Building on the previous assessment which identified the stock of regulations, the first task focussed on identifying the changes to the stock of regulations i.e. which regulations were revoked and which were introduced.

This task proved more complicated in practice and decisions had to be made about when exactly a regulation is introduced and when it is revoked for it to count in the assessment.

⁴ www.statistics.gov.uk/statbase/Product.asp?vlnk=14012

Specifically, for regulations that were introduced, it was not clear when to count a regulation as being introduced. The uncertainty stems from there being legally two relevant dates 1) when the regulation was made i.e. when the regulation was officially published, or 2) when the regulation comes into force. In practice, some regulations have split commencement dates, with some provisions coming into force on one date and others on different dates. It was decided to include regulations when they come into force to be consistent with Defra-Lex an online and up to date list of all Defra legislation in force, to be launched April 2014.

For regulations that were revoked, the difficulty was that in some cases the regulation was not wholly revoked. In particular, regulations may have certain sections revoked or the regulation may be revoked only the Devolved countries. It was decided that a regulation would only counted as being revoked if the revocation:⁵

- Was for a complete regulation i.e. wholly revoked. Thus if a regulation was entirely revoked the number of regulations is reduced and the impacts of the regulation wholly removed. However, if a regulation is partially revoked, then the number of regulations remains unchanged but the impact of the partial revocation is captured, where estimates are available.⁶
- Where they are made for England, even though the regulation may remain extant in Wales, Scotland or Northern Ireland. It does not include revocations for Wales where made by Welsh Ministers but included in a composite instrument.

In practice, the change to the stock of regulations was identified using:⁷

- Defra's legal advisors identified regulations that were introduced or revoked between the publication of the 2011 assessment and December 2012. This information is regularly produced by Defra's legal advisers to answer parliamentary questions and the data was taken primarily from this source. These were then cross-checked with policy teams.
- Better Regulation Team looked at each repealed or revoked regulation on legislation.gov to identify if updated impacts were produced
- Policy teams and analysts helped identify new regulations which came into force by December 2012.

Once the regulations, impacting business, were identified, Defra economists and social researchers assessed the costs and benefits of the regulations identified – see next sub-section.

There then follows a Review by the policy teams responsible for regulations, before the Chief Economist sign-off.

⁵ Again, this is in line with the Defra-Lex methodology.

⁶ For the purposes of counting the number of regulations, revocations of individual or groups of provisions within a regulation that remains partially extant in England are not included in the assessment.

⁷ Going forward, the Defra-Lex will be used to identify regulations that have been repealed and revoked and Defra's Policy Tracker will be used to identify new regulations.

The next stages of work to improve the assessment are set out in the *Next steps* section.

Estimating costs and benefits

A method for assessing costs and benefits was developed with economists and social researchers across Defra and written up into a methods paper to ensure consistency of assessment. The main methodological issues covered were:

- **The counterfactual** (or baseline) against which costs and benefits are assessed. To ensure consistency of assessment, the notional counterfactual is a situation where none of Defra's regulations are applied from 2012 onwards.
- **The period over which impacts are assessed**, expected from 2012 for the next ten years. This means that this assessment excludes the benefits and costs that have already accrued or been incurred. For example, the assessment does not include impacts for a regulation which required action or investment in the past but does not require anyone to take any further action and where nothing is expected to change if the regulation were removed. For some regulations the impacts are estimated over more than 10 years so as not to skew the equivalent annual impact estimates; where this occurs it is generally in line with the Impact Assessment.
- **Geographic scope of the impacts:** The report covers impacts in the UK; this is in line with the geographic coverage of Impact Assessments. All the regulations in this assessment include England, and some may include the Devolved Administrations too.
- **The unit for measuring impacts** is millions of £s in annual equivalent terms – that is the equivalent arising on average in each of the next ten years. This enables consistent reporting of the impacts of those regulations that require different levels of expenditure – or lead to uneven benefits profiles - over each of the next ten years. Impacts are expressed in 2012 prices.⁸ Only direct – or 'first round' – impacts are included for consistency.
- **The coverage of impacts.** The assessment is not yet complete: the aim at this stage is to include an initial estimate for the direct costs to business for all regulations, and to provide as much information as readily available on the other impacts. One of the next steps – outlined below – is to start filling gaps.
- **The sources for estimates** (for both costs and benefits) vary widely depending on analysts' judgement of the most reliable estimates available. In summary:
 - These are most often Impact Assessments (or their predecessors: Regulatory Impact Assessments and Compliance Cost Assessments) where available, with adjustments made, for example to exclude one-off costs that have already been incurred.
 - Better information on actual impacts is sometimes available from post-implementation reviews, specifically commissioned research, for example to value environmental benefits, or, in the case of costs, from actual sector or company spending plans.

⁸ In the regulatory stock assessment, no adjustment is made for the present value base year i.e. impact estimates included in this assessment have differing present value base years. We believe that Defra's resource costs of correcting this will far outweigh the benefits, and will not result in significant changes to the impact estimates.

- Another source is the analysis within Defra to determine the value for money of Defra activity, such as the analysis used to inform the Spending Review and analysis done as part of Business Cases (which are required before any project is authorised).
 - Information on administrative burdens was available from an exercise carried out by Price Waterhouse Coopers in 2005 to establish the baseline of administrative burdens of all government regulation. This has been adjusted by estimated savings reported in Defra's Simplification Plans between 2005 and 2010. In some cases more recent estimates are available or more accurate estimates have been possible.
 - Given that our aim by the time of this publication was to have as complete an assessment of the direct costs to business as possible and, that in some cases, there are no published estimates available; analysts for each policy area have developed their own estimates based on available data and their specialist knowledge of the policy area.
 - Where possible, estimates are cross-checked with other sources – for example Defra's Cumulative Impacts of Forthcoming Farming Regulations.⁹
- **Reliability rating for the estimates of costs to business.** The available evidence is better in some cases than others and there is significant uncertainty for some of the estimates. In order to reflect this uncertainty in a consistent way, those providing information towards this assessment were asked to rate the quality of evidence according to the scale below. The assessment presents central or best estimates with reliability ratings rather than attempting to construct ranges for estimates. Analysts were asked to provide a reliability rating for each regulation's costs to business estimates. These were then weighted by direct costs to business to arrive at a reliability rating for each policy area.¹⁰ Reliability ratings are presented **only for the estimates of costs to business for now**; we will explore developing reliability ratings for benefits, in the next update. The reliability ratings are:
 - 5 – e.g. Costs very well understood and all or almost all estimates are evidenced by real-world data
 - 4 – e.g. Costs well understood and estimates are informed largely by real-world data or directly applicable research - or if not expert judgement
 - 3 – e.g. Costs well understood, estimates rely largely on expert judgement informed by some real-world data
 - 2 – e.g. Costs not fully understood – (e.g. some behavioural responses not clear) but all or most estimates informed by relevant experts
 - 1 – e.g. Costs not fully understood, hard to predict.

Emerging Findings

This report presents progress so far as work is still going on to improve estimates.

⁹ www.gov.uk/government/publications/cumulative-impact-of-regulation-on-farming-in-england

¹⁰ Specifically, the reliability rating for each policy was multiplied by the direct costs to business and then the total is divided by the direct costs to business.

Early trends

In this second update of the regulatory stock assessment we discuss the early insights from comparing the 2012 data with the adjusted 2011 data (see Annex B). These are shown in Table 2 below. The adjustments to the 2011 baseline are to be expected given the ambitious scale of the assessment; over time, it is expected that the number and scale of these adjustments to fall, as the assessment becomes more accurate. However, the adjustments will not disappear as we expect revisions due to better estimates for example from evaluations.

By adjusting the baseline for clarifications in scope or updated estimates, we ensure that the year on year changes reflect true changes over time such as the introduction of a new regulation or the removal of existing regulations.

These year on year changes do not capture the underlying uncertainty in the estimates, since the estimates used in this assessment are based on point (or best) estimates with no corresponding ranges. These point estimates are, in most cases, based on data taken from Impact Assessments which capture this uncertainty using ranges. Thus, all the point estimates in the assessment are subject to uncertainty and do not reflect changes in the statistical precision or the variability year on year. For the next update we will consider improving the estimates presented in the assessment by capturing the underlying uncertainty. Currently, the point estimates presented are our best estimates.

Table 2: Early trends 2011-2012, where monetised, by Defra policy area¹¹

Policy area	Number of EU regs	Number of domestic regs	Direct costs to business, £m p.a.	Direct benefits to business, £m p.a.	Net cost to business, £m p.a.	Costs to other parties, £m p.a.	Other benefits, £m p.a.	Admin burden %	Benefit -cost ratio ¹²	Benefits included in BCR, £m p.a.	Costs included in BCR £m p.a.	Costs EU ¹³	Reliability of cost estimates (1-5)
Adaptation to climate change	0	0	-1	0	-1	0	0	-15%	n/a	n/a	n/a	0	0
Agriculture management	0	0	0	0	0	0	0	0%	n/a	n/a	n/a	0	0
Air quality	0	0	0	1	-1	0	0	0%	0.0	0	0	0	0
Animal health and welfare	0	0	10	5	5	0	0	-2%	0.1	0	0	7	0
Biodiversity	0	-1	0	0	0	0	0	0%	0.0	0	0	0	0
Chemicals and GMOs	0	0	-1	0	-1	0	0	-7%	1.0	0	0	-1	-2
Cross-cutting	0	0	0	0	0	0	0	0%	0.0	0	0	0	0
Flood management	0	0	0	0	0	0	0	0%	0.0	0	0	0	0
Food	0	0	0	0	0	0	0	0%	n/a	n/a	n/a	0	0
Land and soil	0	0	0	0	0	0	0	0%	n/a	n/a	n/a	0	0
Landscape and outdoor recreation	0	0	0	0	0	0	0	0%	0.0	0	0	0	2
Marine	0	2	6	29	-22	12	0	-1%	0.0	0	0	6	0
Noise and	0	0	0	0	0	0	0	0%	0.0	0	0	0	0

¹¹ Please note that the figures in the tables of this report have been rounded.

¹² *Op. cit.* footnote 3.

¹³ As explained in the text below, this represents the costs of those regulations which derive from EU legislation. It does not yet deduct the costs of any domestic provisions within regulations which also transpose EU legislation.

nuisance													
Plants	0	0	0	0	0	0	29	1%	1.4	30	0	0	0
Sustainable products	-5	0	60	0	60	0	379	0%	0.4	381	64	60	-1
Waste	-1	-1	1	0.0	1	0	0	0%	0.0	0	0	0	0
Water quality and quantity	0	1	0	1	-1	0	0	0%	0.0	0	0	0	0
Totals	-6	1	75	35	40	12	409	-1%	0.1	412	64	73	0

EU regulations

Overall, EU direct costs to business increased by £73m p.a. between 2012 and 2011 (Table 2). This was driven by an increase of £60m p.a. in the EU costs for sustainable products. EU costs also increased by £6m p.a. in marine due to the Marine Strategy Framework Directive, and by £7m p.a. in animal health and welfare due to a number of regulations. These figures are the total costs associated with EU regulations. In due course, we will be looking to refine these estimates.

Table 2 shows that **overall, the total number of EU regulations decreased by six in 2012**, with sustainable products seeing the largest fall.¹⁴

Estimated net cost to business

Overall, the estimated net cost to business increased by £40m p.a. in 2012 (Table 2). This was the result of a few changes. For marine, the net cost to business decreased by £22m p.a. thanks to an increase of £29m p.a. in the direct benefits to business of the Marine Strategy Framework Directive. However, the net cost to business for sustainable products increased by £60m p.a., determining an increase of the overall net cost to business.

Impacts to other parties

Table 2 shows that **overall, benefits other than to businesses increased by £409m p.a. in 2012**, mainly due to an increase of around £379m p.a. in sustainable products. Benefits to other parties also increased by £29m p.a. in plants thanks to the Plant (England) Order 2005 and Amendments.

Table 2 shows that **overall, costs to other parties increased by £12m p.a.** due to an increase in the costs of the Marine Strategy Framework Directive.

Estimated benefit-cost ratios

There has been a **small increase in the estimated overall benefit-cost ratio from 2.9 in 2011 to 3.0 in 2012** (see Table 3). The estimated benefit-cost ratios (and all other figures estimated here) are based on point estimates which, in most cases, are based on the benefits and costs contained in Impact Assessments produced alongside the implementation of the regulation. These figures each have ranges around the estimates reflecting uncertainty in the underlying evidence.

Examining the estimated benefit-cost ratios between 2011 and 2012, shows that there was no change for nine policy areas, whilst four policy areas had a positive increase in their ratios and none had a decline in their ratios (see Table 3).

Of the four policy areas which experienced an increase in the estimated benefit-cost ratio the most significant change to the estimated ratios was for plants with an increase of 1.5. This was due to a £29m p.a. increase in benefits to other parties for the Plant Health (England) (Amendment) Order 2012 SSI No.745. The underlying

¹⁴ For sustainable products, five EU Directives were revoked resulting in an increase in benefits to other parties of £380m p.a.

estimates were taken from five Impact Assessments which estimate all impacts based on point estimates with no ranges included.¹⁵ Other drivers for the increase in the estimated benefit-cost ratio are 1) chemicals and GMOs due to a decrease in the cost to business by £0.03m p.a. +/- £0.01m p.a. from the removal of transitional costs for the Mercury Export and Data (Enforcement) Regulation 2010; 2) sustainable products¹⁶ which is based on the analysts own estimates and are point estimates, and animal health and welfare benefit-cost ratio changed slightly due to a decrease of £0.1m p.a. in the overall cost, due to a number of minor changes. This indicates that overall the trend between 2011 and 2012 is positive.

Table 3: benefit-cost ratio in 2011 and 2012

Policy area	Benefit-cost ratio in 2011 report adjusted¹⁷	Benefit-cost ration 2012
Adaptation to Climate Change	-*	-*
Agricultural management	-*	-*
Air Quality	2.3	2.3
Animal health and welfare	5.6	5.7
Biodiversity	7.0	7.0
Chemicals and GMOs	17.9	18.9
Cross-cutting	1.7	1.7
Flood management	3.8	3.8
Food	-*	-*
Land and soil	-*	-*
Landscape and outdoor recreation	2.2	2.2
Marine	3.3	3.3
Noise and nuisance	9.7	9.7
Plants	12.0	13.5
Sustainable products	3.4	3.8
Waste	5.1	5.1
Water quality and quantity	1.1	1.1
Overall	2.9	3.0

¹⁵ Defra Impact Assessment numbers Defra 1352, 1353, 1354, 1355 and 1356, for final stage only.

¹⁶ For sustainable products overall five EU regulations were revoked and the Ecodesign for Energy Related Products Regulations 2009 was amended. This change did not affect the number of regulations; it did lead to increased cost to business of £60m p.a. and increased overall benefit to other parties of £379m p.a.

¹⁷ *Op. cit.* footnote 3.

Reconciliation with One in One Out

Before reconciling this assessment with Defra's One in One Out (OIOO) balance during 2012, it is necessary to describe the OIOO policy and why we expect the OIOO balance to differ from the regulatory stock assessment.

The OIOO was a Cross Government initiative aimed at bringing the costs of regulation under control. The rule means that for every regulation brought in by a government department needs to be matched by savings to business, which may be achieved by removing or recasting existing regulations. A balance of Departmental OIOO is published in the Statement of New Regulations every six months.¹⁸ OIOO operated between 1 January 2011 to 31 December 2012 and has been superseded by the One in Two Out (OITO) from 1 January 2013 onwards. Under OITO, Departments match business costs on new regulations with twice the savings to business.

The OIOO balance may differ from the regulatory stock assessment because the assessment is wider than the OIOO, since it includes the impacts of measures that are out of scope of OIOO. These are:

- **Certain regulatory changes:** Examples of regulatory changes which are out of scope of OIOO but in scope of the regulatory assessment include 1) fees and charges unless they expand or reduce the level of regulatory activity, 2) directly transposed EU Regulations and Directives.
- **Non-legislative changes:** Examples here include simplifying existing guidance and data requests by regulators to businesses.
- **Removal of transitional impacts:** Transitional costs (or benefits) that were incurred in 2011 have been removed from the 2012 estimates, since these impacts have already been incurred.
- **Other changes:** These are not driven by issues connected to regulatory or non-legislative change, and can be due to other factors such as behaviour change or changes to market practices such as a regulated substance is no longer used. These will be identified from the next update onwards, when policy teams will be asked to identify these changes.

The overall change in the net cost to business between 2011 and 2012 was £40m p.a.¹⁹ (See Table 4).²⁰ This is made up of costs of the regulations which are out of scope of the OIOO (£43m pa) and those which are in scope (-£3m pa). There was a

¹⁸ For reports relating to each six month period see <https://www.gov.uk/government/policies/reducing-the-impact-of-regulation-on-business/supporting-pages/operating-a-one-in-two-out-rule-for-business-regulation>

¹⁹ Note that this is the same as the total net change shown in Table 1.

²⁰ Note that this is the same as the total net change shown in Table 1.

reduction in costs of those regulations in scope, the negative figure for this component indicating a benefit.²¹

Table 4: Change of estimated net cost to business between 2011 and 2012, £m*	
Net cost to business	Per year, in 2012£s
Estimated Out of scope of OIOO and other adjustment	43
In scope of OIOO	-3
Overall	40

Source of In scope OIOO figures is Defra's breakdown of the Statement of New Regulations 3 and 4, however, here we present them in 2012 pounds and 2010 present value base year.

Table 5 shows the measures that were in scope of OIOO in 2012. Note that the Statement of New Regulations is a forecast and some of the regulations listed which were due to come into force, may not have been implemented. During 2012, there were two such regulations: 1) the Cattle Identification (Amendment) Regulation, and 2) the Water Industry Act 1991 (Amendment) Order 2012 – part of the special administration package,²² both of these regulations are zero net costs and removing them from the list does not impact upon the overall OIOO balance during 2012.

Table 5 also shows a detailed breakdown from the regulatory stock assessment of the -£3m p.a. net costs to business added during 2012. This is approximately equal to the OIOO figure for 2012 shown in Table 4.

Table 6 shows a similar comparison of the net cost to business for those regulations that are out of scope of OIOO. It shows that the 2012 assessment has added net costs of £44m p.a.

In addition, to the £44m, the transitional costs that occurred in 2011 have been removed from the impact estimates for the Mercury Export and data (amendment) regulations 2010 leading to a reduction in the net cost to business of -£0.04m p.a. This gives about £43 m p.a. which is for out of scope of OIOO measures and other adjustments.

The remaining regulations that came into force during 2012 have no estimated impacts on business.

²¹ A negative OIOO net cost to business represents a saving to business and is thus a benefit. It should not be compared to the negative figures shown in the graphs of the statistics for each policy area. In these graphs, costs are shown as negative and benefits are shown as positive.

²² Note that these are the titles used in the published Statement of New Regulations and may vary from the actual title of the regulation once it is introduced.

In most cases, the reconciliation with OIOO exercise enable Defra to check business impacts from source for those regulations that were added; thus providing Defra with confidence that these estimates are correct.

Table 5: Regulations in scope of OIOO during 2012, 2012 £s and 2010 PV base year

Policy area	INs	OUTs	Zero Net Cost	Net cost to business, £m
Jan-Jun 2012	0	4	2	-3.2
Animal health and welfare	n/a	The Welfare of Animals (Slaughter or Killing) (Amendment) (England) Regulations 2011		-1.9
Air quality		Revision of Annex III of the Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products 2005		-0.5
Marine			Introduction of electronic notices of variations to licences for all fishing vessels in England	0.0
Water		Order under section 14 of the Planning Act 2008		-0.5
Water		Environmental Permitting Regulations (Amendment) (England and Wales) Regulations 2010		-0.2
Water			Commencement of section 30 and Schedule 1 of the Flood and Water Management Act 2010 (Designation of third party flood management of assets)	0.0
July-Dec 2012	3	1	1	0.4
Animal health and welfare	Amendment to the Tuberculosis (England) Order 2007			0.2
Animal health and welfare	The Welfare of Wild Animals in Travelling Circuses (England) Regulations			0.0
Marine	English Scallop Order 2012			0.2
Total				-2.7
Regulations due to be implemented during 2012 but delayed				
Animal health and welfare			Cattle Identification (Amendment) Regulations	0.0

Water			The Water Industry Act 1991 (Amendment) Order 2012- part of special administration package	0.0
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Source: Defra's published breakdown of the Statement of New Regulations.

Table 6: Measures out of scope of One In One Out during 2012

Policy area	Regulation/Non-legislative changes	Direct costs to business, £m p.a.	Direct benefits to business, £m p.a.	Net cost to business, £m p.a.
Animal health and welfare	Cattle Compensation 2012	1.3	0.0	1.3
Animal health and welfare	Veterinary Medicines 2012 amendment	0.0	0.0	0.0
Animal health and welfare	The Charges for Residues Surveillance Regulations 2011 Amendment	0.0	0.0	0.0
Animal health and welfare	The Zootechnical Standards (England) Regulations 2012*	0.0	0.0	0.0
Chemicals and GMOs	Plant Protection Products 2011	0.7	0.0	0.7
Chemicals and GMOs	Plant Protection Products (Sustainable Use) Regulations 2012	1.9	0.0	1.9
Marine	Marine Strategy Regulations 2010 which transpose the Marine Strategy Framework Directive	6.0	28.2	-22.2
Plant	The Plant Health (England) (Amendment) No.2	0.01	0.1	-0.09
Sustainable products	Ecodesign for Energy-related products and energy information (Amendment) Regulations 2012, No.3005	60.0	0.0	60.0
Waste	The Waste (England and Wales) (Amendment) Regulations 2012	0.2	0.0	0.2
Waste	Controlled Waste (England and Wales) Regulation 2012 (SI 2012/811) and 2012 amendment (SI 2012/2320)**	1.9	0.0	1.9
Total		71.9	28.2	43.6

* Note that the accompanying IA, when viewed on legislation.gov.uk web site 15 May 2014, states that the regulation is in scope of OIOO. However, no record of this regulation can be found in Defra's Statement of New Regulations. It is assumed that this regulation is out of scope of OIOO. See: www.legislation.gov.uk/ukia/2012/405/pdfs/ukia_20120405_en.pdf.

** This regulation is not derived from an EU Directive, unlike the other regulations listed in this table.

Summary tables

Table 7 overleaf provides summary information of the numbers of regulations and their costs and benefits, by policy area. Table 8 provides summary information, for each policy area of how costs fall by different industrial sectors. The pie-charts present the same information on costs to business graphically: pie-chart 1 showing costs by policy area and pie-chart 2 costs by industrial sector. **These estimates are on the basis of information currently available. As discussed later, the estimates for costs are so far more complete than those for benefits.**

Table 7: Summary of Defra's regulations and their costs and benefits, where monetised, by Defra policy area

Policy area	Number of EU regs	Number of domestic regs	Direct costs to business, £m p.a.	Direct benefits to business, £m p.a.	Net cost to business, £m p.a.	Costs to other parties, £m p.a.	Other benefits, £m p.a.	Admin burden %	Benefit -cost ratio ²³	Benefits included in BCR, £m p.a.	Costs included in BCR, £m p.a.	% of costs EU ²⁴	Reliability of cost estimates (1-5)
Adaptation to climate change	0	1	0	0	0	0	0	0%	n/a	n/a	n/a	0%	3.0
Agriculture management	22	16	501	277	225	28	1008	79%	n/a	n/a	n/a	83%	2.0
Air quality	10	5	691	2	690	5	1382	14%	2	1383	598	100%	3.3
Animal health and welfare	56	38	365	8	357	0	56	43%	6	40	7	91%	2.4
Biodiversity	5	30	32	10	22	113	970	15%	7	970	138	84%	3.0
Chemicals and GMOs	9	2	57	0	57	1	17	9%	19	17	1	81%	2.0
Cross-cutting	2	1	10	0	9	0	16	2%	2	17	10	24%	4.0
Flood management	1	7	275	1066	-791	798	3013	1%	4	4080	1072	0%	3.0
Food	37	0	58	39	19	6	0	10%	n/a	n/a	n/a	100%	3.7
Land and soil	0	3	546	12	533	183	50	0%	n/a	n/a	n/a	4%	3.0
Landscape and outdoor recreation	1	26	3	0	3	7	17	58%	2	17	8	3%	3.9
Marine	35	45	121	160	-39	55	0	24%	3	132	40	60%	2.8
Noise and nuisance	1	5	20	10	10	25	425	100%	10	435	45	0%	3.0
Plants	10	2	14	229	-216	6	31	19%	14	261	19	88%	3.7
Sustainable products	4	1	440	0	440	1	1670	1%	4	1670	441	100%	3.0
Waste	17	3	582	144	438	0	0	5%	5	144	28	95%	1.4
Water quality and quantity	17	16	2056	108	1948	47	1069	2%	1	1116	1039	92%	4.2
Totals	227	201	5771	2065	3706	1274	9724	14%	3.0	10281	3445	79%	3.2

²³ *Op. cit.* footnote 3.

²⁴ As explained in the text below, this represents the costs of those regulations which derive from EU legislation. It does not yet deduct the costs of any domestic provisions within regulations which also transpose EU legislation.

Table 8: the direct costs of Defra's regulations by business sector²⁵

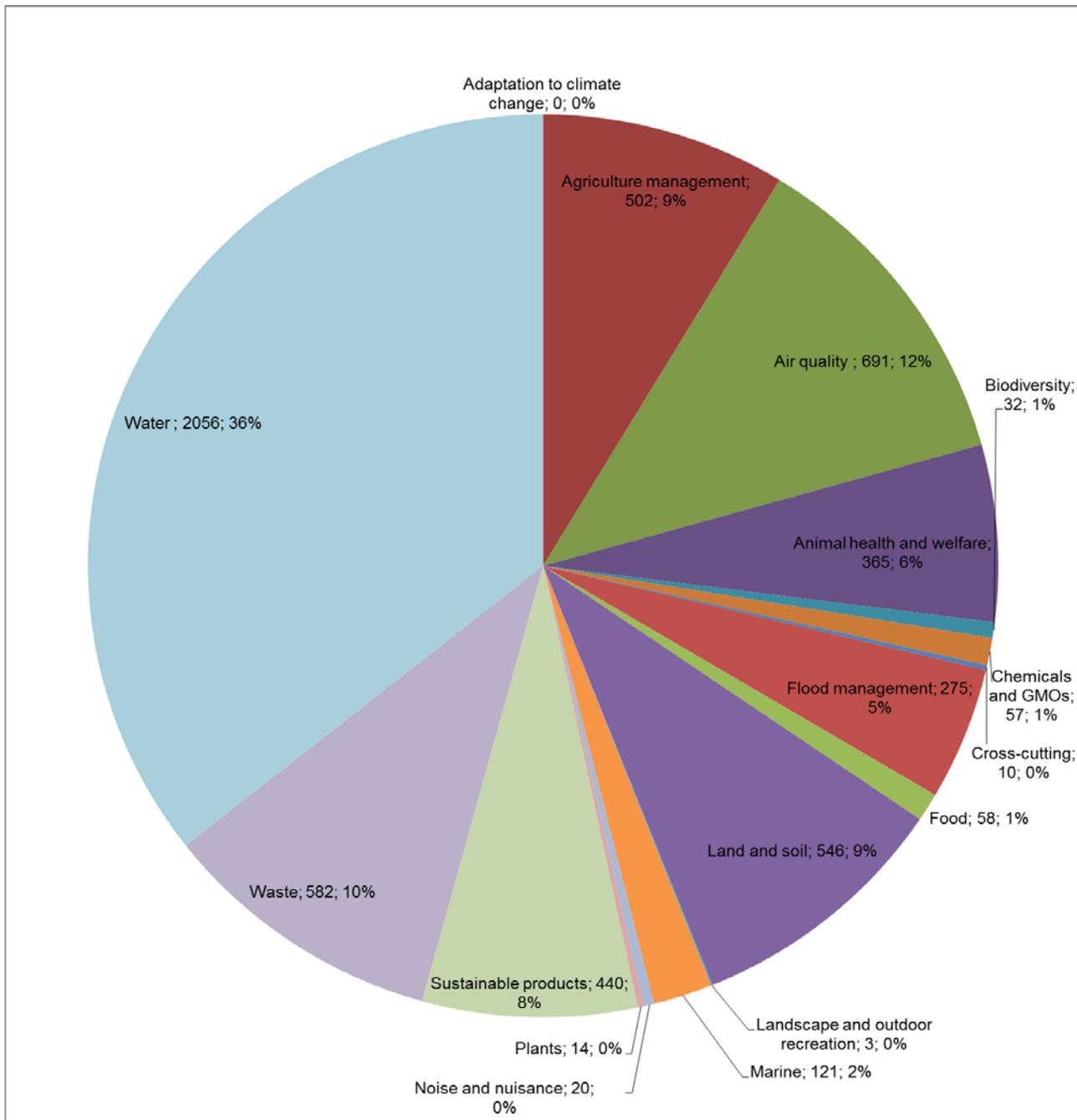
Policy area	Agriculture, Fish & Forestry (£m)	Mining (£m)	Manufacturing (£m)	Energy supply (£m)	Water (£m)	Waste (£m)	Construction (£m)	Retail (£m)	Transport (£m)	Housing & leisure services (£m)	Other services (£m)	Public services (£m)	Total
Adaptation to climate change	0	0		0	0	0	0	0	0	0	0	0	0
Agriculture management	502	0	0	0	0	0	0	0	0	0	0	0	502
Air quality	8	5	345	304	0	1	0	4	25	0	0	0	691
Animal health and welfare	156	0	161	0	0	0	0	42	0	2	4	0	365
Biodiversity	24	3	1	1	1	0	0	0	0	2	0	1	32
Chemicals and GMOs	6	0	50	0	0	0	0	0	0	0	0	0	56
Cross-cutting	2	0	1	0	2	2	0	0	1	0	0	0	10
Flood management	13	0	0	0	262	0	0	0	0	0	0	0	275
Food	19	0	39	0	0	0	0	0	0	0	0	0	58
Land and soil	24	26	26	26	0	0	417	0	26	0	0	0	546
Landscape and outdoor recreation	3	0	0	0	0	0	0	0	0	0	0	0	3
Marine	55	15	1	43	0	0	4	0	3	0	0	0	121
Noise and nuisance	1	1	6	2	1	3	3	0	1	2	0	0	20
Plants	14	0	0	0	0	0	0	0	0	0	0	0	14
Sustainable products	0	0	440	0	0	0	0	0	0	0	0	0	440
Waste	57	0	115	0	3	274	28	103	0	0	0	1	582
Water quality and quantity	188	0	23	1	1735	1	12	0	30	17	0	51	2056
Totals	1073	49	1207	377	2004	280	465	150	85	22	4	54	5770
Percentage	19%	1%	21%	7%	35%	5%	8%	3%	1%	0%	0%	1%	100%

²⁵ This apportions the cost estimates to business sectors, on the basis of formal estimates or, where not available, analysts' judgement.

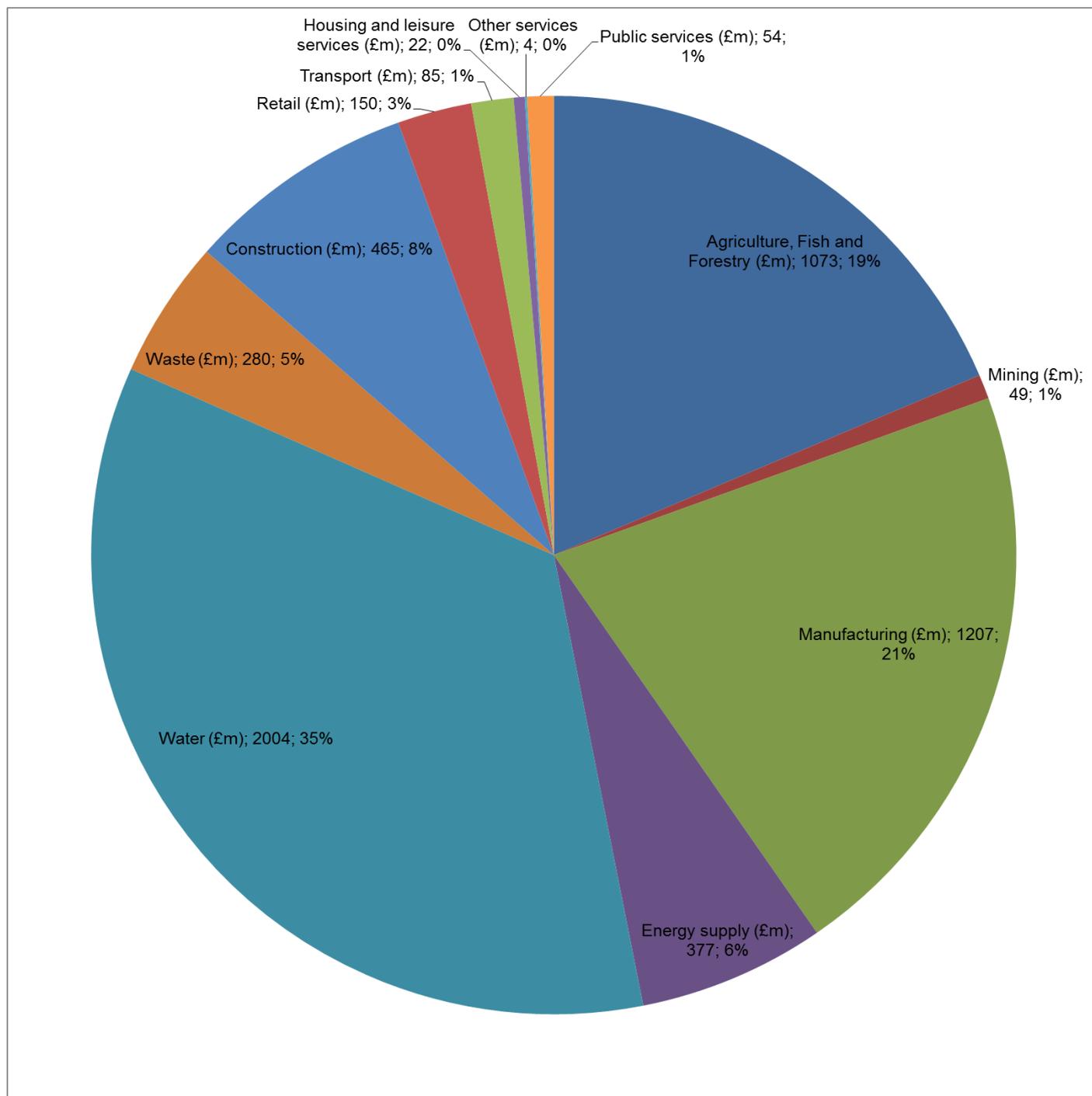
Turnover²⁶	35485	81183	564193	87596	16754	10364	248301	1195713	239816	662391	389490	76606	
% of turnover	3.0%	0.1%	0.2%	0.4%	12.0%	2.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	

²⁶ 2009 turnover data, adjusted by 2009 to 2012 annual unadjusted growth rates from the Office for National Statistics.

Pie-chart 1: the direct costs of Defra's regulations to business by policy area (£m;%)



Pie-chart 2: the direct costs of Defra's regulations by industry sector



Regulations covered

The assessment includes **428 sets of regulations**²⁷ that were identified as potentially requiring some action from businesses. Of these **227 (or 53%) are derived from EU** or international legislation and the remaining **201 are entirely domestic**.²⁸

Defra covers a vast spectrum of different types of regulation. For example, some regulations set rules about how environmental risks at industrial sites should be managed or to safeguard food safety; some set standards (for example for energy efficiency) which drive resource efficiency savings; others ban particularly harmful activities – or the use of particularly harmful substances; others assign liability so that the polluter, rather than the taxpayer, pays when they cause various types of damage. Some regulations provide the institutional rules to enable markets to operate – for example rules on agricultural tenancy arrangements and on assigning plant breeders' rights. Others are directly concerned with protecting business operations such as the arrangements to control plant diseases or to ban the marketing of whisky from outside Scotland as Scotch. Some regulations exist to provide the legal basis for making grant payments or subsidies – for example under the Common Agricultural Policy (CAP). There is, therefore, no single model for regulation.

Direct costs and benefits to business

Total direct costs

The initial estimate of total **direct cost to business is £6bn p.a.**

76% of these costs are accounted for by five policy areas (water 36%, air quality 12%, waste 10%, land and soil 9%, agricultural management 9%), with another 14% accounted for by two further policy areas (sustainable products 8%, animal health and welfare 6%). Eleven regulations with costs estimated at over £100m p.a.²⁹ account for 62% of costs. While summary information on costs such as this can be helpful, for example in focusing attention for investigating opportunities for regulatory reform, an understanding of whether regulations are fit for purpose clearly requires much wider information, including on the nature of the problem, costs, benefits and alternative approaches.

Cost estimates are provided for the vast majority of regulations. However, there remain a few regulations for which costs have not yet been estimated (e.g. Integrated Pollution Prevention and Control regulations and regulations governing forestry activities), regulations against which we have very provisional estimates (e.g. the Animal By-Products Regulations)

²⁷ Where there are a number of very closely related Statutory Instruments, these are grouped together and counted as one set of regulations for the purposes of this assessment. The actual number of Statutory Instruments is therefore much larger.

²⁸ At first glance it appears that there has been no change since the 2011 report; as these figures are the same as in the published report. However, this disregards the baseline adjustments to the 2011 figures. The adjusted 2011 figures show that there were 433 sets of regulations potentially requiring action from business. Of these 233 (or 53%) are derived from the EU or international legislation and the remaining 200 are domestic.

²⁹ The Environmental Stewardship (England) Regulations 2005, Uplands Entry Level Stewardship and Countryside Stewardship; the Large Combustion Plant Directive, the Animal By-Products Regulations, the Contaminated Land Regulations, the Packaging Waste Directive, Water Resources Act, the Water Framework Directive, the Urban Waste Water Treatment Directive, the End-of-Life Vehicles Directive, and the CAP Single Payment Scheme.

or regulations where important components of cost remain unquantified (for example, maintenance expenditure on capital improvements made before 2010 to comply with water regulations). There is some evidence³⁰ that the actual costs to businesses of regulations tend to be lower than estimated before regulations are introduced, which might suggest actual costs are lower than the estimates presented in this document. It is also notable that the costs of many stock regulations – for example those setting environmental standards – will decline over time as those standards become ‘business as usual’. Where estimates have been provided, they are generally well supported by evidence. The ratings in the reliability rating column of Table 7 show the weighted average scores for cost estimates in each policy area. The weighted average for all regulations for which costs have been estimated is 3.2.

Direct benefits to business

Some of the benefits of Defra’s regulations accrue directly to business. So far **£2bn p.a. of direct benefits** to business has been identified. This includes, for example £276m p.a. in subsidies to help farmers to deliver environmental sustainability, £167m p.a. in plants’ marketing, £144m p.a. from better management of construction materials and waste resulting from Site Waste Management Plans, benefits of £39m p.a. to whisky manufacturers and benefits of £34m p.a. to marine industries from increased economic activity resulting from more rational use of marine resources through the marine planning system. Unlike for direct costs for which analysts were asked to develop new estimates where none existed before, estimates for the direct benefits to business have only been included where currently available. We would, therefore, expect the estimate of direct benefits to increase relative to direct costs as this work continues.

Many of the benefits that we are currently capturing elsewhere may also benefit business. For example, there is an estimated £1bn p.a. of energy cost savings from the use of more energy efficient products, some of which will accrue to business rather than householders. More generally health and environmental benefits may feed into enhanced economic benefits – for example through reduced sick leave.

Estimated Net cost to business

Deducting the £2bn of identified direct benefits to business therefore means that the quantified estimate of **net costs to business is £4bn p.a.**

Direct cost by sector

An estimate was made of how the direct costs of each regulation fall to business sectors, providing estimates of the total direct cost of Defra regulation by sector. This is before the direct benefits to businesses are taken into account. Pie-chart 2 provides a summary. Table 8 provides an indication of how significant these costs are for each sector in terms of sector turnover. These estimates should provide an improved basis for understanding the cumulative impacts of policies on different sectors and should help to improve Impact Assessments. The database will also facilitate investigation into whether there are opportunities for greater use of sectoral approaches, for example rationalising numbers of regulations affecting individual sectors.

³⁰ Recent Defra research: randd.defra.gov.uk/Document.aspx?Document=do0102.pdf

Proportion of direct costs accounted for by EU or international regulation

The database identifies whether regulations implement EU or international requirements or are entirely domestic, and that **79% of the total costs are associated with EU or international regulation.**

Administrative burden

In total **14% of the direct costs are the administrative burdens to business**, although there is a wide range between different policy areas, reflecting in part very different types of regulation. For example, the majority of costs for animal health and welfare regulations are for the Zootechnical Standards (England) Regulations 2012 for which the majority of the recorded costs are for testing and disposal and are labelled as an administrative burden. The administrative burden is also a high proportion of overall regulatory costs for landscape and outdoor recreation, biodiversity and plants policy areas.

Direct costs other than to business

We have a less developed picture of the costs to other parties associated with regulations. **Evidence gathered so far identifies just above £1bn p.a. of public expenditure resulting from Defra regulations.** Much of the rest is government expenditure on administering and enforcing regulations. We expect the scale of this latter category will continue to reduce (and be transferred to the regulated community) as regulators recover more of the costs of administration and enforcement.

Direct benefits other than to business

The picture for these benefits to society more widely is, again, partial. **Evidence gathered so far identifies £10bn p.a. of benefits accruing other than to business.** Most of the benefits are in terms of an improved environment and improved health. This includes nearly £1bn p.a. of biodiversity benefits from enhancements to SSSIs, £1.3bn p.a. of health benefits from improved air quality and £17m p.a. of benefits from recreational opportunities through increased coastal access and open access. The other benefits are financial savings to the public: mainly from energy savings from more energy efficient appliances (£1bn p.a.). To illustrate how incomplete this assessment is of these benefits to society more widely, overall they have been assessed for regulations within only 13 of the 17 policy areas; within those policy areas the benefits for only some of the regulations have been assessed; and for individual regulations only some of the benefits have been assessed. For example, the assessment of benefits for the Large Combustion Plant requirements of the Environmental Permitting Regulations only takes account of some of the expected health effects. Therefore a next step in this assessment is to review where gaps in benefits estimates can reasonably be addressed and to work towards a more complete assessment of benefits. This will, for example, take account of work in progress or planned to assess the costs and benefits of policy on plants and on animal health and welfare.

Work is also underway to better understand the role of policy in contributing to national wellbeing and is planned to understand the role of regulation in promoting innovation and the development of new technologies. The outcomes will be reflected within this assessment in due course.

For 35% of the regulations where these benefits to wider society have been monetised, the **estimated overall benefit-cost ratio (i.e. including all the monetised benefits and all the monetised costs for all relevant regulations) is 3:0**. This means that where £1 is spent on regulation (mainly by businesses and public authorities); there is a £3 return to society (mainly economic benefits to business and the public and environmental and health benefits). It seems likely that this ratio may understate benefits compared to costs as, even for those regulations where benefits have been monetised, it is normally the case that some, not all of the benefits, have been assessed; whereas generally all or most of the costs have been monetised.

Economic and environmental/social

This assessment groups costs and benefits first as they affect businesses and then as they arise other than to business, i.e. to society more widely. A large part of the wider societal costs are financial costs (mainly to public bodies) and a large part of the wider societal benefits are financial benefits (largely to the public). There are currently a significant number of gaps for monetised estimates of the wider environmental and social benefits of regulations. The analysis developed so far is represented in table 9 below in terms of economic and environmental/social costs and benefits.

Table 9: Economic and Environmental/Social impacts, £m

Economic		Environmental/social	
Costs	Benefits	Costs	Benefits
6392	5976	0	2496

Progress against Next steps

The 2011 assessment identified a number of next steps to review and improve this evidence base and to start using it to inform our approach to regulatory reform. Here we highlight the progress made.

Review and improve the assessment

The 2011 assessment set out a number of proposals to improve this assessment by:

- **Reviewing with departmental analysts, regulators and others where additional information is available, what gaps remain and the proportionality of doing further work to fill gaps. This will investigate particularly where the assessment of wider social and environmental impacts can be improved.** A review by external consultants (Risk and Policy Analysts) highlighted some important errors about the

impact estimates for Air Quality. Defra subsequently commissioned another external consultant (Amec) to estimate the impact of these regulations.³¹

- **Taking account of any additional information or comments provided.** In terms of the inclusion of new information, this update now includes the opportunity costs to landowners of Sites of Special Scientific Interest (SSSI) designations for the Habitats Directive (92/43/EEC) and the Birds Directive (2009/147/EC). Including these impacts has been possible due to a report published by GHK titled *Taking into account opportunity costs when assessing costs of biodiversity and ecosystem action*,³² estimates from this report were combined with evidence from other reports.³³ Further, the noise and nuisance team have provided revised estimates, leading to baseline adjustments. Similarly, the estimates for air quality were wholly revised. In other cases, regulations have been removed mainly because 1) it does not have an impact on business or civil society or 2) it is not a Defra regulation. In other instances, there is uncertainty surrounding the validity of the estimates; in these cases the reliability rating has been downgraded to reflect this uncertainty. Annex B sets out by policy area where revisions to impact estimates have been made and the impact of these revisions on the 2011 baseline. The Risk and Policy Analysts review of the 2011 assessment found that in some cases the possibility of double counting had not been presented in a transparent manner. In this update we make it clearer what has been assessed.
- **Considering whether collecting further categories of information on the regulations would be worthwhile.** It has not been possible to include further categories of data; this will be done in future updates.
- **Reviewing where this evidence base can be used synergistically alongside the National Ecosystem Assessment.** The ecosystems approach is a framework which allows the user to systematically identify environmental impacts which may otherwise be missed. Basing the assessment on the ecosystems services approach currently would be difficult given that it has not been adopted for all new Impact Assessments, and in some cases may not be appropriate. However, its use is increasing and the Department has a work-stream to embed the approach more widely within Defra; thus, it will be appropriate to revisit the viability of using this approach for future assessments.

³¹ Amec, Support to evaluate the costs and benefits of air quality legislation, April 2013. The estimates used in the 2012 regulatory stock assessment are based on those estimated by Amec. However, the figures have been re-estimated to ensure that the correct time period is examined and estimates are on an equivalent annual basis.

³² GHK report taking into account opportunity costs when assessing costs of biodiversity and ecosystem action, March 2011 (hereinafter the "GHK Study").
ec.europa.eu/environment/enveco/biodiversity/pdf/OpportunityCostsOfBiodiversityAndEcosystemAction.pdf

³³ Specifically, the GHK study found 1) establishing a Natura 2000 network is core to the Habitats and Birds Directive, 2) the Natura 2000 area in the UK is 3,413,532 ha, and 3) the opportunity costs of managing one Natura 2000 site in the EU is on average £21 p.a. in 2012 pounds. This suggests that the cost of managing UK Natura sites is £71m p.a. However, evidence from another GHK report (Benefits of Sites of Special Scientific Interest, 20 June 2011, p.15) shows that not all landowners face this opportunity cost. This 2011 GHK report, states that the opportunity costs of SSSI designation is zero; this is based on one piece of research which looked at Scotland only. Evidence from a Smiths Gore report (The Impact of SSSI status on land values in England (CSP01/03/026 (23102) A report to natural England)) shows that only 9/26 cases were negatively impacted. Thus, the opportunity costs were apportioned by 9/26 to give a central estimate of £25m.

- **Considering opportunities to work with other Government Departments towards a better shared evidence base.** Defra's Better Regulation team has worked closely with the Department of Health who produced a similar assessment focussing on business impacts.³⁴ Defra had similar discussions with the Department of Energy and Climate Change and the Department for Communities and Local Government.
- **Reviewing how best to integrate and make consistent with two related Defra tools: Defra-Lex (the online and up to date list of all Defra legislation that is in force) and the Regulatory Management Tool (the database used within Defra to help manage regulatory plans):** Defra-Lex is now developed and being tested internally before being made accessible to the public in spring 2014. Once up and running, it will help identify those regulations that are currently in force and will be linked to other sources of information such as the IA library on www.legislation.gov.uk. Since the publication of the 2011 assessment, the Regulatory Management Tool has been superseded by the Policy Tracker which was launched in December 2013. Being cloud-based, the Policy Tracker will increase Defra's ability to monitor new policies under development, including commitments made through Red Tape Challenge by extending to changes to regulatory activity introduced by Defra Regulators. The Policy Tracker tool will be used to identify those new regulations with impact assessments.

Using the assessment

Overall, as this evidence base improves, it will increasingly help us take a more objective, strategic and targeted approach to regulatory reform.

Since the publication of the 2011 assessment, the assessment has already been used to champion regulatory reform. Evidence from the 2011 report was used in a number of Cross Whitehall initiatives such as the Cabinet Office's Red Tape Challenge³⁵ and the Foreign and Commonwealth's Review of the Balance of Competencies.³⁶

As part of the Red Tape Challenge, Defra reviewed its own stock of legislation to remove red tape and reduce burdens to business. All of Defra's regulations were on the Red Tape Challenge website and stakeholders were asked to provide their views on which regulations are working, which are not, what should be scrapped, what should be simplified and what can be done differently. Concurrently, the regulatory stock assessment was used to identify high cost regulations for review. Based on this and the stakeholder feedback, Defra came up with a number of recommendations to free business and society of unnecessary red tape.

³⁴ Department of Health, 'An Audit of the Department of Health's Regulations upon business. Final Report', September 2013.
www.gov.uk/government/uploads/system/uploads/attachment_data/file/236741/dhregulations_impact_on_business.pdf

³⁵ www.redtapechallenge.cabinetoffice.gov.uk/home/index/

³⁶ www.gov.uk/review-of-the-balance-of-competences

The Review of Balance of the Competencies, looked at the European Commission's power to act in a particular area, such as Environment and Climate Change, it examined the evidence for how these powers affect the UK. The regulatory stock assessment was used to identify the burden on UK businesses from EU regulation in the fields of environment and climate change.

Adaptation to Climate Change

Why we regulate

- A Coalition Priority is to support a strong and sustainable green economy, resilient to climate change;
- Defra's 2012 Business Plan³⁷ included an action to decide whether to pursue a statutory approach or a voluntary approach to encouraging business reporting of Green House Gases in the light of a public consultation on options.

What we regulate

- Defra works in partnership with other Government Departments to ensure adaptation to climate change;
- There is a climate change adaptation reporting power under the Climate Change Act for specified bodies, such as utilities providers and certain public bodies, to assess risk of climate change on their organisation and to put risk management plans in place. It is the current Government's policy not to exercise this power; instead a voluntary approach is being pursued (see below).

Other policy instruments

- Encouraging voluntary reporting by organisations. Voluntary reporting by key businesses will enable Government to assess the potential vulnerability to climate change and develop response measures;
- These organisations may incur costs and benefits of reporting, however, these impacts are not captured in this assessment.

Changes since 2011 report

- Pursuing a non-regulatory voluntary approach is a departure from the regulatory approach, of compelling certain businesses to report, used in 2011 to estimate the impacts.

³⁷ Business Plan 2012-2015, Department for Environment, Food and Rural Affairs, May 2012, hereinafter 'Defra Business Plan'. www.number10.gov.uk/wp-content/uploads/2012/05/DEFRA-2012-Business-Plan.pdf

List of climate change adaptation regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
			s62 of the Climate Change Act 2008
Totals	0	0	1

Adaptation to climate change - in statistics

Reliability*:
3/5

Number of regulations: 1 domestic regulation

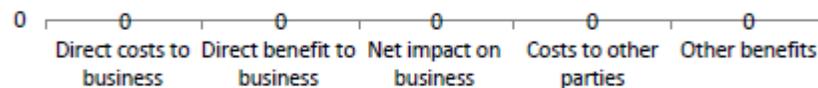
Monetised impacts, £m p.a.

2

Direct costs by business sector

N/A

1



Notes:

- The reporting power is not being exercised by the Government. This means that there are zero impacts to business and other parties of this regulation.
- Instead, a voluntary approach is being adopted. Businesses may incur costs and benefits of voluntarily reporting, however these impacts are not captured here.
- It is assumed that the policy position of pursuing the voluntary approach does not change over the 10 year assessment period

Benefit : cost	Admin burden as % of business cost	% of costs from EU legislation
N/A	N/A	N/A

* Refers to available cost estimates

Agricultural Management³⁸

Why we regulate

- A Coalition Priority is to support and develop British farming and encourage sustainable food production;
- Agriculture has a fundamental part to play in sustainable development and economic competitiveness and is an integral part of the development of rural communities, sustainable land management, the food supply chain and ensuring health and safety standards;
- The EU provides a framework of agricultural objectives through the Common Agricultural Policy (CAP);
- To promote economic efficiency in agricultural land use by incentivising land letting to address a supply-side problem in the land market;
- To reduce the exploitation of workers and that labour providers operate within the law;
- To reduce water pollution caused or induced by nitrates from agricultural sources.

What we regulate

- CAP determines the rules regarding e.g. assistance to agricultural sectors with special problems, the allocation of funding and investment and the balance of funding to support environmental management and rural development;³⁹
- Land must be kept in Good Agricultural and Environmental Condition and receipt of the Single Payment is linked to requirements on farmers to protect soils and maintain a range of both habitat and landscape features;
- Tenants rights and security of tenure;
- Rules of procedures to be used by the Agricultural Land Tribunals in England and Wales;
- Environmental impact assessment for projects proposing the use of uncultivated land and semi-natural areas for intensive agricultural purposes;
- Rules relating to the applications made to the Gangmasters Licensing Authority to act as gangmasters;
- A single levy board (Agriculture and Horticulture Development Board), allowing funding via a statutory industry levy, with functions and duties relating to beef, lamb, pigs (England), cereals and oilseeds (UK), horticulture, milk and potatoes (GB);
- Designation of Nitrate Vulnerable Zones.

³⁸ The agricultural sector is subject to a large number of regulatory regimes. Only those areas which do not fit elsewhere are included here.

³⁹ Note that the impacts for CAP are calculated on the basis of the CAP agreement which was in force in 2012. The new CAP will not be included until the implementing regulations take effect on 1 January 2015.

Other policy instruments

- The provision of a wide range of guidance and advice to farmers, including the Code of Good Agricultural Practice;
- Working with the industry to develop its own targets e.g. the Milk Road Map;
- Private sector assurance schemes from red Tractor to Waitrose Supply Chain agreements;
- Safeguarding and enhancing important landscapes, habitats and species through Environmental Stewardship agreements. Considerable funding and effort is put into encouraging best practice;
- The voluntary Campaign for the Farmed Environment is an industry-led partnership, of which Defra is a partner. It brings together four industry initiatives addressing resource use efficiency (Greenhouse Gas Action Plan), pesticide stewardship (Voluntary Initiative), nutrient management (Tried & Tested) and biodiversity. It has targets to promote farmer and advisor engagement and addresses biodiversity by encouraging farmers to enter into or renew Environmental Stewardship and undertake unfunded management measures which deliver environmental benefits on lowland farms. The four initiatives are not alternatives to regulation but complement the range of existing regulations and incentives.

Changes since 2011 report

- This 2012 update does not include the new CAP reforms as these are not finalised and have not come into force yet. For CAP Single Payment Schemes and the Cross-Compliance Regulations, simplification was a key negotiating aim and whilst some aspects have been simplified, other measures will add complexity. Where there is Member State flexibility, simplicity will underpin our approach to implementing the new CAP in England. Instead, impacts for CAP as estimated on the basis that the current CAP will continue to 2021;
- Similarly, since CAP Pillar 2 (which includes the Environmental Stewardship and Uplands Entry Level Stewardship regulations) was not been agreed during 2012 and was not in force, the impact estimates for Environmental Stewardship are based on the current CAP. The estimates have been re-estimated using more up to date research; thus, the 2011 estimates have been adjusted. These changes are discussed in Annex B;
- To reflect the level of uncertainty around the figures the overall reliability rating for this policy area has been downgraded from four to two;
- The Agriculture Wages Order 2010 has been revoked and replaced by the Agricultural Wages Order 2012;
- The 2011 assessment did not identify all of Defra's agricultural surveys which were required by regulation or listed them in a way which made it difficult to identify or incorrectly stated that the regulations were domestic:
 - The Commission Regulation on farm structure surveys and the survey on agricultural production methods was incorrectly listed as a domestic regulation titled Agricultural Survey;
 - The Commission Regulation on the economic accounts for agriculture in the Community was not listed in the 2012 assessment.
 - The Orchard Fruit Statistics is a Commission decision that was listed as a domestic regulation called the Orchard Fruit Survey. Further, survey data that is collected under The Orchard Fruit Survey was listed incorrectly as a separate regulation – the Vegetables and Flower Survey.

- The Commission Regulation EC no. 436/2009 laying down detailed rules for the application of Council Regulation (EC) no 479/2009 as regards the vineyard register, compulsory declarations and the gathering of information to monitor the wine market, the documents accompanying consignments of wine products and the wine sector registers to be kept has now been included as a EU regulation. Previously, in the 2011 assessment it was listed as a domestic regulation called the EC Survey of Wine Stocks – Producers, Wholesalers and Retailers.
- The following Commission regulations were not included in the 2012 assessment - EC Regulation on Crop Statistics, EC Regulation concerning livestock and meat statistics, EC Regulation laying down detailed rules for implementing Regulation (EC) 1234/2007 as regards marketing standards for eggs for hatching and farmyard poultry chicks, and the Directive on statistical surveys of milk and milk products.
- The Wheat and Milled Production regulation has been removed from the list of agricultural management regulations since the regulation could not be found on legislation.gov. This implies that the regulation does not exist. This has led to a baseline adjustment of £0.006m p.a. which has been removed from business administrative cost.

List of agricultural management regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
CAP	Council Regulation (EC) No 1234/2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products	Agriculture (Cross-Compliance) Regulations 2009	
		Environmental Stewardship (England) Regulations 2005	
		Countryside Stewardship Regulations 2000	
		Uplands Entry Level Stewardship	
		The Common Agricultural Policy Single Payment and support schemes Regulations - various SIs. The Common Agricultural Policy (Wine) Regulations - multiple SIs. The Common Agricultural Policy Single Payment and Support Schemes (Cross Compliance) Regulations - multiple SIs.	
		Milk Quotas	
		Fresh Fruit and Vegetables Aid Scheme: Recognition; Fresh Fruit and Vegetables Aid Scheme: Operational programmes	
		Skimmed Milk Powder for Animal Feed	
		Casein Production	
	Value of Milk Purchased in England & Wales		
	Commission Regulation laying down implementing rules in respect of sugar production in excess of the quota.	Sugar Production Quotas	

	Commission Regulation 2813/2000 rules for private storage aid	Butter and other private storage aid	
	Commission Regulation 245/2001 on flax and hemp grown for fibre		
Land tenancy and land management			The Agricultural Land Tribunals (Rules) Order 2007
			Regulatory reform (agricultural tenancies) (England and Wales) Order 2006. Agriculture Tenancies Act 1995 - Agriculture Holdings Act 1986
			Official Controls (Animals, Feed and Food)
Employment			The Rent (Agriculture) Act 1976
			Agricultural Wages Act 1984
			The Gangmasters (licensing conditions) rules 2009
Sector management, surveys and wider environmental issues			Agricultural Wages Order 2012
			The Agricultural and Horticulture Development Board Order 2008
			Code of Good Agricultural Practice Whole Farm Approach (WFA)
			Nutrients Management Review
	Commission Regulation EC No 1166/2008 on farm structure surveys and the survey on agricultural production methods ⁴⁰		
	Commission Regulation (EC) No. 138/2004 on the economic accounts for agriculture in the Community		
			Revision of the Fertiliser Manual
	Orchard Fruit Statistics (2008/690) ⁴¹		
		Glasshouse survey	
Commission Regulation EC No 436/2009 laying down detailed rules for the application of Council Regulation (EC) no 479/2009 as regards the vineyard register, compulsory			

⁴⁰ In the 2011 assessment this was incorrectly listed as a domestic regulation titled Agricultural survey.

⁴¹ Commission Decision (2008/690/EC) of 4 August 2008 amending Directive 2001/109/EC of the European Parliament and of the Council and Decision 2002/38/EC, as regards the statistical surveys carried out by the Member States on plantations of certain species of fruit trees (notified under document number C(2008) 4070). In the 2011 assessment, this was incorrectly listed as a domestic regulation called the Orchard Fruit Survey.

	declarations and the gathering of information to monitor the wine market, the documents accompanying consignments of wine products and the wine sector registers to be kept ⁴²		
	Commission regulation EC No 543/2009 concerning crop statistics		
	Commission Regulation EC No 1165/2208 concerning livestock and meat statistics		
	Commission Regulation EC No 617/2008 laying down detailed rules for implementing Regulation (EC) 1234/2007 as regards marketing standards for eggs for hatching and farmyard poultry chicks		
	Directive 2003/107/EC amending Council Directive 96/16/EC on statistical surveys of milk and milk products		
			Weeds Act 1959 (as amended by the Ragwort Control Act 2003)
			Purchase of British corn in England and Wales
			Fertilisers (Sampling and Analysis) Regulations 1996
			Oatmeal Millers
	Directive 76/116/EEC	Fertilisers Regulations 1991	
Total		25	15

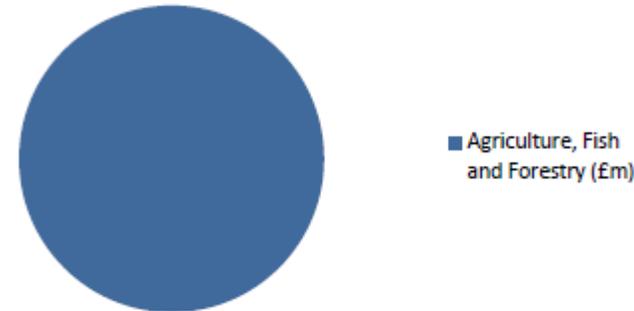
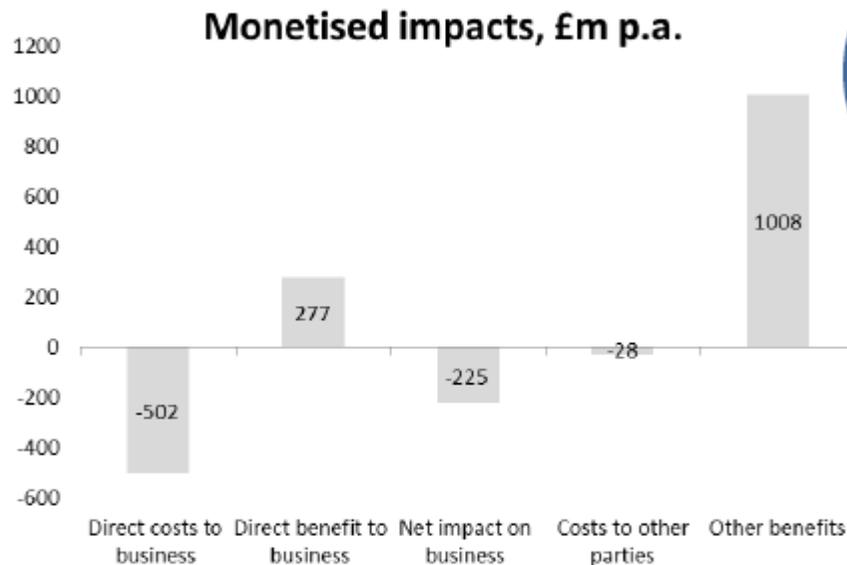
⁴² This was incorrectly listed as a domestic regulation called EC Survey of Wine Stocks – producers, Wholesalers and Retailers in the 2011 assessment.

Agriculture management – in statistics

Reliability*:
2/5

Direct costs by business sector

Number of regulations: 38 (of which 22 are EU)



Direct costs to business by regime:

CAP grants and measures (£415m); Land tenancy (£0.5m); Employment (£29m); general sector management (£57m).

Scope of monetised estimates

Includes:

- All costs to business

Do not include:

- Cost to EU and exchequer of grant funding
- Enforcement costs
- Benefits to sector from: CAP grants; enabling tenancy arrangements; sector management, including the Agricultural and Horticultural Development Board aimed at improving efficiency and competitiveness. Social benefits of enhanced working conditions.

Benefit : cost

N/A

Admin burden as % of business cost

79%

% of costs from EU legislation

83%

Notes: The direct benefits to farmers far outweigh the direct costs. Many of the regulations give direct support to farmers or create markets to aid them.

* Refers to available cost estimates

Air Quality

Why we regulate

- A Coalition Priority is to help enhance the environment and biodiversity to improve quality of life;
- Defra's Business Plan includes a commitment to enhance and protect the natural environment by, among other things, championing a reduction in emissions;
- Air pollution contributes to increased lung and heart disease and can damage agricultural crops, ecosystems and the built environment;
- Defra's aim is to reduce emissions and influence Other Government Departments to contribute to meeting EU air quality standards and requirements stemming from EU Directives and United Nations Economic Commission for Europe (UNECE) Conventions.

What we regulate

- The existing framework focuses on controlling concentrations in outdoor air of a number of air pollutants known to have ill health effects or adverse effects on the natural environment; the framework is largely set by European and international obligations;
- EU regulation is designed to control certain substances that could deplete the ozone layer; and requires plans to be drawn up to minimise the unintentional production of persistent organic compounds;
- EU Regulation is designed to contain, prevent and thereby reduce emissions of certain fluorinated gases (F gases) which are powerful greenhouse gases;
- National emission ceilings to be met by 2010 also exist for each Member State for emissions of ammonia, sulphur dioxide, oxides of nitrogen and volatile organic compounds;
- Large scale industrial installations are regulated through environmental permits which embody European integrated pollution prevention and control (IPPC) requirements. These address emissions to all media, including air, through permit conditions based on the application of best available techniques (BAT);
- Generally smaller industrial installations are regulated under national requirements in a similar way but in respect only of their emissions to air;
- Many of these installations also are required to have environmental permits meeting EU requirements in respect of vapours from the storage and distribution of petrol, solvent emissions during manufacture, storage and use, and the impact of waste incineration, as well as to deliver EU and international air quality requirements;
- There is a requirement on Government to publish an Air Quality Strategy that include national objectives for improving air quality;
- Under the Environment Act 1995 Local Authorities have responsibility for assessing local air quality against the Air Quality Strategies National Objectives and must declare air quality management areas where national objectives are not met or are at risk. They must also put in place action plans to improve air quality in these areas;
- The smoke control and other requirements of the Clean Air Act 1993;
- Defra is a party to the UNECE Convention of Long Range Trans-boundary Air Pollution and Protocols made under that aimed at addressing long range air pollution.

Other policy instruments

- Codes of practice aimed at reducing emissions from agriculture and construction in particular;
- Statutory Guidance to local authorities on assessment of air quality and on policy and practice to improve air quality with regard to their duties under the Environment Act;
- Voluntary agreements with two industry sectors; risk-based inspection taking account of environmental management systems and other matters; trading/burden sharing arrangements for one sector; self-certification under consideration regarding the Clean Air Act.

Changes since 2011 report

- The estimates for the air quality policy area were wholly revised due to some errors being found in the impact estimates. Defra commissioned an external contractor to revise the impact estimates;
- All regulations have impacts estimated over the 10 year period 2012 to 2021, apart from the Petrol Vapour Recover Stage I and Stage II Directives which is estimated over the period 2012 to 2026. This regulation does not come into force until 2017 when the first impacts occur, with impacts occurring annually for the next ten year;
- The Council Directive 96/62/EC on ambient air quality assessment and management and Council Directive 99/30/EC relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead ('the relevant pollutants') in ambient air were included in the 2011 assessment, despite being replaced by Directive 2008/50/EC on ambient air quality and cleaner air for Europe. This has now been removed as a separate regulation;
- The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2005 has been revoked and replaced with The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012;
- The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2002 has been revoked and replaced by The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011;
- The Aerosols Dispensers Regulations 2009 was added to the list of transposing regulations, and The Crop Residues (Burning) Regulations 1993 has been added to the list of domestic regulations.

List of air quality regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
Air quality	Directive 2008/50/EC on ambient air quality and cleaner air for Europe replaces Council Directive 96/62/EC on ambient air quality assessment and management, Council Directive 1999/30/EC relating to limits for sulphur dioxide, nitrogen dioxide, oxides of nitrogen, particulate matter and lead in	Air quality standards regulations 2010 Air Quality Limit Value Regulations 2003 and 2004 amendment	Environment Act 1995

	ambient air, Council Directive 2000/69/EC relating to limit values for benzene and carbon monoxide in ambient air, Council Directive to ozone in ambient air.) Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air. National emission ceilings directive 2001/81/EC, transposing regulation National Emissions Ceilings Regulations 2002		
			Air quality (England) Regulations 2000
	IPPC Directive (2008/1/EC); European Regulation 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register	PPC requirements in the Environmental Permitting Regulations and the Environmental Permitting (Amendment) Regulations 2012	
	Large Combustion Plant Directive (2001/80/EC);	Large combustion plant requirements in the Environment Permitting Regulations and the Environmental Permitting (Amendment) Regulations 2012	
	Petrol Vapour Recovery Stage I and Stage II Directives (94/63/EC + 2009/126/EC)	Petrol vapour requirements in The Environmental Permitting Regulations	
	Directive on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations (1999/13/EC); Paints Directive (2004/42/CE)	Solvents requirements in the Environmental Permitting Regulations 2010 and the Environmental Permitting (Amendment) Regulations 2012. The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012	
	The Sulphur Content of Liquid Fuels Directive (1999/32/EC)	The Sulphur Content of liquid fuels (England and Wales) Regulations (SI 2007 No.79)	
	EU Regulation on certain fluorinated Green House Gases (842/2006)	The Fluorinated Greenhouse Gases Regulations 2009 (S.I 261)	
	Council Regulation (EC) no. 2037/2000 on substances that deplete the ozone layer. + relevant laws: EU Regulation 1005/2009 as amended by Commission Regulation 744/2010	The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011 (SI 2002/528) The Ozone-depleting Substances (Qualifications) Regulations 2009	
	Aerosol dispensers Directive (324/1975) amended by Directive 94/1/EC of Directive 2008/47/EC	The Aerosol Dispensers Regulations 2009	
			The Clean Air Acts 1993
			Dark Smoke (Permitted Periods)

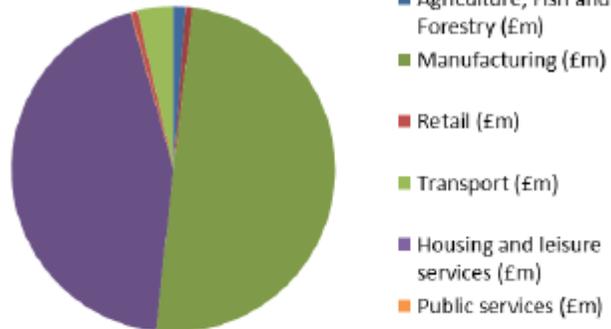
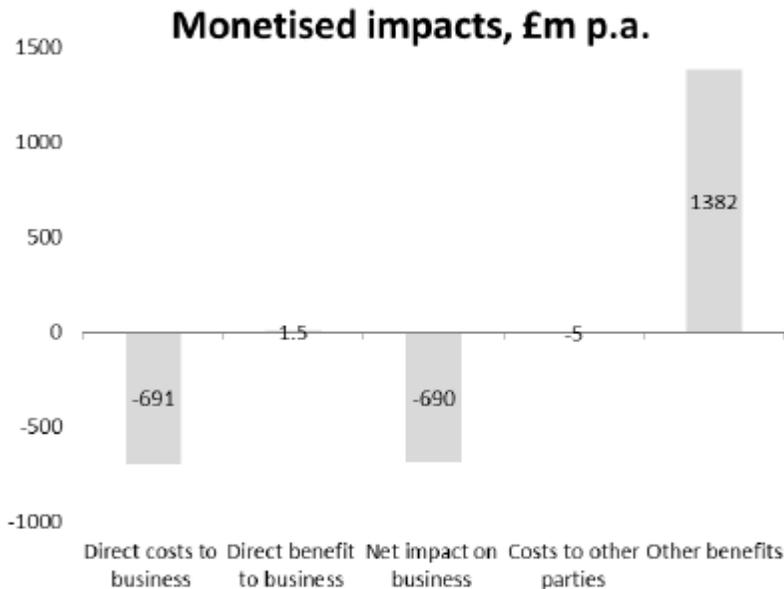
			Regulations 1958 SI 498
			The Crop Residues (Burning) Regulations 1993
Total		9	5

Air quality – in statistics

Reliability*:
3.3/5

Direct costs by business sector

Number of regulations: 15 (of which 10 are EU)



Scope of monetised estimates:

Include:

- Benefits to business only for the Petrol Vapour Recovery Stage I and II Directives
- Direct cost to business driven by Large Combustion Plant Directive (£569m)
- Wider benefits estimates for PVR, LCD and the Sulphur Content of Liquid Fuels Directive

Do not include:

- Impacts not identified for the Clean Air Acts, Dark Smoke (Permitted Periods) Regulations, and the Crop Residues (Burning) Regulation

Notes:

- To avoid double-counting, the impacts of the specific requirements on business are covered rather than of the national emissions targets.
- Benefit-cost ratio only applies to Directive on ambient air quality and cleaner air for Europe, Petrol Vapour Recovery and the Large Combustion Plant Directives.

Benefit : cost
2.3:1~

Admin burden as % of business cost
14%

% of costs from EU legislation
100%

* Refers to available cost estimates

Animal Health and Welfare

This covers

- Animal welfare;
- Monitoring animal movements;
- Disease prevention and surveillance;
- Disease outbreaks;
- Veterinary medicines.

Why we regulate

- A Coalition Priority is to support and develop British farming and encourage sustainable food production. The intention is to help to enhance the competitiveness and resilience of the whole food chain to ensure a secure, environmentally sustainable and healthy supply of food with improved standards of animal welfare;
- Defra's Business Plan includes a commitment to implement the recommendations of the Macdonald Farming Task Force by, amongst other things, simplifying the livestock movement;
- Defra aims to protect public health from animal disease, reduce the incidence and cost of disease, and incentivise the industry to share costs and responsibility;
- Animal welfare is a matter of widespread public concern; there is a high correlation between high standards of animal welfare and animal health;
- Animal movements are regulated to help contain the spread of animal diseases that can affect humans, devastate farming and impact on trade in livestock;
- Targeted testing, surveillance and notification schemes can help contain the spread of disease;
- To maintain consistent methods of marketing and quality of production which benefit both animal health and welfare and brings consumer clarity and confidence;
- Honey bees play a key role in both food security and sustaining the natural environment through the pollination of many crops and some wild flowers. Honey bees are susceptible to serious pest and disease threats and in addition to implement EU requirements, government intervention on disease control is necessary because the majority of beekeepers are amateurs.

Animal welfare

What we regulate

- High minimum standards of welfare for all animals kept for farming purposes, during transport and at the time of slaughter;
- Specific welfare requirements for laying hens, meat chickens, calves and pigs;
- animal keepers are responsible for meeting the welfare needs of their animals, including suitable diet, place to live and avoidance of unnecessary suffering;
- Licensing conditions for specific animal related activities such as riding stables and pet shops include welfare considerations;
- There are a number of regulations that protect dog and horse welfare.

Monitoring movements

What we regulate

- Animals must be healthy before being traded in or imported into the EU;

- EU regulations set down requirements for the identification of cattle, sheep, goats, horses and pigs and (except for horses) the reporting of their movements. Sheep and cattle holdings must be registered with a proportion inspected;
- EU Directives set down requirements for the Intra-Community trade of cattle, sheep, goats, horses, poultry and hatching eggs, bees, semen, ova and embryos;
- Transportation must comply with specific conditions and be accompanied by supporting paperwork (e.g. passports, certificates);
- Many species must be checked for disease before movement and most livestock movements must be notified. There are also standstill requirements;
- Requirements exist governing the non-commercial movements of pet animals.

Disease prevention/surveillance

What we regulate

- EU Directives lays down minimum requirements for monitoring zoonoses and zoonotic agents and investigate food borne outbreaks;
- EU Regulation lays down rules on prevention, control and monitoring of transmissible spongiform encephalopathies (TSEs) such as BSE and scrapie;
- Rules govern products of animal origin intended for human consumption;
- Regulations govern the collection, transport, storage etc. of animal by-products not intended for human consumption, categorised according to the likelihood of disease with legislation controlling different routes of disposal according to risk to protect public and animal health;
- Markets, slaughterhouses and animal transport must be cleansed, disinfected and, in the case of slaughterhouses, have a vet present;
- There are bio-security measures for the production of embryos and other genetic materials;
- Key surveillance regimes include salmonella in eggs/poultry; BSE testing of fallen and slaughtered cattle; routine testing for bovine TB in all cattle; and sample testing for TSEs in goats and sheep;
- Certain animal gatherings are licensed, e.g. livestock markets and collection centres, limiting the duration of markets and requiring disinfection between sales. Knackers Yards are also licensed;
- Beekeepers and importers of bees are regulated.

Disease outbreaks

What we regulate

- General measures to combat spread of certain animal diseases: diagnosis, holding under surveillance, treatment of contaminated materials and cleansing, circumstances for vaccination, establishment of protection zones;
- For certain diseases, notification requirements to the Commission and Member States. Where a notifiable diseases is suspected or confirmed, it must be notified to the local Animal Health Office;
- The Secretary of State may sanction animals to be slaughtered. For certain diseases, slaughter is compulsory and protection/surveillance zones around infected premises are required;
- Prescriptive procedures set down for a number of diseases, for example foot and mouth, bluetongue, swine fever, African horse sickness and TSEs.

Veterinary medicines

What we regulate

- Governed by EU Directives and regulations for animal use, food safety and feed hygiene, animal nutrition;
- Medicines must be authorised before use and there are monitoring requirements for certain chemicals within live animals and animal products.

Animal Health and Welfare - other policy instruments

- Much of the industry operates to farm assurance standards (EN45011);
- Defra has published a series of animal health and welfare guides, animal welfare codes of practice and a farming magazine.

Changes since 2011 report

- The following regulations came into force since the 2011 assessment:
 - The Welfare of Animals (Slaughter or Killing) (Amendment) (England) Regulations 2012;
 - The Welfare of Wild Animals in Travelling Circuses (England) Regulations 2012;
 - The Non Commercial Movement of Pet Animals (England) Regulations 2011;
 - The Tuberculosis (England) (Amendment) Order 2012. The addition of this regulation does not change the number of sets of regulations;
 - Cattle Compensation (England) Order 2012 and The Individual Ascertainment of Value (England) Order 2012;
 - The Pigs (Records, Identification and Movement) Order 2011. This came into force during 2011 and has been included as a baseline adjustment;
 - The Bovine Semen (England) (Amendment) Regulations 2011. The addition of this regulation does not change the number of sets of regulations;
 - The Zootechnical Standards (England) Regulations 2012;
 - The EC Directive on Laying down health rules as regards animal by-products and derived products not intended for human consumption was made in 2009 and was not listed in the 2011 assessment. It repealed the EC Directive on Animal by-products not intended for human consumption. This change does not result in a change in the number of sets of regulations or a change in impact estimates;
 - Animal By-Products (England) (Amendment) Regulations 2011. This does not change the number of sets of regulations and has been recorded as a baseline adjustment as it came into force during 2012;
 - Cattle Compensation (England) Order 2012; The Individual Ascertainment of Value (England) Order 2012;
 - Veterinary Medicines (Amendment) Regulations 2012. This does not change the number of sets of regulations;
 - Veterinary Surgery (Rectal Ultrasound Scanning of Bovines) Order 2010 was not listed in the 2011 assessment and has now been included;
- The following regulations were revoked in 2012:
 - The Non-Commercial Movement of Pet Animals (England) Regulations 2004;
 - The Avian Influenza (H5N1) (Miscellaneous Amendments) Order 2007. The revocation does not change the number of sets of regulations;
 - Rabies(importation of dogs, cats and other mammals) order 2004;
 - Cattle Compensation (England) Order 2006 and The Individual Ascertainment of Value (England) Order 2005;
 - Veterinary Medicines Regulations 2009 was replaced by the Veterinary Medicines Regulations 2011. This does not change the number of sets of regulations;

- The Veterinary Surgery (Rectal Ultrasound Scanning of Bovines) Order 2002.
- During 2011 The Pigs (Records, Identification and Movement) Order 2007 was revoked and replaced with the Pigs (Records, Identifications and Movement) Order 2011; both these adjustments were treated as baseline adjustments.
- Despite these changes, overall the number of regulations remains at the 2011 level.

List of animal health and welfare regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
Animal welfare	Minimum welfare standards for animals kept for farming purposes (Council Directive 98/58/EC)	Animal Welfare Act 2006;	
	Minimum welfare standards for the protection of laying hens (Council Directive 1999/74/EC); chickens kept for meat production (Council Directive 2007/43/EC); pigs (Council Directive 2008/120/EC; and calves (Council Directive 2008/119/EC)	Welfare of Farmed Animals (England) Regulations 2007 (as amended)	
	Protection of animals at time of slaughter or killing (Council Directive 93/119/EC)	The Welfare of Animals (Slaughter or Killing) (Amendment) Regulations 2007	
	Protection of animals at time of slaughter or killing (Council Regulation (EC) No.1099/2009)	The Welfare of Animal (Slaughter or Killing) (Amendment) Regulations 2012 ⁴³	
	Protection of animals during transport (Council Regulation (EC) no. 1/2005 amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No. 1255/97)	Welfare of Animals at Markets Order 1990 (as amended);	
		Welfare of Horses at Markets (and other places of sale) Order 1990;	
		Welfare of Animals (Staging Points) Order 1998;	
		The Transport of Animals (Cleansing and Disinfection) (England) (No.3) Order 2003 as amended by The Transport of Animals (Cleansing and Disinfection) (England) (No.3) Order 2007	
		Welfare of Animals (Transport) Order 2006;	
			The Hunting Act
			The Docking of Working Dog's Tails (England) Regulations 2007
			Pet Animals Act 1951 (as amended in 1983)
			Performing Animals (Regulation) Act 1925
		Welfare of Racing Greyhounds Regulations 2010;	
		The Mutilations (Permitted	

⁴³ This regulation has been added to Directive 1099/2009 rather than Directive 93/119/EC because the Impact Assessment is estimated against a baseline of Directive 1099/2009 being in place. This is because in 2013, Directive 93/119 and the Welfare of Animals (Slaughter or Killing) Regulations will be repealed.

List of animal health and welfare regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
			Procedures) (England) Regulations 2007 (as amended) The Breeding of Dogs Act 1973, The Breeding of Dogs Act 1991, The Breeding and Sale of Dogs (Welfare) Act 1999; The Export of Horses (Protection) Order 1969; The Export of Horses (Excepted Cases) Order 1969; The Export of Horses (Veterinary Examination) Order 1969; The Riding Establishments Act 1964 and The Riding Establishments Act 1970 Animals Act 1971 Animal Boarding Establishments Act 1963 Dogs Act 1871 Town Police Clauses Act 1847 Metropolitan Police Act 1839 The Welfare of Wild Animals in Travelling Circuses (England) Regulations 2012 Dangerous Dogs Act 1991 (as amended, 1997)
Monitoring movement	Non-commercial movements of pet animals (Regulation (EC) No. 998/2003)	The Non Commercial Movement of Pet Animals (England) Regulations 2011	
	Bovine identification (Regulation (EC) No. 1760/00); Commission Regulation (EC) No. 2629/97	The Cattle Identification Regulations 2007	
	Tuberculosis (Directive 64/432/EEC)	The Tuberculosis (England) Order 2007. The Tuberculosis (England) (Amendment) Order 2012. The Tuberculosis (England) Order 2005.	Cattle Compensation (England) Order 2012 SI 2012/1379 The Individual Ascertainment of Value (England) Order 2012
	(Commission Regulation (EC) No 504/2008 implements Council Directives 90/426/EEC and 90/427/EEC)	The Horse Passports Regulations 2009	
	Porcine identification (Council Directive 2008/71/EC)	The Pigs (Records, Identification and Movement) Order 2011	
	Intra-Community trade in bovine animals and swine Intra-Community trade in ovine and caprine animals	The Disease Control (England) Order 2003 (as amended)	
	Ovine and caprine identification (Council Regulation (EC) No 21/2004 as amended)	The Sheep and Goats (Records, Identification and Movement) (England) Order 2009; (and double tagging). The Sheep and Goats (Records, Identification and Movement) (England) (Amendment) Order 2006. The Sheep and Goats (Records, Identification and Movement)	

List of animal health and welfare regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
		(England) Order 2005. December 2005	
	Deer identification and movement requirements	<ul style="list-style-type: none"> • The Tuberculosis (Deer) (Amendment) Order 1993 • The Tuberculosis (Deer) Order 1989 The Tuberculosis (Deer) (Amendment) Order 1993 (SI no. 2010) • The Movement of Animals (Records) (Amendment) Order 1989 (as amended) • Welfare of Farmed Animals (England) Regulations 2000 (as amended) 	Tuberculosis (Deer) Notice of Intended Slaughter and Compensation Order 1989
	(Directive 64/432/EEC as amended); (Council Directive 91/68/EEC as amended by Council Directive 2003/50/EC)	The Animal Gatherings (England) Order 2010	
	Intra-Community trade in, and imports of, poultry and hatching eggs; (Council Directive 2009/158/EC); Intra-Community trade in, and imports of, equidae (Council Directive 90/426/EEC as amended); Bovine ova and embryos (Council Directive 89/556/EEC); Porcine semen (Council Directive 90/429/EEC); Equine, ovine and caprine semen, ova and embryos; porcine ova and embryos; other animal species (Council Directive 92/65/EEC); Veterinary checks on live animals and animal products; (Council Directives 89/662/EEC, 90/425/EEC, 91/496/EEC, 97/78/EC)	The Animals and Animal Products (Import and Export) (England) Regulations 2006 & 2010 The Animals and Animal Products (Import and Export) (England) (Laboratories, Circuses and Avian Quarantine) Regulations 2007;	
		Charges for Inspections and Controls Regulations 1997 The Charges for Inspections and Controls (Amendment) (No.2) Regulations 2005. SI 2005/2715 October 2005	
	Bee diseases and pests (Balai Directive 92/65/EEC as amended by Commission Regulation (EC) 1398/2003; Commission Regulation (EC) No. 206/2010)	Bee Diseases and Pests Control (England) Order 2006;	
	Bovine semen (Council Directive 88/407/EEC as amended);	Bovine Semen (England) Regulations 2007 (SI 2007/1319); Bovine Semen (England) (Amendment) Regulations 2011	
			Importation of Animal Pathogens Order
			Importation of hay and straw order

List of animal health and welfare regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
			Export quarantine stations order Animal (Post-Import Control) Order 1995
Animal testing and disease prevention	Zoonoses and zoonotic agents (Directive 117/92/EEC), (part replaced by Directive 2003/99/EC and Regulation 2160/2003)	The Zoonoses Order 1989; the Zoonoses (Monitoring) (England) Regulations 2007; Zoonoses and Animal By-products (Fees) (England) Regulations 2008	
		The Zootechnical Standards (England) Regulations 2012 ⁴⁴	
	Products of animal origin intended for human consumption (Directive 2002/99/EC)	The Products of Animal Origin (Disease Control) (England) Regulations 2008	
	Laying down health rules as regards animal by-products and derived products not intended for human consumption (EC 1069/2009)	Animal By-Products (England) Regulations 2011; Animal By-Products (England) (Amendment) Regulations 2011	
	Control of food-borne salmonella (Regulation 2160/2003)	The Salmonella in Laying Flocks (Survey Powers) (England) Regulations 2004;	
		The Poultry Breeding Flocks and Hatcheries (England) Order 2007; The Control of Salmonella in Turkey Flocks Order 2009 Control of Salmonella in Poultry Order 2007 The control of Salmonella in broilers The eggs and chicks regulations 2009 Registration of Establishments (Laying Hens) (England) Regulations 2003	
	Prevention, control and eradication of transmissible spongiform encephalopathies (TSEs) (Regulation 999/2001)	Transmissible Spongiform Encephalopathies (England) Regulations 2010	
	Brucellosis (Directive 64/432/EEC and Directive 77/391/EEC)	The Brucellosis (England) Order 2000	
	Enzootic Bovine Leukosis (Directive 64/432/EEC) and Directive 77/391/EEC)	The Enzootic Bovine Leukosis (England) Order 2000	
		Animal Feedingstuffs: Production, Stocks and Usage of Raw Materials	
	Avian influenza (Directive 2005/94/EC as amended by Directive 2008/73/EC) (Additional specific measures in Directive 2006/415/EC for H5N1 in poultry;	The Avian Influenza and Influenza of Avian Origin in Mammals (England) (No.2) Order 2006; The Avian Influenza (H5N1 in Poultry (England) Order 2006;	

⁴⁴ This is not a transposing regulation but has been counted as one because it implements the European decisions 2007/371/EC, 2006/427/EC, 2005/379/EC, 94/28/EC, and 2008/73/EC.

List of animal health and welfare regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
	Directive 2006/563/EC ref. H5N1 in wild birds; Directive 2005/734/EC - further preventive measures	The Avian Influenza (H5N1 in Wild Birds) (England) Order 2006; The Avian Influenza (Preventive Measures) England Regulations 2006; The Avian Influenza (Vaccination) (England) Regulations 2006; The Avian Influenza (Fees for the Licensed Vaccination of Birds) (England) Regulations 2007	
			The Avian Influenza and Newcastle Disease (England and Wales) Order 2003; The Avian Influenza and Newcastle Disease (Biosecurity Guidance and Disease Control (Slaughter) Protocol) (England and Wales) Order 2003; The Avian Influenza and Newcastle Disease (Contingency Planning) (England) Order 2003
			Infectious diseases of horses order 1987
			Sheep Scab Order 1997
			Cattle Compensation (England) Order 2012; The Individual Ascertainment of Value (England) Order 2012
Disease out-breaks	Combat spread of certain animal diseases (Directive 92/119/EEC); Notification of diseases (Directive 82/894/EEC)	The Specified Diseases (Notification and Slaughter) Order 1992 & 1996 (as amended);	
	Foot and Mouth Disease (Directive 2003/85/EC)	The FMD (England) Order 2006; IA available The Foot and Mouth Disease (Control of Vaccination) (England) Regulations 2006;	
	Bluetongue (Directive 2000/75/EC)	The Bluetongue Order 2003; The Bluetongue (No.2) Order 2007; The Bluetongue Regulations 2008	
	Classical swine fever (Directive 2001/89/EC)	The Classical Swine Fever (England) Order 2003	
	African swine fever (Directive 2002/60/EC)	The African Swine Fever (England) Order 2003	
	African horse sickness (Directive 92/35/EEC)	The Specified Diseases (Notification and Slaughter) Order 1992 The Specified Diseases (Notification and Slaughter) Order 2006.	
	Aujesky's Disease (compulsorily notifiable in the EU, but there is no specific EU legislation).	Aujesky's Disease Order 1983	
	Directives 92/119 and 2007/10	The Swine Vesicular Disease Regulations 2009	
			Movement of Animals (Restrictions) (England) Order 2002 The Movement of Animals

List of animal health and welfare regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
			(Restrictions) (England) (Amendment) Order 2007
			The Diseases of Animals (Seizure) Order 1993
			Animal Health Act 1981 (Amendment) Regulations 2005;
			The Diseases of Animals (Approved Disinfectants) (England) Order 2007; the Diseases of Animals (Approved Disinfectants) (Fees and Amendment) (England) Order 2011 ⁴⁵
			The FMD (Packing Materials) Orders 1925 and 1926;
			The Specified Animal Pathogens (Amendment) Order 2009. The Specified Animal Pathogens Order 1998;
Veterinary medicines	Directive 2001/82/EC, as amended by Directive 2004/28/EC and Commission Directive 2009/9/EC	Veterinary Medicines Regulations 2011; Veterinary Medicines (Amendment) Regulations 2012	
	Council Directive 81/851/EEC & Council Directive 90/676/EEC	Retailers records for veterinary medicinal products regulations 2000	
	Directive 2001/82/EC, as amended by Directive 2004/28/EC and Commission Directive 2009/9/EC	The Charges for Residues Surveillance Regulations 2006; The Charges for Residues Surveillance (Amendment) Regulations 2008 & 2009 & 2011 ⁴⁶	
	Regulation (EC) 178/2002 (general principles of food safety)		
	Regulation (EC) 1831/2003 (additives)		
	Regulation (EC) 882/2004 (verification of compliance);	The official controls (Animals, Feed and Food) regulations	
	Regulation (EC) 183/2005 (feed hygiene)		
	Council Directive 96/22 (prohibition on use of certain substances)		
	Council Directive 96/23/EC (monitoring measures)		
	Council Regulation 470/2009 (residue limits in foodstuffs of animal origin)		
	Commission Regulation 37/2010 (classification of residue limits)		

⁴⁵ This was listed as the diseases of Animals (approved disinfectants) Order in the 2011 assessment. In the 2012 assessment and future assessments, we use the regulations full title for transparency.

⁴⁶ For transparency this regulation has been listed using its full title.

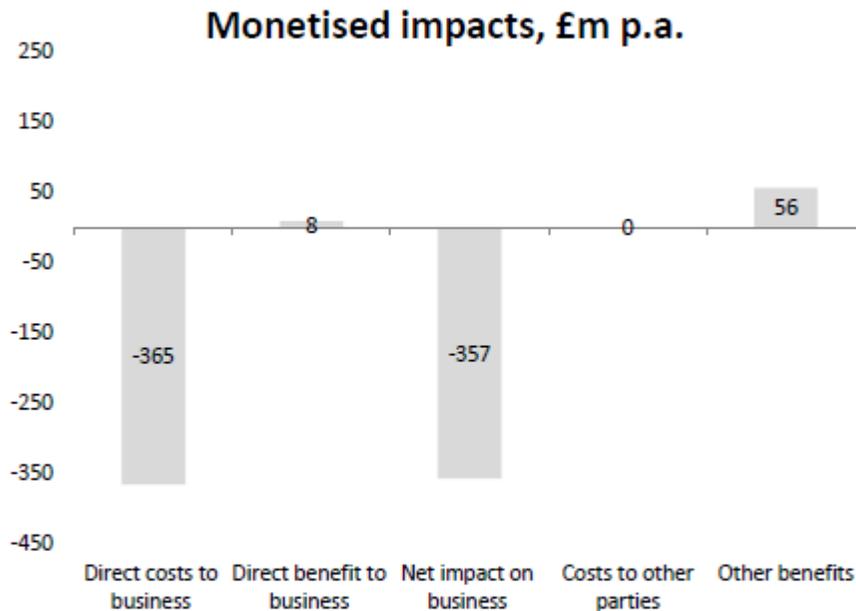
List of animal health and welfare regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
			Veterinary Surgery (Rectal Ultrasound Scanning of Bovines) Order 2010
			Veterinary Surgery (Rectal Ultrasound Scanning of Bovines) Order 2002
			Veterinary Surgery (Artificial Insemination) Order 2010
Totals		56	39

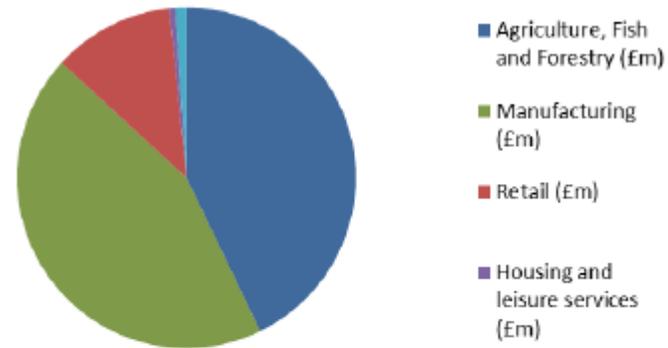
Animal health and welfare – in statistics

Reliability*:
2.4/5

Number of regulations: 94 (of which 56 are EU)



Direct costs by business sector



Direct costs to business by regime:

Animal welfare (£26m); monitoring movement (£107m); animal testing and disease prevention (£192m); disease outbreaks (£0.2m); vet medicines (£47m)

Scope of monetised estimates:

Includes:

- All costs to business
- Benefits to business for 3 set of regulations and wider benefits for 5 sets of regulations

Does not include:

- Costs incurred when there is an outbreak
- Benefits to business and society of reducing the incidence and total cost of animal disease outbreaks
- Benefits of animal welfare standards

Benefit : cost
5.7:1~

Admin burden as % of business cost
43%

% of costs from EU legislation
91%

Notes: Benefit-cost ratio includes 4 sets of regulations.

* Refers to available cost estimates

Biodiversity

Why we regulate

- A Coalition Priority is to enhance the environment and biodiversity to improve quality of life' and an important part of the Government's commitment to be the 'greenest ever';
- Defra's Business Plan included commitments to 1) protect and enhance our urban and natural environment to improve public health and wellbeing by, amongst other things, setting up Local Nature Partnerships and establishing Local Nature Improvement Areas to enhance and reconnect with nature and report on their benefits, and 2) set the strategic direction on biodiversity at home and abroad;
- The conservation and enhancement of biodiversity are critical for a healthy natural environment and for economic and social well-being. We rely on biodiversity for natural resources, for services pollination, the production of healthy fertile soils and so on.

What and how we regulate

- Important sites for nature conservation are designated under International, EU or domestic law to protect important or threatened habitats and species, and to secure their positive management and prevent damage;
- These include Ramsar Sites, Natura 2000 sites, National Nature Reserves, Sites of Special Scientific Interest (SSSI), Local Nature Reserves and Local Sites;
- Certain individual species are also protected at different levels. Some, which are endangered, may be offered complete protection, including protection of their habitat. Others may be managed through restrictions e.g. on hunting;
- Endangered species are subject to a strict licensing system as required by the Convention on International Trade in Endangered Species (CITES) to ensure that the international trade in endangered species is sustainable;
- Activities affecting uncultivated land and semi natural areas, which are often of biodiversity value, are subject to regulation. These regulations prevent being damage by agricultural projects and guard against possible negative environmental effects from the restructuring of rural land holdings;
- Zoos are required to carry out conservation managements activities.

Other policy instruments

- The new England Biodiversity Strategy (EBS) for the period 2011-2020 was published in August 2011.⁴⁷ It sets out how Government is responding in England to the UK's international commitments to halt the overall loss of biodiversity and provides a framework guiding conservation action over the next decade;
- All public authorities have a duty to take biodiversity into account when carrying out their public functions;
- Planning and development also impacts on biodiversity and in addition to the policies set out in planning policy documents. Defra has recently, closed a green paper consultation on introducing a biodiversity offsetting scheme which included

⁴⁷ www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services

an option for introducing a voluntary biodiversity offsetting scheme to improve the process for managing the impacts of development on biodiversity;

- Biodiversity conservation and enhancement projects are supported by a range of funding streams including Life+, and the Heritage Lottery Fund. Under the EBS we are encouraging and facilitating new and innovative financing mechanisms to support conservation of biodiversity;
- Local Nature Partnerships (LNPs) are partnerships, recognised by Government, of a broad range of local organisations, businesses and people who aim to bring about improvements in their local natural environment. LNPs have three aims to 1) drive positive change in the local environment, 2) contribute to achieving the Government's national environmental objectives locally, and 3) become local champions influencing decision making relating to the natural environment and its value to social and economic outcomes.⁴⁸ There are 48 LNPs across England;⁴⁹ 12 Local Improvement Areas (LIAs) were created during 2012 in England. These were the winners of a national competition announced in the National Environment White Paper. Winning proposals received public money to improve local nature sites for the enjoyment of public and the benefit of wildlife. Proposals were mainly from a variety of partnerships of local bodies, including ones led by farmers, NGOs, AONBs and a National Park, and were judged by a panel of experts.⁵⁰
- Regulations in other policy areas support biodiversity. On farmland, Defra uses a policy of financial incentives part funded through the EU Rural Development Regulation (pillar 2 of the Common Agricultural Policy) to encourage farmers and land managers in England to undertake effective land management to conserve and enhance the environment, habitats and wildlife. Schemes within the Rural Development Programme for England include Environmental Stewardship (ES) and English Woodland Grant Scheme. Effective use is also made of the cross compliance requirements ('conditionality' obligations attached to the Single Farm Payment) of the Common Agriculture Policy-to provide basic protection to aspects of the natural environment including supporting biodiversity legislation. The impacts of these regulations are accounted for in the sections on 'agriculture management' for the Common Agricultural Policy and, 'landscape and outdoor recreation' for the English Woodland Grant Scheme.

Changes since 2011 report

- The Spring Traps Approval Order 1995, as varied⁵¹ was revoked and has been removed from the list of regulations. This regulation did not have any impact estimates;
- Business costs for the Habitats and Birds Directives now include the opportunity costs of a Site of Special Scientific Interest designation to landowners;

⁴⁸ Defra, An overview of the Local Nature Partnership role, April 2012.

www.gov.uk/government/uploads/system/uploads/attachment_data/file/192580/local-nature-partnerships-overview120402.pdf

⁴⁹ www.gov.uk/government/policies/protecting-biodiversity-and-ecosystems-at-home-and-abroad/supporting-pages/local-nature-partnerships

⁵⁰ www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/nia/monitoringandevaluation.aspx and www.gov.uk/government/news/twelve-new-havens-for-wildlife-announced

⁵¹ This includes the following regulations The Spring Traps Approval Order 1995, The Spring Traps Approval (Variation) (England) Order 2007, The Spring Traps Approval (Variation) (England) Order 2009, and The Spring Traps Approval (Variation) (England) Order 2010.

- All other regulations have been updated by the GDP deflator so that impacts are in 2012 pounds.

List of biodiversity regulations

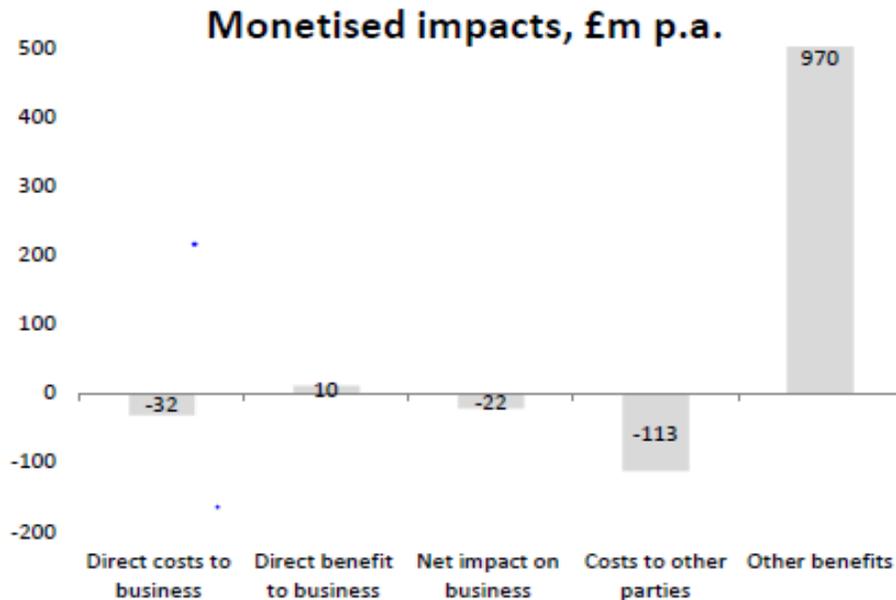
Regime	EU regulations	Transposing regulations	Domestic regulations	
Biodiversity	Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC)	Conservation of Habitats and Species Regulations 2010 as amended Wildlife and Countryside Act 1981, as amended		
	CITES Regulation (EC) No 338/97	Control of Trade in Endangered Species Regulations 1997 as amended; Control of Trade in Endangered Species (Designation of Ports of Entry) Regulations 1985, as amended; Control of Trade in Endangered Species (Fees) Regulations 2009		
	EC Zoos Directive 1999/22/EC	The Zoo Licensing Act 1981, as amended by the Zoo Licensing Act (Amendment) (England and Wales) Regulations 2002		
	Trapping Regulation (No. 3254/91)			
	Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment as amended	The Environmental Impact Assessment (Agriculture) (England) (No2) Regulations 2006		
				Natural Environment and Rural Communities Act 2006
				Wildlife and Countryside (Registration to Sell etc. Certain Dead Wild Birds) Regulations 1991
				Wildlife and Countryside (Registration and Ringing of Certain Captive Birds) Regulations 1982
				The Legislative Reform (Dangerous Wild Animals) (Licensing) Order 2010 No.839
				The Regulatory Reform (Game) Order 2007
				The Wild Birds (Sundays) Order 1955, 1957 and 1963
				Night Poaching Act 1828 & 1844
				Poaching Prevention Act 1862
		Game Act 1831; The Regulatory Reform (Game) Order 2007		
		Ground Game Act 1880		
		Ground Game (Amendment) Act 1906		
		Hares Preservation Act 1892		
		Protection of Animals Act 1911		
		Destructive Imported Animals Act 1932		
		Musk Rats (Prohibition of Importation and Keeping) Order 1933		

		Grey Squirrels (Prohibition of Importation and Keeping) Order 1937
		Grey Squirrels (Warfarin) Order 1973
		Prevention of Damage by Rabbits Act 1939
		Rabbit Clearance Order No. 148 1972
		Prevention of Damage by Pests Act 1949
		Pests Act 1954
		Small Ground Vermin Traps Order 1958
		Conservation of Seals Act 1970; Conservation of Seals (England) Order 1999
		Mink (Keeping) Regulations 1975, as amended; Mink Keeping (Prohibition)(England) Order 2004
		Dangerous Wild Animals Act 1976, as amended
		Control of Pollution (Anglers' Lead Weights) Regulations 1986, as amended
		Coypus (Prohibition on Keeping) Order 1987
		Coypus (Special Licence) (Fees) Regulations 1997
		Deer Act 1991, as amended
		Protection of Badgers Act 1992
		Environmental Protection (Restriction on Use of Lead Shot) (England) Regulations 1999
		The Heather and Grass &c Burning (England) Regulations 2007
		Countryside and Rights of Way Act for England and Wales 2000
		The Hedgerows Regulations 1997
Total	5	30

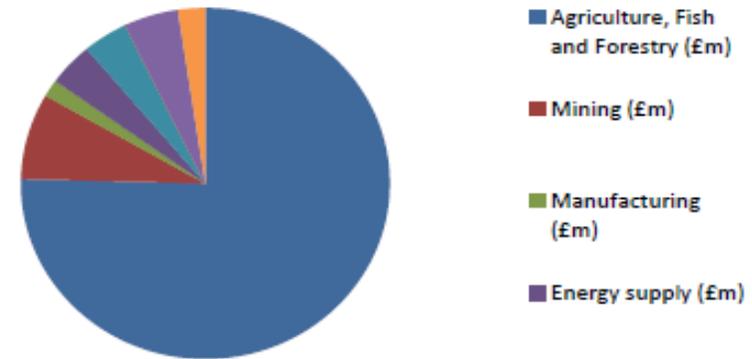
Biodiversity – in statistics

Reliability*:
3/5

Number of regulations: 36 of which 5 are EU



Direct costs by business sector



Scope of monetised estimates:

Includes:

- Costs to business for all regulations but some partial estimates.
- Benefits to business of CITES regulations
- Government expenditure on SSSIs
- Environmental benefits of enhanced SSSIs
- Costs to developers of assessing impacts on N2K sites

Does not include:

- Benefits of measures other than SSSIs
- Any opportunity costs of designations
- Enforcement costs (other than SSSIs).

Notes: Benefit-cost ratio only includes SSSIs.

Benefit : cost

7:1

Admin burden as % of business cost

15%

% of costs from EU legislation

84%

* Refers to available cost estimates

Chemicals and GMOs

Why we regulate

- To support Coalition Priorities through encouraging sustainable food production, helping to enhance the environment and biodiversity to improve quality of life and support a strong and sustainable green economy;
- Chemical products that are intended to improve plant health or are consumed by industry or generated unintentionally as by-products of various industrial or combustion processes can persist, bio-accumulate and/or be toxic, affecting the environment and animal and human health. Persistent organic pollutants and mercury are both recognised as chemicals of global concern and action is undertaken internationally to restrict and ultimately eliminate their use;
- The chemicals industry contributes significantly to the UK economy, with 125,000 direct employees, total sales of around £47bn p.a. and a Gross Value Added to the economy of £6bn p.a. Through regulation we encourage sustainable and innovative alternatives to hazardous chemicals to be found.
- To ensure the release of Genetically Modified Organisms (GMOs) does not harm human health or the environment.

What we regulate

- EU regulation 850/2004 on persistent organic pollutants (POPs) prohibits the production, use and placing on the market of the POPs listed under both the international Stockholm Convention and the POPs Protocol with a view to reducing or eliminating their release and by establishing provisions regarding waste consisting of, containing or contaminated by any of these substances;
- Statutory sampling regimes ensure that residues within food products remain within legal limits;
- UK regulation implementing an EU Directive fulfils our obligation to dispose of and decontaminate equipment containing polychlorinated biphenyls (PCBs) and polychlorinated terphenyls (PCTs) in order to eliminate them completely; this total elimination is shortly foreseen;
- The Mercury Export and Data (Enforcement) Regulations 2010 put into place provisions for UK enforcement and management of obligations under an EU regulation that requires (i) mercury producing companies to provide certain information e.g. amount of mercury produced (ii) bans mercury exports from the EU and (iii) requires the safe storage of waste mercury;
- Where chemicals are not caught by any specific regulatory regime, there is a requirement on manufacturers to register the chemicals made (REACH). Industry then has to provide information about environmental health risks before the chemical is assessed, possibly leading to its restriction.
- Under EU legislation, all plant protection products and GMOs must be authorised before being marketed for use within the EU, and GMOs must be assessed for safety before trials are authorised.

Other policy instruments

- Defra actively works with the chemical industry, on a voluntary basis, to reduce the risk of chemicals damaging the environment, e.g. via a formal agreement to take action to reduce the risk of environmental harm from certain specified substances.

Changes since 2011 report

- The Pesticides Directive has been replaced by the Regulation on the Placing of Plant Protection Products on the market;
- The Plant Protection Product Regulations have been revoked and replaced by the Plant Protection Products Regulations 2011, the Plant Protection products (Fees and Charges) Regulations 2011 and the Plant Protection Products Regulations (Northern Ireland) 2011;
- The following regulations have had their impact estimates updated:
 - The REACH enforcement Regulations now includes wider benefits for the first time. This addition will result in a baseline adjustment;
 - The Mercury Export and Data (enforcement) Regulations the direct costs to business estimate has been revised to remove the transitional costs occurring prior to 2012. This change does not require a baseline adjustment to the 2011 estimate since this transitional cost was incurred in 2012;
 - The Persistent Organic Pollutants Regulations had no impacts estimated in the 2011 assessment due to lack of data. This 2012 estimate now includes business costs estimates of £44m taken from specifically commissioned research.
- Impacts for the Mercury Export and Data (enforcement) Regulations are estimated over the period 2012 to 2038. This is line with the Impact Assessment which estimates impacts over a 40 year period on the basis that the regulation was implemented in 2010;
- Other changes include:
 - A down grading of the reliability rating for the costs to business for the Plant Protection Products for three to one because the admin figure, based on an exercise carried out by Price Waterhouse Cooper, seems too high. However, no evidence is available to update this estimate;
 - The apportionment of direct costs of Chemicals and GMO regulations has changed, since the 2011 assessment, in some cases. In particular, for the:
 - Regulation on placing of plant protection products on the market and the Control of Pesticides Regulations all direct costs to business now fall on the manufacturing sector rather than the agricultural sector since not all costs are passed onto farmers;
 - Regulation on Pesticide Statistics, the 2011 assessment had a 50:50 split of business costs between the agricultural and retail sector. This has now been revised so that 26%, 56% and 19% of direct costs to business fall on the following sectors respectively – agriculture, manufacturing and public services.
- The 2012 assessment stated that the Regulation on Pesticide Statistics was being currently being transposed; this has not occurred.

List of chemicals and GMO regulations

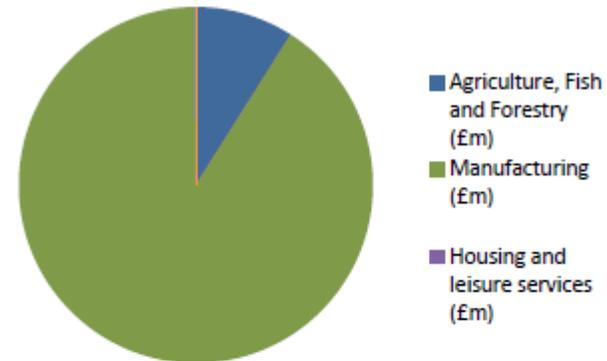
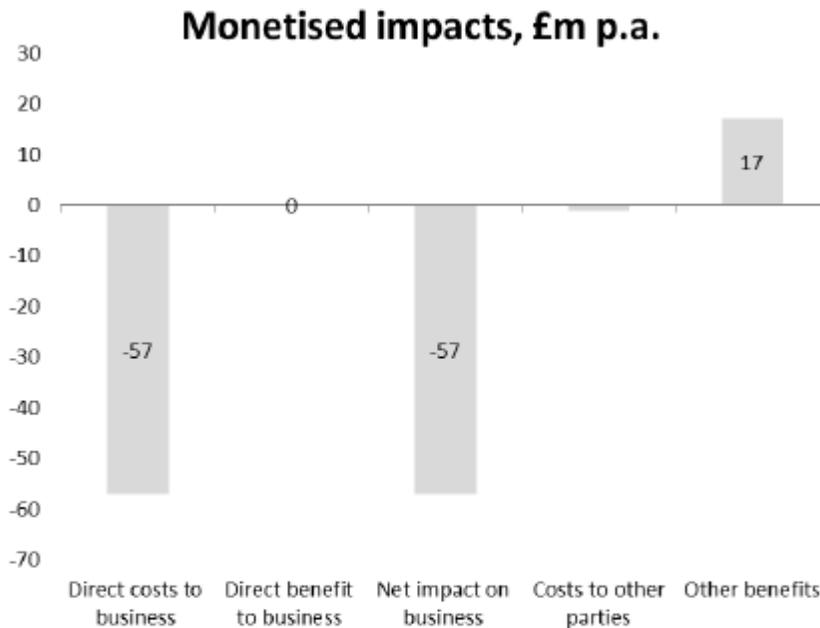
Regime	EU regulations	Transposing regulations	Domestic regulations
Chemicals	Regulation on placing of plant protection products on the market (EC 1107/2009)	Plant Protection Products Regulations 2011, the Plant Protection Products (Fees and Charges) Regulations 2011 and the Plant Protection Products Regulations (Northern Ireland)	
			The Control of Pesticides Regulations 1986
	Framework for sustainable pesticides use Directive (2009/128/EC)	Plant Protection Products (Sustainable Use) Regulations 2012	
	Regulation on pesticide statistics 1185/2009/EC		
			The Food and Environment Protection Act 1985
	Regulation 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin	The Pesticides (Maximum Residue Levels)(England and Wales) Regulations 2008	
	REACH Regulation 1907/2006, as amended	REACH enforcement regulations 2008 The REACH (Appointment of Competent Authorities) Regulations 2007	
	Persistent Organic Pollutants Directive (2006/507/EC)	The Persistent Organic Pollutants Regulations 2007	
	Regulation on mercury 1102/2008	The Mercury Export and Data (enforcement) regulations 2010	
Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls	The Environmental Protection (Disposal of Polychlorinated Biphenyls and Other Dangerous Substances Regulations) (England and Wales) 2000 (no 1043).		
GMOs	Directive 2001/18/EC on the deliberate release into the environment of GMOs. Although Defra has a role in other GMO-related regulations, main policy responsibility for the following regulations rests with other government bodies (The Contained Use Directive is HSE's; The GM food and feed Regulation and the traceability and labelling Regulation are both the responsibility of The Food Standards Agency	Genetically Modified Organisms (Deliberate Release) Regulations 2002 (SI 2002/2443)	
Total	9	2	

Chemicals & GMOs – in statistics

Reliability*:
2/5

Number of regulations: 11 (of which 9 are EU)

Direct costs by business sector



Scope of monetised estimates:

- Includes:*
- Costs to business for all regulations
 - Benefits to business where monetised equals zero
 - Benefits to human health and the environment from keeping exposure to harmful substances within safe limits
- Does not include:*
- Commercial benefits to food industry from increased consumer confidence of pesticides and GM safety
 - Commercial costs and benefits of using alternatives to banned or restricted substances
 - Enforcement costs

Benefit : cost
18.9:1~

Admin burden as % of business cost
9%

% of costs from EU legislation
82%

Notes: Benefit-cost ratio includes 2 sets of regulations

* Refers to available cost estimates

Cross-cutting

Why we regulate

- A Defra Structural Reform Priority is to help enhance the environment and biodiversity to improve quality of life;
- To ensure that the polluter pays for cases of serious environmental damage;
- To provide a statutory right of access to environmental information held by public authorities;
- To ensure a proportionate enforcement regime.

What we regulate

- The prevention and remediation of cases of serious environmental damage;
- Environmental information includes information about air, water, soil, land, flora and fauna, energy, noise, waste and emissions; and information about decisions, policies and activities that affect the environment.
- The use of civil sanctions amongst the range of enforcement tools available to certain regulators to secure compliance with selected environmental regulations.

Other policy instruments

- Insurance companies offer policies that cover incidents of serious environmental damage.

Changes since 2011 report

- The environmental civil sanctions order and regulations 2010 has had the impacts from the Amendments to the Environmental Permitting (England and Wales) Regulations 2010 added.⁵² No regulations have been revoked. All other regulations have been uprated by the GDP deflator.

⁵² Page 7 of the IA states that the impacts of the amendments to the Environmental Permitting regulations 2010 relate to the civil sanctions under environmental permitting, and are additional to the impacts from the civil sanctions IA. (See Defra IA No. 1068, 'Amendments to the Environmental Permitting (England & Wales) Regulations 2010.

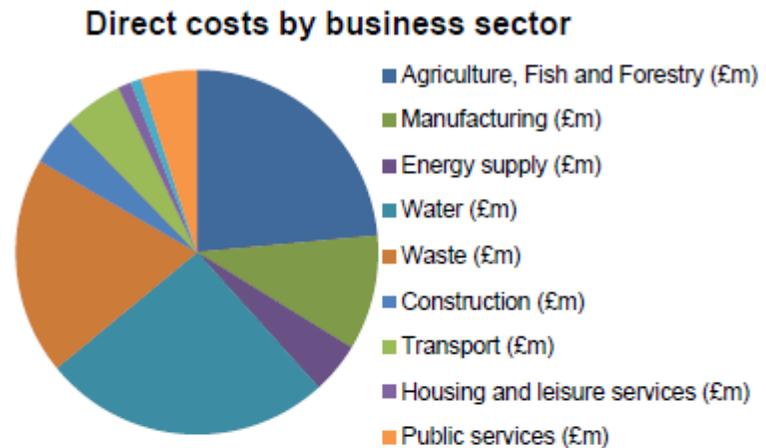
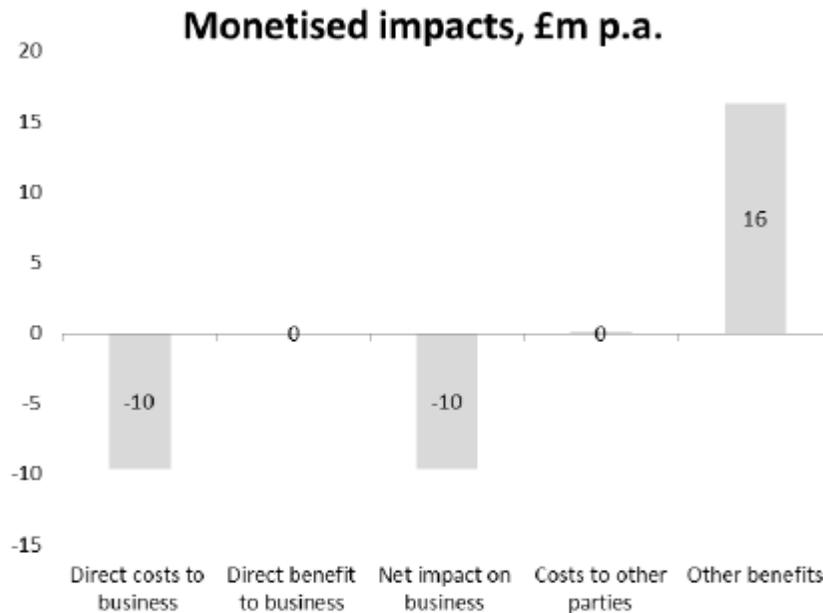
List of cross-cutting regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
Cross-cutting	Environmental Liability Directive (2004/35/EC)	The Environmental Damage Regulations 2009	
	Public participation Directive (2003/35/EC)	The Environmental Information Regulations 2004 [SI 2004/3391]	
			The environmental civil sanctions order and regulations 2010. The Amendments to the Environmental Permitting (England and Wales) Regulations 2010
Total		2	1

Cross-cutting – in statistics

Reliability*:
4/5

Number of regulations: 3 (of which 2 are EU)



Direct costs to business by regime:
Environmental civil sanctions: £7m; the Environmental Damage Regulations: £2m

Scope of monetised estimates:
Includes:
•Costs to business
•Enforcement costs
•Environmental benefits from remediation and avoidance of damage
Does not include:
•Impacts of the Environmental Information Regulations and the Environment Act 1995.

Notes: Benefit-cost ratio includes all regulations

Benefit : cost
1.7:1

Admin burden as % of business cost
2%

% of costs from EU legislation
24%

* Refers to available cost estimates

Flood Management

Why we regulate

- A Coalition Priority is to help to support a strong and sustainable green economy, including thriving rural communities, resilient to climate change;
- Defra's Business Plan included a commitment to improve resilience in the face of flooding and coastal risks by completing a programme of investment to reduce the risk of flooding and improve flood defences;
- Over five million properties in England are currently at risk of flooding from surface water, rivers and the sea. Flooding can happen for a variety of reasons and is worsening as development increases run-off and the climate changes;
- Market failures mean that incentives for private action to tackle flood risk are weak. In particular, benefit is generally collective within affected areas (public good), and the adverse impacts on third parties from actions (e.g. development) are not priced (externalities). These issues have led to flood management becoming a collective public activity – and the basis for this goes back centuries.

What we regulate

- Riparian owners must maintain the bank and bed of watercourses to avoid obstruction of flow;
- Owners of river structures must maintain them properly. Works by rivers and ordinary water courses require formal consent. Riverside property owners in London are required to maintain flood defences;
- Sewerage undertakers must drain their areas effectively. They are responsible for investing in infrastructure to prevent sewage floods;
- Reservoir owners and operators are responsible for their safety; they must be registered and high volume raised reservoirs operate under permit – this is now changing to a more risk based approach;
- Permissive powers to manage flood risk for people, homes and businesses (e.g. through physical defence measures) are granted to public authorities;
- Internal Drainage Boards may levy agricultural land owners for drainage works and includes flood management that is incidental to drainage functions;
- Land may be subject to compulsory purchase for flood protection and the use of watercourses or flood or coastal defence structures may be restricted in the public interest;

Other policy instruments

- Environment Agency works with water and sewerage undertakers to identify flood hotspots, and work with local authorities to identify and promote information about flood risks and potential solutions;
- Some relief for landowners exists under the Countryside Stewardship scheme where existing flood defence removed to provide new inter-tidal habitat;
- The Association of British Insurers has agreed a statement of intent with Government to enable the insurance market to be able to provide flood insurance;
- Rural land management can reduce the incidence of flooding on a local scale.

Changes since 2011 report

- No new regulations have come into force and no regulations have been revoked;
- The only change is that the Flood and Water Management Act has been updated to include benefits to landowners, resulting in baseline adjustments.

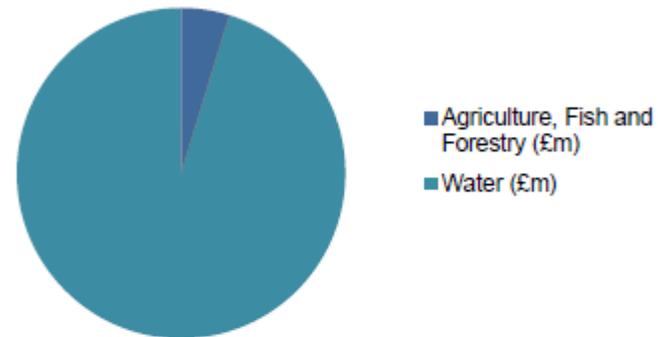
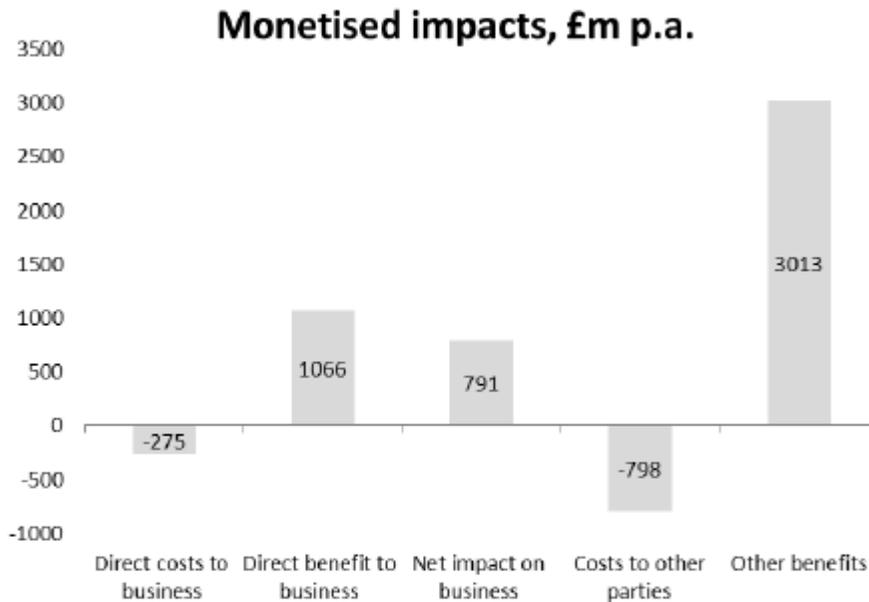
List of flood management regulations			
Regime	EU regulations	Transposing regulations	Domestic regulations
Floods	Directive 2007/60/EC on the assessment of flood risks	Flood Risk Regulations 2009	
			Flood provisions of the Water Resources Act 1991
			Flood provisions of the Water Industry Act 1991
			Land Drainage Act 1991
			Flood provisions of the Reservoirs Act 1975
			Coast Protection Act 1949
			Metropolis Management (Thames River Prevention of Floods) Amendment Act 1879
		Flood and Water Management Act 2010	
Total		1	7

Flood management – in statistics

Reliability*:
3/5

Number of regulations: 8 (of which 1 is EU)

Direct costs by business sector



Scope of monetised estimates:

Includes:

- Costs to business
- Government expenditure on flood management
- Benefits to business from avoided flood damage
- Financial benefits to others from avoided damage

Does not include:

- Avoidance of health and stress impacts, disinvestment, environmental and social damage from flooding
- Maintenance of investment confidence, urban clusters and mobility (through protection of transport infrastructure)

Benefit : cost

3.8:1

Admin burden as % of business cost

1%

% of costs from EU legislation

0%

Notes: Benefit-cost ratio includes all regulations

* Refers to available cost estimates

Food

Why we regulate

- A Coalition Priority is to support and develop British farming and encourage sustainable food production;
- Defra's Business Plan included a commitment to deliver a new framework for achieving the dual objectives of increasing food production and enhancing the environment;
- Government's role is to ensure the food chain delivers a healthy and secure food supply for all. Farming also makes an important non-food contribution to rural economies and the environment.

What we regulate⁵³

- The food industry is regulated to protect consumers from deceptive practices and encourage market transparency and fair competition;
- Food composition and labelling requirements;
- Some supply chain and marketing issues: poultry meat marketing, Scotch whisky and spirit drink regulation, marketing of fresh horticultural produce, beef and veal labelling and dairy sector trade.

Other policy instruments

- Partnership working with the industry to: change producer action, for example Campaign for the Rural Environment; and to encourage new consumer behaviour and investment;
- Seeking to encourage businesses to adopt the best practice labelling guidance and develop a voluntary code of practice;
- Government leading by example in public sector food procurement to ensure they meet British standards of production and develop a set of Government Buying Standards;
- Participation in the voluntary system for the protection of food names on a geographical or traditional recipe basis.

Changes since 2011 report

- The Wine Regulations 2009 were revoked and replaced by the Wine Regulations 2011;
- No new sets of regulations were introduced in 2012. However, the Fruit juices and fruit nectars regulations were amended; given that the assessment uses sets of regulations rather than counting individual Statutory Notices this addition has not altered the number of regulations;
- All other regulations were updated by the GDP deflator so that impacts are in 2012 pounds.

⁵³ The food industry has a number of environmental impacts, e.g. waste and water are dealt with elsewhere. This section has a narrower focus.

List of food regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
Standards and labelling	Regulation (EEC) No.1247/91 and (EEC) No.1907/90	Eggs (marketing standards) Regulations 1995	
	Regulation 1234/2007	Milk and Milk Products (Pulps in Educational Establishments) (England) Regulations 2001	
		Poultry meat Marketing standards	
		Beef - Compulsory Origin Labelling	
	Regulation No. 110/2008 Definition, description and presentation of spirit drinks	Spirit Drink Regulations 2008 /Specific measures concerning the marketing in ethyl alcohol of agricultural origin	
		Control of Casein in Cheese Making	
		Brewers, Distillers and Maltsters	
		Wine Regulations 2011	
	Numerous	Food labelling regulations	
	Regulation 104/2000	Fish labelling regulations	
		Beef and veal	
	89/397/EEC	Cocoa and chocolate products	
	Directive 2001/114/EC	Condensed and dried milk regulations	
	Directive 1999/4/EC	Coffee and chicory extracts regulations	
	Directive 80/777/EEC	The natural mineral water, spring water and bottled drinking water regulations	
	Directive 2001/112/EC	Fruit juices and fruit nectars regulations 2003 and amending regulation 2011	
	Directive 2001/111/EC	Specified sugar products regulations	
	Directive 2001/113/EC	Jam and similar products regulations	
	Directive 2001/110/EC	Honey regulations	
	Regulation 1234/2007	Spreadable fats and milk and milk products regulations	
Directive 77/99/EEC	Meat products regulations		
Regulation (EC) No 110/2008	Scotch whisky regulations		
Slaughterhouses	Regulation No 1234/2007; No 1249/2008	The Beef and Pig Carcase Classification (England) Regulations 2010	
		Deadweight Price Reporting Cattle Scheme	
		Return of Stock Slaughtered by Type of Animal	
International trade	Regulation (EC) No 3448/93	Stocks of Cereals and Feeding stuffs held by Importers, Dealers and Merchants	
	EC Council Regulation 510/2006 on the Protection of Geographical Indications and Designations of Origin		
	EC Council Regulation No 509/2006 - Traditional Speciality Guaranteed		
	Regulation (EC) No 1043/2005	Import and export licences and advance fixing certificates for agricultural products	
		Rice - Import and Export Licensing	
		Milk Import Duties	
		Importing and Exporting CAP Goods - Bananas	
	Regulation No 529/2007 and 545/2007	Beef Import Tariff Quota	
	Manioc imports from Thailand		

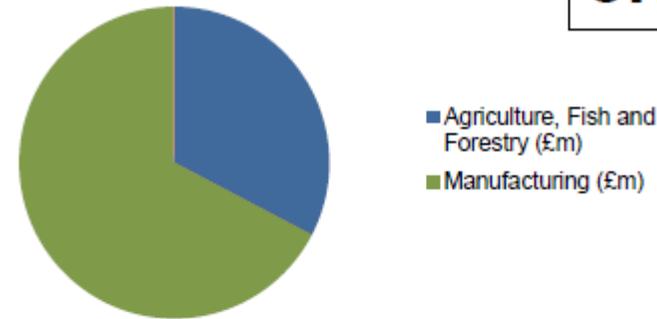
Other	EU School Fruit Scheme		
	Organic Products Regulations 2009		
	The Marketing of Fresh Horticultural Produce Regulations 2009		
Sum total		37	0

Food – in statistics

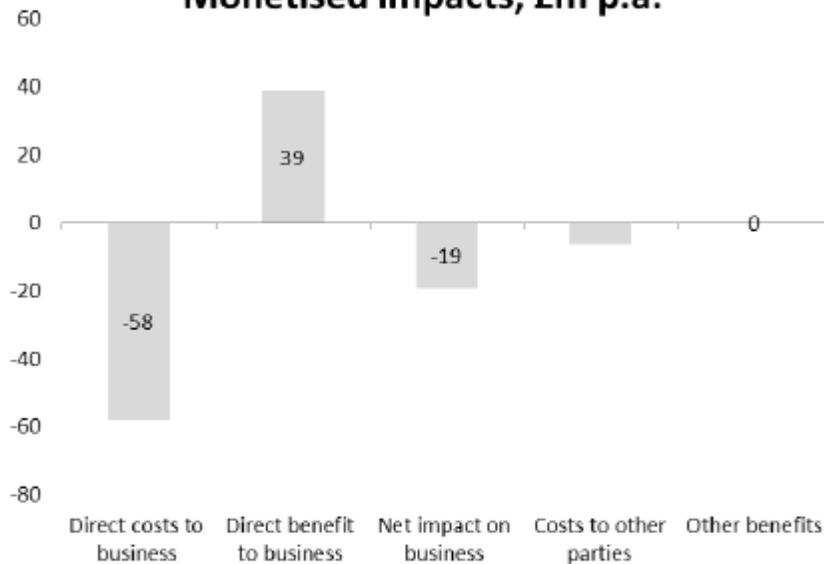
Number of regulations: 37 (all EU)

Reliability*: **3.7/5**

Direct costs by business sector



Monetised impacts, £m p.a.



Direct cost to business by regime: standards and labelling (£43m); slaughterhouses (£0m); international trade (£6m); horticultural marketing (£9m)

Scope of monetised estimates:
 Includes:
 •Costs to business of all regulations
 •Government expenditure on the school fruit scheme
 •Benefits to UK of Scotch Whisky regulations
 Does not include:
 •Benefits to consumers of food standards and transparency;
 •Benefits to industry of transparency about standards and of trading rules;
 •Enforcement costs for slaughterhouses and international trade.

Benefit : cost
N/A

Admin burden as % of business cost
10%

% of costs from EU legislation
100%

* Refers to available cost estimates

Land Contamination and Soils

Why we regulate

- Defra's Business Plan includes a commitment to enhance and protect the environment, including biodiversity and the marine environment, by reducing pollution, mitigating greenhouse gas emissions and preventing habitat loss and degradation;
- England has a substantial legacy of chemical contaminants in its soils, stemming from a long history of industrial activity, posing potential risks to humans and the environment, though direct scientific evidence of links between human health and soil contamination remain poorly understood;
- Soils provide a range of essential ecosystem services such as food production, water management and carbon storage. Their ability to continue to provide these in the future may be threatened by intensive agricultural production, industrial pollution, development pressure and climate change.

What we regulate

- The UK currently covers a wide range of soil protection measures through voluntary agreements and there is little soil specific legislation as voluntary approaches are seen to perform well as they are highly flexible and can be adapted to the wide range of soils and land uses across the UK;
- The Natural Environment White Paper 2011 sets out the ambitious objective of improving the sustainable management of soil and to tackle degradation to preserve healthy soils for future generations;
- England's peat reserves are protected using a voluntary approach which aims to phase out the use of peat in horticulture by 2030;
- Where contaminated land poses unacceptable risks to human health or the wider environment and no market-led solution exists, the Local Authority takes action under Part 2A of the Environmental Protection Act 1990;
- Land managers must comply with four Good Agricultural and Environmental Condition (GAEC) standards in order to receive CAP payments. These standards aim to protect agricultural soils focusing on erosion, soil compaction and soil organic matter decline. Compliance is met through completion and implementation of a Soil Protection Review. The Soil Protection Review is aimed at the protection of agricultural soils and requires land managers to assess soil types and risks and select appropriate land use measures to address the identified risks from a catalogue of options;
- Other environmental measures directly or indirectly protect soils from degradation (e.g. environmental permits, fertiliser regulations, a code of practice for the use of sewage sludge, the protection afforded by Nitrate Vulnerable Zones under the Nitrates Directive and the Construction Code of Practice, which aims to protect soils from hazards occurring during building and development activities);
- There are regulatory controls that are focused on ensuring that organic materials do not present an unacceptable risk to human health and the wider environment.

Other policy instruments

- In tackling land contamination current policy is that the market should be encouraged to deal with land contamination when land is redeveloped, and

hold other measures in reserve to deal with cases where there is no prospect of private sector solution;⁵⁴

- The Contaminated Land Programme within Defra provides grants to local authorities to identify and remediate contaminated land where no market-led solution exists;
- A Code of Practice for Soil Use on Construction Sites and a new toolkit for planners on how to take soil functions into account through the planning system have been published in order to ensure that soils are protected from the pressures imposed by construction, such as compaction through heavy machinery.

Changes since 2011 report

- During 2012, no new regulations were introduced or revoked. However, in the 2011 assessment the Contaminated Land (England) Regulations 2000 were listed as a separate domestic regulation, when it should have been listed as part of the Implementation of Part IIA of the Environmental Protection Act 1990. This has led to the number of domestic regulations falling from four to three;
- Since the 2012 assessment:
 - The DETR Circular 2/2000 Contaminated land has had impact estimates added for everything apart from benefits to parties other than business, and the direct benefits to business are estimated at £0m p.a. The direct costs to business have been given a reliability rating of three.
 - The Soil Protection Review now includes estimates of wider benefits;
 - The 2011 assessment incorrectly stated that for the Soil Protection Review the 0% of the direct costs of the EU is derived from EU requirements; it should be 100%. However, the Soil Protection Review requires Member States to put in place soil standards for cross-compliance. This is driven by the Common Agricultural Policy – which is captured under the Agricultural Management policy area of the regulatory stock assessment;
 - The reliability rating of the costs to business for the Agricultural Land (Removal of Surface Soil) Act, 1953 has been downgraded from five to four. This is due to incorrect classification in the 2011 report.
 - One regulation (the Countryside Stewardship Scheme⁵⁵) has been moved from Land and Soil to Agricultural Management because it is an agri-environment scheme which predates to the Environmental Stewardship Scheme.

⁵⁴ The prevention of more contaminated land being created is covered by policies and regulations on pollution relating to air, water, waste and chemicals. The Soil Strategy sets out Defra's particular approach to soil pollution.

⁵⁵ The scheme was replaced by the Environmental Stewardship in 2005 but payments to CS agreement holders continued in 2012 because agreements were for 10 years (in some cases 20 years).

List of land contamination and soils regulations			
Regime	EU regulations	Transposing regulations	Domestic regulations
Land			DETR Circular 2/2000 Contaminated Land: Implementation of Part IIA of the Environmental Protection Act 1990; Contaminated Land (England) Regulations 2000
Soil			Soil Protection Review ⁵⁶
			The Agricultural Land (Removal of Surface Soil) Act, 1953
Total		0	3

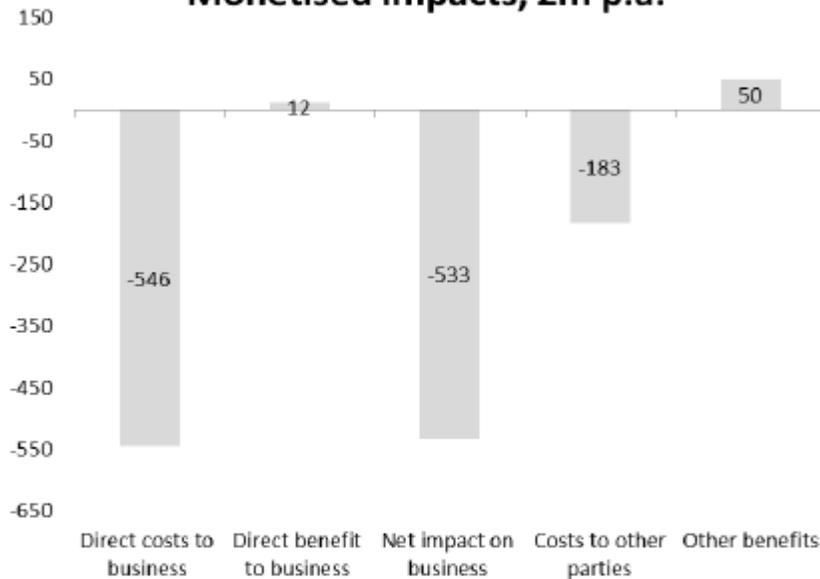
⁵⁶ Note that this regulation is derived from the EU CAP regulation on CAP. To avoid double counting of EU regulations, CAP is listed under agricultural policy. For land contamination and soils the direct costs to business due to the Soil Protection Review are scored as derived from EU regulations.

Land and soil – in statistics

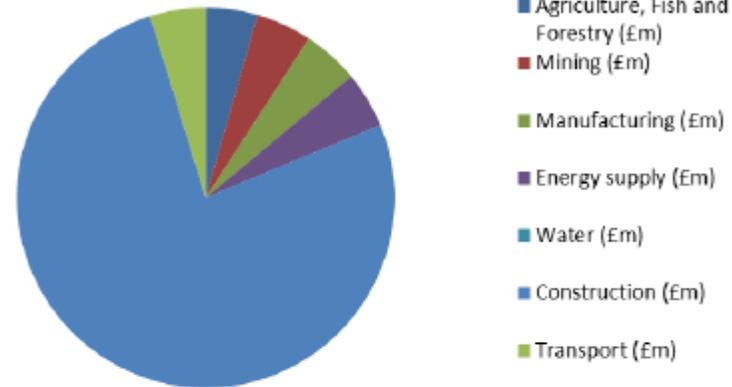
Reliability*:
3/5

Number of regulations: 3 (none EU)

Monetised impacts, £m p.a.



Direct costs by business sector



Scope of monetised estimates:

- Includes:*
- Costs to business of the contaminated land regime and the Soil Protection Review
 - Government expenditure on remediation & assessment
 - Benefits to business of the Soil Protection Review (minimum estimate)

- Does not include:*
- Reduced health and ecological risks from remediation
 - Improved soil function from actions in response to the Soil Protection Review
 - Environmental disbenefits associated with land remediation work

Notes: Most of the cost is from higher than efficient standards of remediation resulting from uncertainty in the contaminated land regime.

Benefit : cost
N/A

Admin burden as % of business cost
0%

% of costs from EU legislation
4%

* Refers to available cost estimates

Landscape and Outdoor Recreation

Why we regulate

- A Coalition Priority is to enhance the environment and biodiversity to improve the quality of life;
- Defra's Business Plan included a commitment to review the direction of forestry and Woodland policy in England;
- Access to high quality landscapes provides a range of health benefits.

What we regulate

- Public access to land, coastal access, access to open countryside, footpaths and bridleways and along inland waterways;
- Plant health and forestry reproduction;
- Planning requirements within National Parks, for example: forest managers may be required to prevent loss of tree cover and ensure that new forests and related operations do not harm the environment. A felling licence and longer term design plan may be required before starting work.

Other policy instruments

- A voluntary approach is used to improve public footpaths through the development of permissive paths.

Changes and clarifications since 2011 report

- The following regulations have been introduced and came into force during 2012:
 - The Access to the Countryside (Exclusions and Restrictions) Amendment Regulation 2011;
 - The Plant Health (Forestry) (Amendment) Order 2012;
 - The introduction of these regulations does not change the number of sets of regulations;
 - Neither of these amendments has an accompanying Impact Assessment.
- There have been no revocations during 2012;
- The Access provisions in the Marine and Coastal Access Act 2009 has no separate Impact Assessment. Instead, the Impact Assessment which was prepared for Part 9 (coastal access) of the Marine and Coastal Act 2009 examined the impact of the access provisions on the marine side. Thus, although this regulation is listed under Landscape and outdoor Recreation, the impacts are captured under the Marine policy area;
- All other regulations have been uprated by the GDP deflator;
- The reliability rating has increased from 2.0 to 3.9, due to the inclusion of reliability ratings for Forests: grants and licensing and Forest reproduction regulations;
- The access to the countryside provisions under the Higher Level Stewardship (HLS) scheme were listed under 'other policy instruments' in the 2011 assessment still operates. It provides grants to farmers and land managers for meeting certain environmental objectives. However, the permissive access

to the countryside objective has not been available for new agreements since December 2010, having been discontinued as part of Spending Review changes. Earlier agreements are however being honoured and continue to receive access payments until their expiry date. The last of these agreements will expire in October 2020. Impacts for HLS are estimated in the 'Agricultural Management' section; and the access to the countryside provision is not split out here.

List of landscape and outdoor recreation regulations			
Regime	EU regulations	Transposing regulations	Domestic regulations
Access and public rights of way			Parts I and II of the Countryside and Rights of Way Act 2000
			Access to the Countryside (Exclusions and Restrictions) (England) Regulations 2003; Access to the Countryside (Exclusions and Restrictions) (Amendment) (England) Regulation 2011
			Highways Act 1980 sections 25-28, 118-119b and schedule 6
			Part III of the Wildlife and Countryside Act 1981
			Access provisions in the Marine and Coastal Access Act 2009
			Part 6 of the Natural Environment and Rural Communities Act 2006
			Part IV and V of the National Parks and Access to the Countryside Act 1949
			Part IV and V of the National Parks and Access to the Countryside Act 1949
Common Land			Commons Act 2006
			Commons Registration Act 1965
			Part 1 of the Commons Act 1899
National parks			National Parks and Access to Countryside Act 1949 section 20 and 21
			National Park and Broads Authorities (Model Code of Conduct) (England) Order 2001
			Statutory powers in the Countryside and Rights of Way Act 2000
			The Norfolk and Suffolk Broads Act 1988
Areas of outstanding natural beauty			Part IV of the Countryside and Rights of Way Act 2000
			Cotswolds Area of Outstanding Natural Beauty (Establishment of Conservation Board) Order 2004
			Chilterns Area of Outstanding Natural Beauty (Establishment of Conservation Board) Order 2004
Forests: grants and licensing			The Forestry Act 1967
			English Woodland Grant scheme;

			Farm Woodland Premium Scheme
	EIA Directive	Environmental Impact Assessment (Forestry)(England and Wales) Regulations 1999	
Forests: plant health			Plant Health (Forestry) Order 2005; Plant Health (Forestry) (Amendment) Order 2006; Plant Health (Forestry) (Amendment) Order 2012
			Plant Health (Forestry) (Phytophthora Ramorum) (Great Britain) Order 2004
			Plant Health (Wood Packaging Material Marking) Order 2006
			Plant Health (Export Certification)(Forestry)(Great Britain) Order 2004
			Treatment of Spruce Bark Order 1993
Forest reproduction			Forest Reproductive Material (Great Britain)(Amendment) Regulations 2006
Forest Byelaws			The Forestry Commission Byelaws 1982
Total		1	11

Landscape and recreation – in statistics

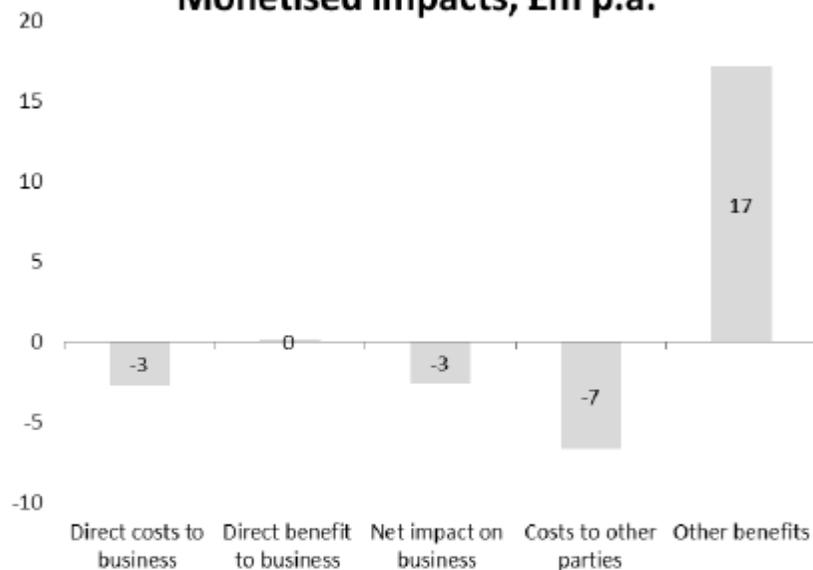
Number of regulations: 27 (of which 1 is EU)

Direct costs by business sector

Reliability*:

3.9/5

Monetised impacts, £m p.a.



■ Agriculture, Fish and Forestry (£m)

Direct cost to business by regime: Access (£1.1m); National Parks (£0.3m); Forests (£1.2m)

Scope of monetised estimates:

Includes:

- Costs to business for access and National Park administrative burden only for forestry
- Costs to users and the public sector of access
- Social benefits for access

Does not include:

- Costs or benefits of Common Land or AONBs
- Impacts of forestry regs: compliance costs and government costs including grant funding. Benefits to foresters of grants and of forestry management measures, environmental and social benefits
- Other costs of access (to property owners of disruption, safety measures and ongoing management
- Opportunity cost of National Parks
- Health and wellbeing benefits from increased access
- Environmental, social and economic benefits of Parks

Benefit : cost

2.2:1

Admin burden as % of business cost

58%

% of costs from EU legislation

3%

Notes: Benefit-cost ratio includes 2 sets of regulations

* Refers to available cost estimates

Marine

This covers:

- Protection and use of the marine environment;
- Sea fisheries policy;
- Freshwater and migratory species policy.

Why we regulate

- The UK vision for the marine environment is for clean, healthy, safe, productive and biologically diverse oceans and seas. This is reflected in two of the Coalition's Priorities to 1) enhance the environment and biodiversity to improve quality of life, and 2) support and develop British farming and encourage sustainable food production;
- Defra's Business Plan included a commitments to 1) create new Marine Conservation Zones, and 2) reform the management of domestic fisheries and influence reform in Europe to support strong fishing industries;
- We subject our seas to competing demands as well as pollution and other damage. They help to regulate our climate, but their ecosystems are threatened by warming and acidification. Some fish stocks are not fished at sustainable levels and some habitats and species are threatened by the pressures on our seas;
- Our seas are a common public resource so we aim to ensure they are sustainably managed for a range of social, environmental and economic benefits. We are tackling the issues of how best to strike a balance between conservation and development of marine resources. Supplies of fish as a healthy food source need to be secured, without destroying fish stocks and damaging the marine environment, and enabling a sustainable fishing industry;
- Regulation is often necessary to ensure compliance with our EU and international obligations and commitments.

Protection and Use of the Marine Environment

What we regulate

- The Marine and Coastal Access Act 2009 established a framework for taking a more inclusive and forward looking approach to managing marine activities. This encompasses the creation of a new non-departmental public body, the Marine Management Organisation which will carry out planning functions within the English inshore and offshore regions, a new streamlined marine licensing system, and a new system of marine planning which will guide decisions which affect the marine environment;
- The marine planning process has commenced with the creation of the UK Marine Policy Statement which provides the UK-wide policy context and framework within which Marine Plans will be developed;
- The second stage of marine planning will consist of a series of Marine Plans that will interpret and present the national policies within the UK Marine Policy Statement and apply area specific policy, spatially where appropriate, within Marine Plan areas. Marine planning within the English inshore and offshore regions will be taken forward by the Marine Management Organisation using

- a phased approach with two plans being developed at any one time. It is estimated that each Marine Plan will take roughly two years to complete;
- All public authorities taking authorisation or enforcement decisions that affect or might affect marine areas must do so in accordance with the Marine Policy Statement and Marine Plans unless relevant considerations indicate otherwise;
 - Marine licensing is the term used for giving official consent to people or companies who want to carry out a wide range of projects or activities in, on or under the sea. Through the process of marine licensing and the conditions put into licences, the objective is to minimise the adverse impact of activities on the environment, navigational safety and other legitimate uses of the sea;
 - The Marine Strategy Framework Directive requires Member States to put in place measures to achieve or maintain Good Environmental Status in their seas by 2020. We are deciding what Good Environmental Status will mean for our seas, balancing our environmental ambitions against impacts on industry and society as a whole;
 - We are seeking to halt the decline in marine biodiversity and allow recovery where appropriate. This requires a range of measures to be agreed to meet our obligations under EU and national legislation, while managing competition between conservation and socio-economic needs. Marine protected areas are one of the major tools to conserve biodiversity and associated ecosystem services in the marine environment;
 - The Marine and Coastal Access Act 2009 introduced a new type of marine protected area called Marine Conservation Zones (MCZs). MCZs will complement existing marine protected areas and those in the pipeline under European legislation, to create a coherent network that will conserve important marine ecosystems for future generations;
 - MCZs will contribute to the UK's commitments under the Convention on Biological Diversity, the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR), World Summit on Sustainable Development and the Marine Strategy Framework Directive.

Sea fisheries policy

What we regulate

- The Common Fisheries Policy (CFP) is the EU's instrument for the management of fisheries and aquaculture. It is a highly centralised, one size fits all regime, where EU Fisheries Ministers make decisions each year on catch limits on "quota" stocks and related measures such as the time fishermen can spend at sea;
- The CFP also provides financial support through the European Fisheries Fund as well as providing the regulatory framework for monitoring, control and enforcement;
- Much of this regulatory framework is directly applicable via EC regulations. Some requirements, such as the need for fishing vessels to be licensed, restrictions on the number of days at sea, restrictions on the type of fishing gear, and restrictions in the ports where landings can be made, have been implemented into national legislation.

Freshwater and Migratory Species Policy

What we regulate

- The overall aim of freshwater and migratory species policy is to promote the conservation, restoration and rational management of salmonids, eels and freshwater fish stocks;
- The Environment Agency, who have day to day management and regulatory responsibility for salmon and freshwater fisheries, can introduce byelaws to protect fish stocks by restricting the methods and baits that are used by anglers and netsmen;
- Defra licences the keeping and/or release of species of fish and crayfish likely to constitute a threat to species native to the UK;
- Major amendments to the Salmon and Freshwater Fisheries Act 1975 made by the Marine and Coastal Access Act 2009 will enable the introduction of a new authorisation scheme for net and trap fisheries for eel, smelt and lamprey fisheries in order to ensure proper scrutiny is given to these fisheries before they may be pursued;
- Amendments will also enable the introduction of a number of new schemes concerning the stocking and transportation of live fish, this includes a scheme to regulate the introduction, removal and keeping of live fish and another concerning the stocking of alien fish in fish farms;
- We are encouraging the development of efficient, competitive and sustainable aquaculture industries whilst protecting the health status and conservation of UK farmed and wild freshwater fish and shellfish.

Marine - other policy instruments

- The UK is piloting the use of catch quotas as a new way of managing fisheries. Under this scheme all catches are counted against the quota and fishermen have to stop fishing once these are reached. Instead of discarding, fishermen used their professional knowledge and skills to maximise the return from what they caught;
- The Fishing for the Markets Project looked at ways to encourage consumption of under-utilised, sustainable species that are often discarded. The project investigated what Government and industry can do to remove barriers to using less popular fish, use market incentives to deliver more sustainable fisheries and to maximise the value of what is already caught. The project reported in May and next steps are currently under consideration;
- Industry-led self-regulation of brown crabs with self-imposed limits for larger vessels.

Changes since 2011 report

- The following domestic regulations have been added:
 - The Offshore Marine Conservation (Natural Habitats, &c.) (Amendment) Regulations 2012 has been added to the Offshore Marine Conservation (Natural Habitats etc.) Regulations 2007. This addition does not alter the number of sets of regulations.
- The following regulations were revoked:
 - Regulation fixing total allowable catches for certain fish stocks and groups if fish stocks (53/2010);

- Sea Fishing (Licensing and Notices) Regulations 1994 has been revoked and replaced by Sea Fishing (Licensing and Notices) (England) Regulations 2012;
- Scallop Fishing Order 2004 has been revoked and replaced by the Scallop Fishing (England) Order 2012.
- Estimates for the impact of the Marine Strategy Framework Directive have now been included. The inclusion of these impacts does not require any baseline revisions as the first impacts occur in 2012. The Directive is appraised over 13 years since this is the lifetime of the policy impacts. Artificially, capping the impacts to 10 years would result in a skewed annual equivalent estimates;
- The impacts of a domestic regulation (Access provisions in the Marine and Coastal Access 2009)_listed under Landscape and Outdoor Recreation policy area have been included in the impacts for the marine policy area;
- The new Common Fisheries Policy reforms have not been included in this update, as these are not finalised and have not come into force during 2012.

List of marine regulations			
Regime	EU regulations	Transposing regulations	Domestic regulations
Protection and use of the marine environment			Licensing requirements now in the Marine and Coastal Access Act 2009 (and associated SI)
			Civil sanctions in the Marine and Coastal Access Act 2009 (and associated SI) (not currently applicable)
			Planning system in the Marine and Coastal Access Act
			Marine and Coastal Access Act 2009- Reform of inshore fisheries management
			Marine Conservation Zone provisions of the Marine and Coastal Access Act 2009
	The Habitats Directive; The Wild Birds Directive	The Offshore Marine Conservation (Natural Habitats etc.) Regulations 2007 and the Offshore Marine Conservation (Natural Habitats, & c.) (Amendment) Regulations 2012	
	The EIA Directive	The Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2011	
	The Marine Strategy Framework Directive	The Marine Strategy Regulations 2010	
Fisheries: principal acts			Fishery Limits Act 1976
			Sea Fish (Conservation) Act 1967
			Sea Fisheries Act 1968 and Commencement Order 1969
			Fisheries Act 1981

			Sea Fisheries (Shellfish) Act 1967	
Fisheries: Access to fishery limits	Common Fisheries Policy (2371/2002)			
	Unreported and unregulated fishing (1005/2008). Regulation 1010/2009 lays down the detailed rules			
	Authorisation of Community vessels outside Community waters (1006/2008). Commission Regulation 210/2010 lays down detailed rules			
Fisheries: technical measures	Regulation on the protection of juveniles of marine organisms (850/98)	Sea Fishing (enforcement of Community Conservation Measures) Order 2000 as amended		
	Regulation on incidental catches of cetaceans in fisheries (812/2004)			
	Regulation on the removal of fins of sharks on board vessels (1185/2003)	The Sea Fishing (Prohibition on the removal of shark fins) Order 2007		
		Shrimp fishing nets Order 2002		
		Sea Fish (Specified Sea Areas (Regulation of Nets and Other Fishing Gear) Order 2011 as amended		
				Undersized edible crabs Order 2000
				Undersized velvet crabs Order 1989
				Undersized spider crabs Order 2000
				Undersized lobster Order 2000
				Undersized Bass Order 1989
				Lobsters and crawfish (prohibition on fishing and landing) Order 2000
				The Tope (Prohibition of fishing) Order 2008
				Prohibition of fishing with multiple trawls Order 2003
				Bass (Specified Areas) (Prohibition of Fishing) Order 1990, as varied
				Razor Shells, trough shells and carpet shells (specified sea are) (prohibition of fishing) Order 1998
		Scallop Fishing (England) Order 2012		
		South West Territorial Waters (Prohibition of Pair Trawling) Order 2004		
		Sea Fishing (recovery Measures) Order 2008		
		Sea Fishing (restrictions on days at sea) Order 2007		

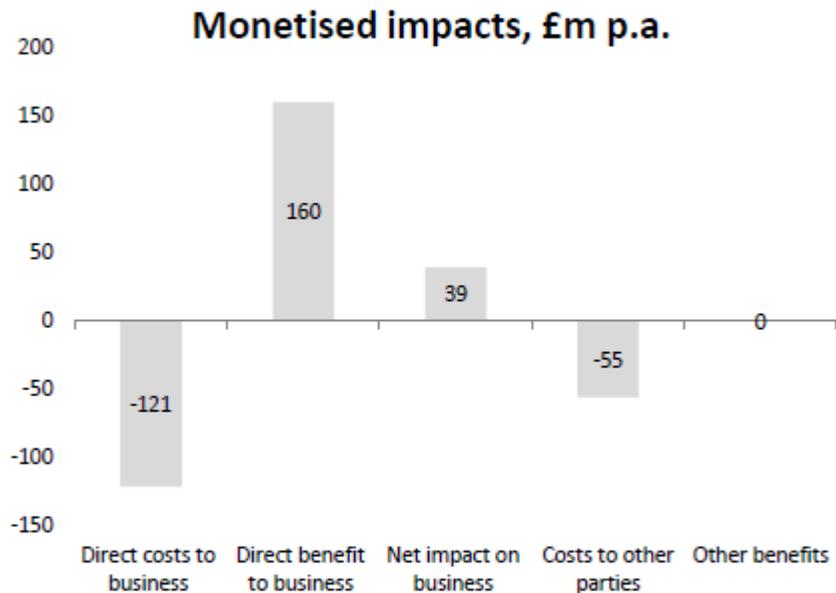
Fisheries: special protections	Regulation on access requirements for deep sea stocks (2347/2002)		
	Regulation on control measures for certain highly migratory stocks (1936/2001)		
	Regulation on recovery plans for blue fin tuna in the eastern Atlantic and Mediterranean (302/2009)		
	Regulation on a catch documentation programme for blue fin tuna (640/2010)		
Fisheries: control measures	Regulation on a control system applicable to the Common Fisheries, (2846/93 as amended by 1224/2009)		
	Regulation on detailed rules for real time closures of certain fisheries in the North Sea and Skagerrak (724/2010)		
	Regulation on detailed rules for recording information on Member States' catches of fish (2807/83)		
	Regulation on detailed rules for the implementation of Regulation 1966/2006 on electronic recording and reporting of fishing activities and on the means of remote sensing (1077/2008)		
			Registration of Fish Buyers and Sellers and Designation of Fish Action Sites Regulations 2005
	Commission Regulation 1292/97 laying down, pursuant to Article 10(2) of Council Regulation (EEC) No.2847/93, notification deadlines for fishing vessels flying the flag of, or registered in, certain third countries		
	Commission Regulation 1449/98 laying down detailed rules for the application of Council Regulation 2847/93 as regards effort reports		
	Commission Regulation 1382/87 establishing detailed rules concerning the inspection of fishing vessels		
	Commission Regulation 1542/2007 on landing and weighing procedures for herring, mackerel and horse mackerel, as amended	Sea Fishing (landing and weighing procedures for herring, mackerel and horse mackerel) Order 2009	
	Sea Fishing (Enforcement of Community Control Measures) Order 2000, as amended by SI		

	2009/1847		
	Commission regulation 1381/87 establishing detailed rules concerning the marking and documentation of fishing vessels	The Fishing Boats (Marking and Documentation) (Enforcement) Order 1993	
	Commission Regulation 356/2005 laying down detailed rules for the marking and identification of passive fishing gear and beam trawls, as amended	The Sea Fishing (marking and identification of passive fishing gear and beam trawls) (England) Order 2006	
	Commission Regulation 2244/2003 laying down detailed provisions regarding satellite based Vessel Monitoring Systems	The Sea Fishing (enforcement of Community Satellite Monitoring Measures) Order 2004	
	Commission Regulation 1342/2008 establishing a long term plan for cod stocks and fisheries exploiting those stocks. Commission Regulation 237/2010 lays down detailed rules		
	Commission Regulation 811/2004 establishing measures for the recovery of Northern Hake stock		
	Commission Regulation 509/2007 establishing a multi annual plan for the sustainable exploitation of the stock of sole in the western channel		
	Commission Regulation 676/2007 establishing a multi annual plan for fisheries exploitation of stocks of plaice and sole in the North Sea		
	Commission Regulation 1300/2008 establishing a multi annual plan for the stock of herring distributed in the west of Scotland and the fisheries exploiting that stock		
		Sea Fish Licensing Order 1992, as amended	
			Sea Fish (Specified Manx Waters) Licensing Order 1990
			Sea Fishing (Specified Western Waters) (Restriction on Landing) Order 1990, as varies
			Receiving of Trans-shipped Sea Fish (licensing) Order 1982, as varied
			Sea Fishing (Licensing and Notices) (England) Regulations 2012
Fisheries: Licensing and landing restrictions	Council Regulation 734/2008 on the protection of vulnerable		

	marine ecosystems in the high seas from the adverse impacts of bottom fishing gears		
			The Lyme Bay Designated Area (Fishing Restrictions) Order 2008
			The Fal and Helford (fishing Restrictions) Order 2008
			The Solent Marine Site (Prohibition on method of dredging) Order 2004
Freshwater and migratory fisheries			Requirements in the Wildlife and Countryside Act 1981
			Requirements in the Water Resources Act 1991
			The aquatic animal health (England and Wales) Regulations 2009
			The Salmon and freshwater Fisheries Act 1975
	Alien species regulation (708/2007)		
	Eel passes regulation (1100/2207)	The Eels Regulations 2009	
			The prohibition of keeping or releasing live fish (Specified species) Order 1998
			Import of live fish Act 1980
			The Salmon Act 1986
			The Salmon and Migratory Trout Orders
		The Diseases Of Fish (England And Wales) Order 2007	
		Importation of salmonid Viscera	
Total		35	45

Marine – in statistics

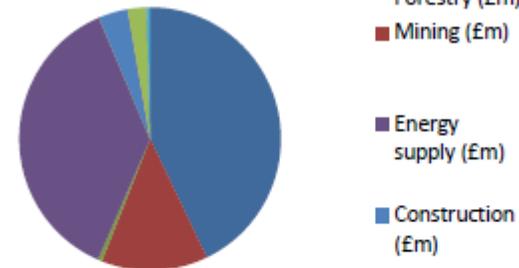
Number of regulations: 80 (of which 35 are EU)



<p>Benefit : cost</p> <p>3.3:1~</p>	<p>Admin burden as % of business cost</p> <p>24%</p>	<p>% of costs from EU legislation</p> <p>60%</p>
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* Refers to available cost estimates

Direct costs by business sector



Reliability*:
2.8/5

Direct cost to business by regime:
Protection/use of the marine environment (£95m); marine fishing (£22m); freshwater and migratory fisheries (£4m).

Scope of monetised estimates:
Includes:

- Costs to business of 17 sets of regulations
- Enforcement costs of fisheries regulation
- Costs of rod licenses
- Benefits to business of the maintenance of sustainable levels of commercially important fish stocks and of the marine planning system

Does not include:

- Ecosystem and social benefits of marine conservation.
- Enforcement costs for other regulations

Notes: Benefit-cost ratio reflects marine fisheries management and marine planning only.

Noise and Nuisance

Why we regulate

- Noise can adversely affect health and quality of life (wellbeing). It can 1) cause annoyance and disturbance, 2) interfere with communication and disrupt other activities, 3) disrupt sleep, and 4) there is increasing evidence that long term exposure can cause direct health effects such as heart attacks;
- Defra has overall responsibility for the Government's policy on noise and works closely with other Government departments so that their work can properly take account of the noise policy.

What we regulate

- Defra is responsible for the implementation of the Environmental Noise Directive which primarily focuses on noise from transport sources;
- Defra is also responsible for various legislation providing powers to local authorities to deal with potential statutory nuisances including noise, vibration, odour, smoke, dust, gases or steam, accumulations, insects and artificial lighting;
- These powers cover potential nuisances arising from domestic, commercial and industrial premises, and noise in the street. The legislation also includes powers to deal with noise and vibration from construction sites, and powers to deal immediately with noise occurring at night from domestic and licensed premises;
- These powers cover potential nuisances arising from domestic, commercial and industrial premises, and noise in the street. The legislation also includes powers to deal with noise and vibration from construction sites, and powers to deal immediately with noise occurring at night from domestic and licensed premises.

Other policy instruments

Other Government Departments have legislation that:

- Control the noise emitted by a wide variety of plant and equipment including motor vehicles;
- Control of the type of aircraft that can be used in this country;
- Limits the sound transmission between residential dwellings;
- Limits the noise intrusion into new school buildings;
- Controls the allowable noise to be emitted from certain industrial processes and waste sites;
- Much noise management is carried out through the planning and licensing regimes, and the use of conditions. The nuisance legislation provides a valuable safety net should it be found (for whatever reason) that these controls have not been as effective as intended.

Changes since 2011 report

- The 2012 assessment contains major revisions due to many errors in the 2011 assessment being identified; these have led to baseline adjustments to the 2011 estimates which are set out in Annex B;

- The 2011 assessment included some regulations which should not have been included:
 - An EU Directive on Noise from outdoor equipment and an accompanying transposing regulation titled Noise emissions into the Environment by Equipment for use Outdoors Regulations 2001. These two regulations are not Defra's regulations;⁵⁷
 - The 2011 report included a set of domestic regulations which is a set of Statutory Instruments that formally adopt Codes of Practice. These have no regulatory force; instead, they are guidance that can be relied upon if defending an allegation of a statutory nuisance occurring. This set of regulations have been excluded from this year's analysis because they do not fall under the definition of regulation as set out at paragraph 1.1.4 of the Better Regulation Framework manual.⁵⁸ Thus, the following codes of practice (Noise and vibration control on construction and open sites - Part 1 : Code of Practice for basic information and procedures for noise and vibration control; Part 3 : Code of Practice applicable to surface coal extraction by opencast methods; Part 4: Code of practice for noise and vibration control applicable to piling operations; Part 5 : Code of Practice applicable to surface mineral extraction (except coal) sites) have been removed;
 - The Street Litter Control Notices (England) were included because they imposed a cost to business. However, these regulations do not impose any costs on business since the Notice comes into force after a Street Control Litter Notice has been issued. Further, in 2013 this Notice will be replaced by the Home Office's Anti-Social Behaviour, Crime and Policy Bill and the Notice will cease to have any effect;
 - Similarly, the Dog Fouling (Fixed Penalty) (England) Order 2002 and the Litter (Fixed Penalty) (England) Order 2002 have been removed from the list of regulations because they only impose costs on business after they have not complied with the law;
 - The sector split has changed of direct costs to business has changed to 5% for agriculture, 5% for mining, 30% for manufacturing, 8% for energy, 5% for water, 15% for waste, 15% for construction, 2% for retail, 5% for transport and 10% for housing and leisure;
 - The 2011 baseline has been adjusted to account for these changes

⁵⁷ The legislation on [legislation.gov.uk](http://www.legislation.gov.uk) shows that the transposing regulation was signed by a BIS Minister when it was known as the Department of Trade and Industry.
<http://www.legislation.gov.uk/uksi/2001/1701/signature/made>.

⁵⁸ Department for Business innovation & Skills, Better Regulation Framework Manual, July 2013.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211981/bis-13-1038-better-regulation-framework-manual-guidance-for-officials.pdf

List of noise and nuisance regulations

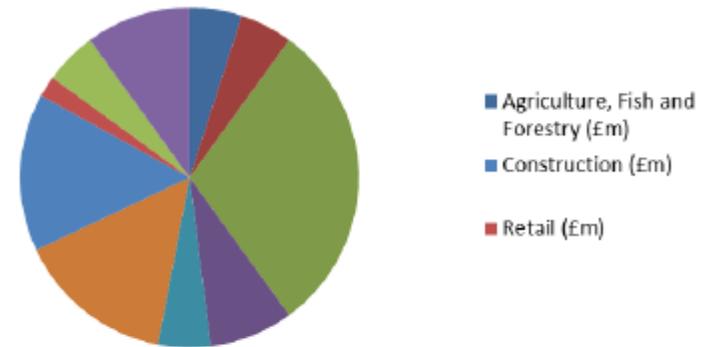
Regime	EU regulations	Transposing regulations	Domestic regulations
Noise and Nuisance			Noise Act 1996
			Environment Protection Act 1990
			Noise and Statutory Nuisance Act 1993 (covers vehicles and machinery)
			Clean Neighbourhoods and Environment Act 2005 (covers insects and artificial light)
			Control of Pollution Act 1974 (powers for LAs to deal with noise and vibration from construction and demolition sites and loudspeakers)
	Environmental noise Directive (2002/49/EC)	Environmental noise (England) regulations 2006	
Total		1	5

Noise and nuisance – in statistics

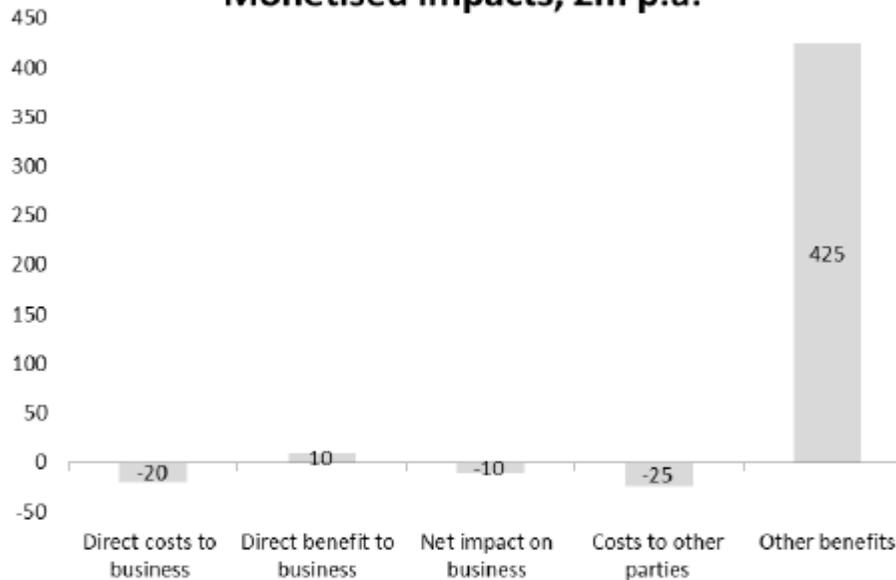
Reliability*:
3/5

Number of regulations: 6 (of which 1 is EU)

Direct costs by business sector



Monetised impacts, £m p.a.



Scope of monetised estimates:

Includes:

- Costs to business for all regulations
- Benefit to business for all regulations

Does not include:

- Benefits to health and wellbeing from management of noise (e.g. annoyance, sleep disturbance health effects from sustained exposure) and nuisance.
- Enforcement costs

Benefit : cost

9.7:1

Admin burden as % of business cost

100%

% of costs from EU legislation

0%

Notes: Benefit-cost ratio includes 1 set of regulations

* Refers to available cost estimates

Plants

Why we regulate

- Coalition Priorities include two priorities that encompass plants policy to 1) support and develop British farming and encourage food production, and 2) enhance the environment and biodiversity to improve quality of life;
- Plant pests and diseases can change the face of the UK landscape, devastating crops and ornamental plants, affecting food security and the environment as well as affecting demand for horticultural exports. Regulation reduces the risk of introducing and spreading new plant pests and diseases by inspecting the highest risk trades and carrying out surveillance;
- Regulation of movements of plants and plant products is required in connection with the EU Plant Health regime and the International Plant Protection Convention to facilitate trade and prevent the spread of pests and diseases;
- Plant Reproductive Material listing and marketing regulations provide consumer protection, assuring the quality of the material;
- Listing and Plant Breeders' Rights legislation drives improvements in new plant varieties and allows breeders to charge royalties.

What we regulate

- Importers, exporters, growers and traders of plants and certain plant products are regulated. Plants that harbour the most serious pests cannot be moved between businesses without plant passports. Plants and some plant products cannot be exported to many third countries without an official phytosanitary certificate;
- Plant material is inspected at ports and airports and businesses are authorised to issue plant passports;
- Seed potatoes being marketed must be of a certified quality.
- Some Plant Reproductive Material is subject to registration before marketing is permissible;
- Plant Reproductive Material must meet quality standards;
- Plant Breeders' Rights legislation provides for intellectual property protection for new varieties of plants.

Other policy instruments

- The cost of plant health checks is partially recovered from the industry;
- Industry awareness and self-regulation are appropriate in some cases, following risk assessment and consultation.

Changes since 2011 report

- The following regulations have been revoked:
 - The Plant Health (Licence Fees) (England and Wales) Regulations 1996; the Plant Health (Plant Passport Fees) (England) Regulations 2007; the Plant Health (Import Inspection Fees) (England) Regulations 2010. These are all part of the same set of regulations so this change does not change the number of sets of regulations.
- The following regulations have been introduced:

- The Plant Health (Miscellaneous Amendments) (England) Regulations 2012; the Plant Health (Fees) (England) Regulations 2012; the Plant Health (England) (Amendment) Order 2012 SSI No.745, the Plant Health England (Amendment) Order 2012 SI 2922, the Plant Health (England) (No.2) (Amendment) Order 2012 SI No 3033,
- The Seed Marketing (Amendment) Regulations 2012,
- The introduction of these regulations does not alter the stock of regulations, which is based on sets of regulations.

List of plants regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
Plant health	Directive 2000/29/EC and amending Directives (e.g. Directive 2002/89/EC; Directive 2004/103; Directive 2004/105/EC; Directive 2005/16/EC). Directive 92/105/EEC and amending directives (e.g. Directive 2005/17/EC); Directive 2005/260/EC	Plant Health (England) Order 2005 and amendments; The Plant Health (Miscellaneous Amendments) (England) Regulations 2012; The Plant Health (Fees)(England) Regulations 2012; Plant Health (Amendment) Order 2012 SSI No.745, the Plant Health England (Amendment) Order 2012 SI 2922, the Plant Health (England) (No.2) (Amendment) Order 2012 SI No 3033	The Plant health (export certification) Order 2004; The Plant health (export certification fees) (England) regulations 2005
			Plant Health (Phytophthora Kernovii Management Zone) (England) Order 2004
	Directive 2002/56/EC; Directive 2004/842/EC	The Seed Potatoes (England) Regulations 2006 and amendments; The Seed Potatoes (Fees)(England) Regulations 2009	
	Decision 2004/4/EC and 96/301/EC Commission Decisions: 2002/757/EC, 2004/426/EC and 2004/278/EC	The Potatoes Originating in Egypt (England) Regulations 2004 Plant Health (Phytophthora ramorum) (England) Order 2004	
Marketing	Directives 92/33/EEC; 93/61/EEC; 93/62/EEC and successors	The Marketing of vegetable plant material regulations 1995 and amendments	
	Directives 92/34/EEC; 93/48/EEC; 93/64/EEC; 93/79/EEC and successors	The Marketing of Fruit Plant Materials Regulations 2010	
	Directives 98/56/EC; 93/49/EEC; 91/682/EEC	The Marketing of Ornamental Plant Propagating Material Regulations 1999	
	Directives 66/401/EEC; 66/402/EEC; 2002/54/EEC; 2002/55/EC; 2002/57/EC; 2008/62/EC; 2009/145/EC & 2004/117/EC	The Seed Marketing Regulations 2011 and 2012 amendment	
	Directives 2002/53/EC; 2002/55/EC; 2008/62/EC; 2009/145/EC;	Seeds (National Lists of Varieties) Regulations 2001 and amendments	
	1991 International Convention for the Protection of New Varieties	Plant Varieties Act 1997; and associated Plant Breeders' Rights Regulations	
	Commission Regulation (EC) No 1148/2001 of 12 June 2001 on checks on conformity to the marketing standards applicable to fresh fruit and vegetables.		
Total		10	2

Plants – in statistics

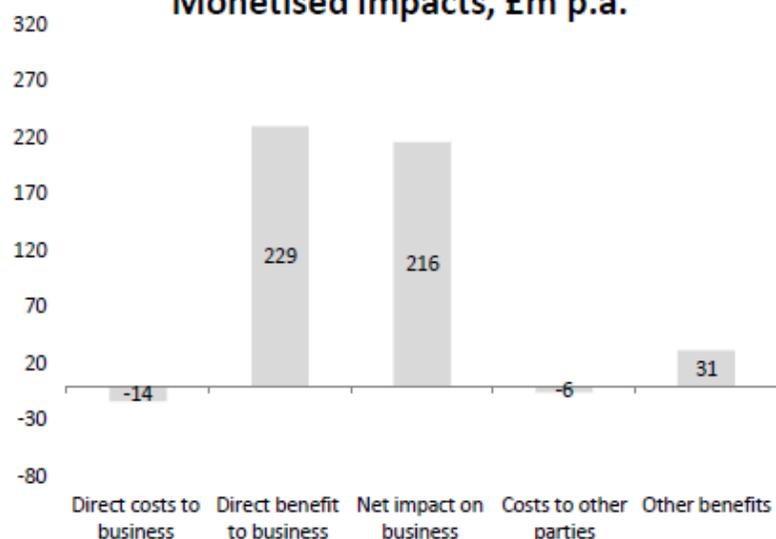
Reliability*:
3.7/5

Direct costs by business sector



Number of regulations: 12 (of which 10 are EU)

Monetised impacts, £m p.a.



Direct cost to business by regime:

plant health regulations (£10m); plant varieties regulations (£4m).

Scope of monetised estimates:

Includes:

- Costs to business for all regulations
- Wider benefits for Plant Health (England) Order and amendments
- Enforcement/surveillance costs for plant health regulations and government expenditure on *Phytophthora ramorum*
- Benefit to business from reducing incidence of plant diseases and creating a market for seeds

Does not include:

- Business benefits for plant varieties regulations
- Enforcement costs for plant varieties regulations.
- Wider environmental and social benefits for other regulations

Benefit : cost

13.5:1

Admin burden as % of business cost

19%

% of costs from EU legislation

88%

Notes: Benefit-cost ratio includes all regulations

* Refers to available cost estimates

Sustainable Products

Why we regulate

- A Coalition Priority is to support a strong and sustainable green economy, including thriving rural communities, resilient to climate change;
- EU wide rules for improving the environmental performance of energy related products through eco-design and for consistent labelling requirements creating a level playing field for intra-EU trade.

What we regulate

- EU-wide mandatory performance standards for a variety of energy using products, e.g. external power supply units, simple set-top boxes, tertiary lighting products, non-directional domestic lighting products, washing machines, dishwashers, TVs, fans;
- EU-wide mandatory labelling for products such as fridges and freezers, washing machines, driers, dishwashers, ovens, air conditioners and most lamps.

Other policy instruments

- The purchasing power of central Government gives public procurement a critical role in driving the market for sustainable products;
- The Enhanced Capital Allowance Scheme enables a business to claim 100% first year capital allowances on their spending on qualifying energy saving products;
- There is financial incentive under the Carbon Reduction Commitment to reduce emissions by placing a price on carbon emissions, potentially increasing the market for more efficient products;
- A voluntary labelling scheme for IT products (Energy Star) and a wider range of products with the EU Eco-label;
- Voluntary labelling scheme operated by the Energy Saving Trust (Energy Saving Trust Recommended) for the highest performing domestic products, e.g. home appliances, computers and peripheral equipment;
- Voluntary product roadmaps with the industry help to identify where supply chains could be improved. 8 pilot roadmaps are ongoing for clothing, milk, fish and shellfish, plasterboard, window systems, WCs, sewage system motors, and ultra-efficient lighting.

Changes since 2011 report

- The following regulations have been added:
 - Ecodesign for Energy-Related products and Energy Information (Amendment) Regulations 2012. This regulation amends both the Ecodesign for Energy Related Products Regulations and The Energy Information Regulation 2011. The addition of this amendment does not alter the number of regulations. As a result of this amendment four new products have been added, these are air conditioning, pumps, tumble dryers and directional lighting. These products apply to one or both Directives.

- The following five regulations were revoked:
 - Energy Information (Tumble Driers) Regulations 1996;
 - Energy Information (Combined Washer-driers) Regulations 1997;
 - Energy Information (Lamps) Regulations 1999;
 - Energy Information (Household Electric Ovens) Regulations 2003;
 - Energy Information (Household Air Conditioners) Regulations 2003.
- Impacts are estimated over 11 years rather than 10 years. The regulations have an impact up to 2030; however, there is a great deal of uncertainty over the impacts in later years, so estimates are made over a shorter time frame. This is in line with other published impact estimates for sustainable products.

List of Sustainable Products regulations

Regime	EU regulations	Transposing regulations	Domestic regulations
Sustainable Products	Ecodesign Directive 2009/125/EC	Ecodesign for Energy Related Products Regulations (SI 2010 No 2617); Ecodesign for Energy-Related products and Energy Information (Amendment) Regulations 2012 ⁵⁹	
	Energy labelling Directive 2010/30/EC	The Energy Information Regulation 2011 <i>including:</i>	
		Standby	
		Simple set top boxes	
		Tertiary lighting	
		External power supply units	
		Domestic lighting	
		TVs (incl labelling)	
		Motors	
		Cold Appliances (incl labelling)	
		Washing machines (incl labelling)	
		Dishwashers (incl labelling)	
		Stand-alone circulators	
		Fans	
		Air conditioning	
		Pumps	
		Tumble dryers	
	Directional Lighting		
	Boiler (Efficiency) Regulations 1993		
	Energy Efficiency (Ballasts for Fluorescent Lighting) Regulations 2001		
			Cost sharing measures
Total		4	1

⁵⁹ Note that this regulation also amends the Energy Information Regulations 2011, as well as the Ecodesign for Energy related products.

Sustainable products – in statistics

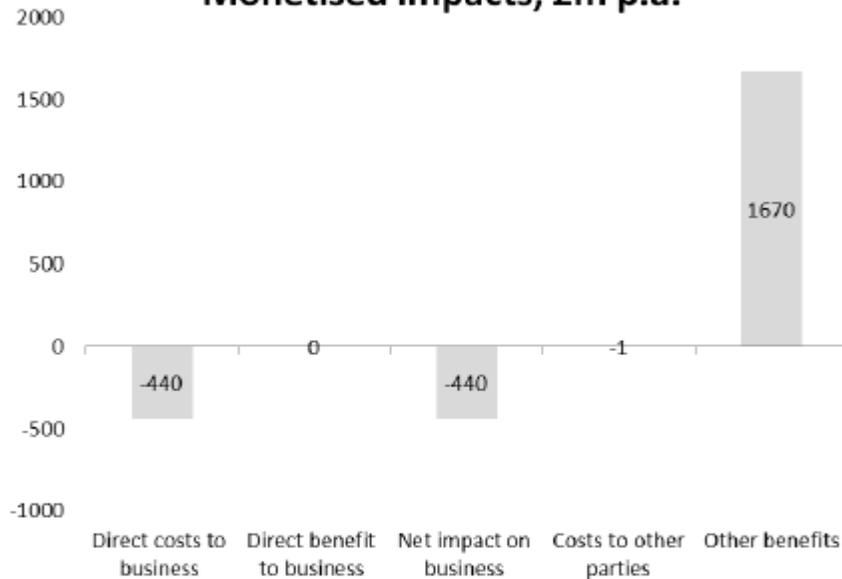
Direct costs by business sector

Reliability*:

3/5

Number of regulations: 5 (of which 4 are EU)

Monetised impacts, £m p.a.



■ Manufacturing...

Scope of monetised estimates:

Includes:

- Costs to manufacturers of labelling and meeting standards
- Enforcement costs
- Financial savings to final consumers from reduced energy consumption

Does not include:

- Benefits from stimulation of innovation, contribution to energy security, other air quality improvements, avoided costs of renewables generation.

Notes:

- While costs of labelling and standards will fall on manufacturers in the first instance, these are then passed through to the final consumers (households and other businesses) who benefit from cost savings that considerably outweigh the upfront cost
- Benefit-cost ratio includes all regulations

Benefit : cost

3.8:1

Admin burden as % of business cost

1%

% of costs from EU legislation

100%

* Refers to available cost estimates

Waste

Why we regulate

- A Coalition Priority is to support a strong and sustainable green economy, including thriving rural communities, resilient to climate change;
- Defra's Business Plan included a commitment to drive a "zero waste" agenda;
- Waste management can pose a risk to human health and the environment and a loss of valuable resources that could be put to better use, saving businesses and consumers money;
- To ensure acceptable standards of waste management are complied with and to enforce against those who flout the law and undercut legitimate operators;
- The UK consumes natural resources at an unsustainable rate and contributes unnecessarily to climate change. Each year we generate over 80 million tonnes of waste from households, commerce and industry.

What we regulate

- Those who import produce, keep, handle, transport treat, recover or dispose of waste through systems of permitting and registration;
- Sites where waste is recovered or disposed of including landfill; waste incineration; composting and anaerobic digestion and a range of treatments of hazardous and non-hazardous wastes;
- The diversion of waste from landfill;
- the collection, treatment, re-use, recovery and recycling of Waste Electrical and Electronic Equipment (WEEE);
- Flytipping;
- The management of hazardous waste;
- Mining waste;
- The use, handling and disposal of animal by-products;
- Waste from end-of-life vehicles;
- The use of toxic chemicals in batteries and producer responsibility for treating/recycling waste batteries;
- The management of packaging waste;
- Controls on the import and export of waste.

Other policy instruments

- Environmental and climate change targets means driving action further up the waste hierarchy, away from landfill towards more environmentally beneficial waste management options;
- There are financial incentives to encourage the development and take up of renewable energy, e.g. anaerobic digestion, and waste management technology;
- The WRAP programme provides a single source of expertise for English businesses, local authorities and households on how to become more resource efficient, supporting moves to a low carbon economy, underpinned by voluntary agreements;
- Defra and DECC are working together to provide guidance to local authorities and industry on the use of Energy from Waste.

Changes since 2011 report

- The following regulations came into force during 2012:
 - The Waste (England and Wales) (Amendment) Regulations 2012 was added. It does not change the number of regulations;
 - The Controlled Waste (England and Wales) 2012 and 2012 Amendment.
- The following regulations were revoked:
 - Controlled Waste Regulations 1992;
 - Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991;
 - Environmental Protection (Duty of Care) Regulations 1991.
- The Stop, search and seizure regulations were listed in the 2011 assessment as not being in force. In the 2012 assessment Defra's legal advisors could find no record of this regulation being introduced;
- The following impacts were added:
 - Admin burdens for business and benefits to society were added for the Waste Incineration Directive;
 - Policy Costs were added for the Transfrontier Shipment of Waste Regulations 2007;
 - Cost to other parties for 1) The Waste (England and Wales) Regulations 2011 and the Waste management requirements in the Environmental Permitting Regulations; 2) The Waste (Household Waste Duty of Care) (England and Wales) Regulations 2005; and 3) the Transfrontier Shipment of Waste Regulations 2007.

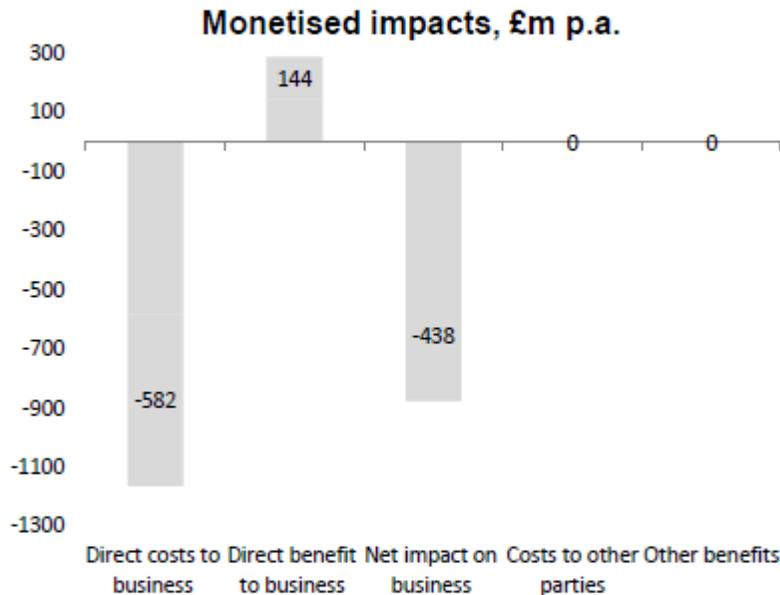
List of waste regulations			
Regime	EU regulations	Transposing regulations	Domestic regulations
Waste	Directive 2008/98/EC - Revised Waste Framework Directive	The Waste (England and Wales) Regulations 2011; The Waste (England and Wales) (Amendment) Regulations 2012 Waste management requirements in the Environmental Permitting Regulations Waste Management Licensing compensation and consultation requirements in the Environmental Permitting Regulations Agricultural waste management requirements in the Environmental Permitting Regulations	
		Hazardous Waste (England and Wales) Regulations 2005, as amended	
		List of Waste Regulations 2005	
		Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991	
		The Waste (Household Waste Duty of Care) (England and Wales) Regulations 2005. SI 2005/2900	
		Control of Pollution (Amendment) Act 1989	
	Directive 2006/21/EEC	Mining waste requirements of the	

	(The Mining Waste Directive)	Environmental Permitting Regulations. Major Accident Off-Site Plan (Management of waste from Extractive Industries England and Wales) Regulations 2009	
	Directive 1999/31/EC (The Landfill Directive)	Landfill requirements in the Environmental Permitting Regulations	
			Waste and Emissions Trading Act 2003 (Amendments are due to come into force 1 October 2011) Landfill Allowances and Trading Scheme (England) Regulations 2004 Landfill (Scheme Year and Maximum Landfill Amount) Regulations 2004 – This is due to be replaced by the Landfill (Maximum Landfill Amount) Regulations 2011 (Coming into force 1 October 2011)
	Directive 2000/76/EC	Waste incineration requirements in the Environmental Permitting Regulations	
	Council Directive 94/62/EC on packaging and packaging waste as amended by Council Regulation (EC) No 1882/2003, Council Directive 2004/12/EC and Council Directive 2005/20/EC (“the Packaging Waste Directive”).	Producer Responsibility Obligations (Packaging Waste) Regulations 1997, as amended	
	Waste Shipments Regulation (Regulation (EC) No 1013/2006	Transfrontier Shipment of Waste Regulations 2007 Transfrontier Shipment of Radioactive Waste Regulations 1993	
	Regulation (EC) No 2150/2002 of the European Parliament and of the Council of 25 November 2002 on waste statistics.		
	2002/96/EC (WEEE Directive)	Waste Electrical and Electronic Equipment (WEEE) Regulations 2006 as amended	
	2006/66/EC (Batteries Directive)	The Waste Batteries and Accumulators Regulations 2009 as amended.	
	EU 2000/53/EC (End of life vehicles)	End-of-Life Vehicles Regulations 2003 as amended	
			Controlled Waste (England and Wales) Regulations 2012; Controlled Waste (England and Wales) (Amendment) Regulations 2012 Site Waste Management Plans Regulations 2008
Total		17	3

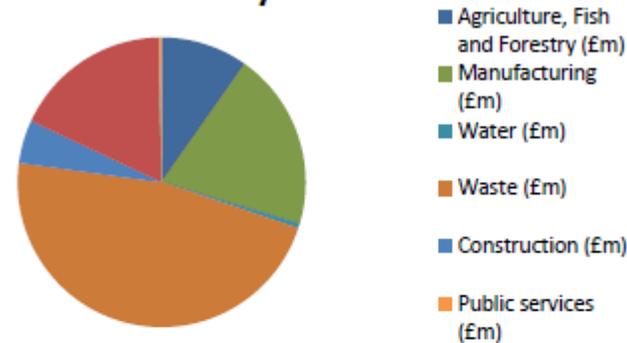
Waste – in statistics

Reliability*:
1.4/5

Number of regulations: 20 (of which 17 are EU)



Direct costs by business sector



Scope of monetised estimates:

Includes:

- Costs to business of all regulations
- Benefits to business driven by Site Waste Management Plans

Does not include:

- Health, environmental and social benefits from waste management
- Commercial benefits from improved resource efficiency.
- Enforcement costs

Benefit : cost

5.1:1

Admin burden as % of business cost

5%

% of costs from EU legislation

95%

Notes: Benefit-cost ratio includes all regulations

* Refers to available cost estimates

Water Quality and Quantity

Why we regulate

- Water and how we use it is critical to human life, and the animal and plant life in our environment. Quantity (excess or deficiency) and quality both have significant impacts;
- Water is a natural resource: it varies naturally in availability and it cycles through the environment. Human activity impacts on that cycle and alters its availability and quality;
- A Coalition Priority is to support a strong and sustainable green economy, resilient to climate change;
- Defra's Business Plan included a commitment to reform the water industry to enhance competition and improve conservation;
- Water needs to be shared between different uses and society requires rules for ensuring that is done equitably and fairly including a fair share for the environment;
- Public interest in the public water supply should be protected within what are natural regional monopoly services, and the long terms supply of water assured;
- Public health should be protected by ensuring drinking water is wholesome and it should also be acceptable to consumers;
- Water and waste water discharged back to the environment should meet certain standards, so that bathing waters do not pose a risk to human health and there is no deterioration in the status of ground and surface waters.

What we regulate

- Water undertakers and licensees providing water supply services, and sewerage undertakers taking sewage away from domestic and business premises are subject to a regulatory framework overseen by the economic regulator, Ofwat;
- Water companies have a general duty to develop and maintain an efficient and economic system of water supply and to make necessary arrangements to provide water supplies, including planning to balance supply and demand over the longer term, and the assurance of continuing supplies during periods of water shortage;
- Drinking water should meet with mandatory standards set to protect public health and safeguard consumer acceptability; and mandatory monitoring requirements overseen by the Drinking Water Inspectorate;
- Water fittings such as toilets, taps, showers, urinals, washing machines and dishwashers which have minimum standards to protect public health;
- Sewerage undertakers have duty to provide a system of public service and effective drainage;
- Most businesses abstracting more than 20 cubic metres per day need a licence ; and water undertakers are required to take action to prevent environmental harm from abstraction;
- Bathing water should meet mandatory standards limiting bacteria concentrations;
- Ground water and surface waters have to meet requirements to prevent deterioration in water status (the quantity and chemical quality for ground waters and ecology and chemical quality for surface waters);

- Businesses that discharge water or waste water need an environmental permit;
- Diffuse pollution, largely arising from farms, arising from run-off from manure and slurry on farms, and from detergents to reduce phosphate pollution;
- Protecting the environment from the adverse effects of urban waste water and preventing the contamination of drinking water.

Other policy instruments

- There is a private voluntary labelling scheme for bathroom appliances;
- The Waste and Resources Action Programme (WRAP) provides advice on resource efficiency, including water;
- There are voluntary industrial targets on water efficiency;
- GreenPlumb trains plumbers on water efficiency;
- Promoting competence of plumbers in the application of the Water Fittings Regulations through the Approved Contractor schemes;
- The Enhanced Capital Allowance scheme for water efficient technologies was introduced in 2003, encouraging development of environmentally beneficial technologies;
- The Catchment Sensitive Farming project (formerly known as the England Catchment Sensitive Farming Delivery Initiative) supports farms through targeted, small capital grants (through the Capital Grants Scheme) and free training, information and advice focussing primarily in priority catchments identified within River Basin Districts across England and working with local and national partners in catchments and national partnerships;
- Environmental Stewardship offers opportunities for farmers and land managers to take up land management options to reduce the impact of farming on water quality. The impacts of Environmental Stewardship are captured in the Agriculture Management section.

Changes since 2011 report

- The Infrastructure Planning (Waste Water Transfer and Storage) Order 2012 came into force during 2012;
- No regulations were revoked.
- The following impacts were added to regulations in the 2011 assessment:
 - Direct benefit to business for Nitrate Pollution Prevention, and the Control of Pollution (Oil Storage) Regulations 2001;
 - Direct cost to business and direct benefit to business of the Environmental Permitting Regulations;
 - Benefits to other parties other than business added for the Private Water Supplies Regulations.

List of water regulations			
Regime	EU regulations	Transposing regulations	Domestic regulations
Water	Water Framework Directive (2000/60/EC)	The Water Environment (Water Framework Directive) Regulations 2003	
			Water Industry Act 1991 Water Resources Act 1991
	Water Framework Directive	Water control provisions of the Environmental	

(2000/60/EC) & Mercury Directive (82/176/EEC)	Permitting Regulations; The Trade Effluents (Prescribed Processes and substances) Regulations 1989; 2010 Directions to the Environment Agency	
Priority Substances Directive 2008/105/EC	Environmental Permitting Regulations	
The Nitrates Directive (91/676/EEC)	Action Programme for Nitrate Vulnerable Zones (England and Wales) Regulations 1998 Nitrate Sensitive Areas Regulations 1994 Protection of Water Against Agricultural Nitrate Pollution (England and Wales) Regulations 1996 Nitrate Pollution Prevention Regulations 2008 The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010	
EIA Directive (85/337/EEC)	Water Resources (Environmental Impact Assessment) (England and Wales) Regulations 2003	
Sewage Sludge directive (86/278/EEC)	Sludge (Use in Agriculture) Regulations 1989	
Groundwater Directive (2006/118/EC)	Environmental Permitting Regulations (Section 22)	
Detergents Regulation (648/2004)	Detergents Regulations 2010	
Bathing Water Directive (2006/7/EC)	The Bathing Water Regulations 2008	
Urban Wastewater treatment Directive (91/271/EEC)	Urban Waste Water Treatment (England and Wales) Regulations 1994	
Freshwater Fish Directive	The Surface Waters (Fishlife) Directions 2010 The Surface Waters (Fishlife)(Classification) Regulations 1997	
Shellfish Waters Directive (2006/113/EEC)	The Surface Waters (Shellfish) Directions 2010 The Surface Waters (Shellfish) Classifications Regulations 1997	
Drinking Water Directive (98/83/EC)	Private Water Supply Regulations 2009 Water Supply (Water Quality) Regs 2000 Drinking Water (Undertakings) (England and Wales) Regulations 2000 Water Supply (Water Fittings) Regulations 1999	
Convention on Biological Diversity	UK BAP	
Habitats Directive (92/43/EEC)	Conservation of habitats and species regulations 2010 (SI no. 2010/490)	
		Control of Pollution (Applications, Appeals and Registers) Regulations 1996
		Countryside and Rights of Way Act 2000
		Water Supply and Sewerage Services (Customer Service Standards) Regulations 1989
		Reservoirs Act 1975
		Code of Good Agricultural

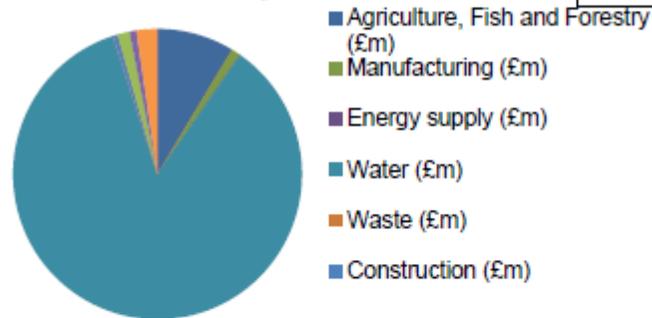
			Practice for the Protection of Water
			Control of Pollution (Oil Storage) Regulations 2001
			Anti-pollution Works Regulations 1999
			The Water Industry (suppliers' Information) Direction 2009
			Water Act 2003
			Water Resources (Impounding & Abstracting) Regulations 2006
			Drought Plan Regulations 2005
			Catchment sensitive farming delivery initiative
			Flood and Water Management Act 2010 (Schedule 3: Sustainable Drainage Systems) (to commence in 2012)
			The Infrastructure Planning (Waste Water Transfer and Storage) Order 2012
Total		17	16

Water – in statistics

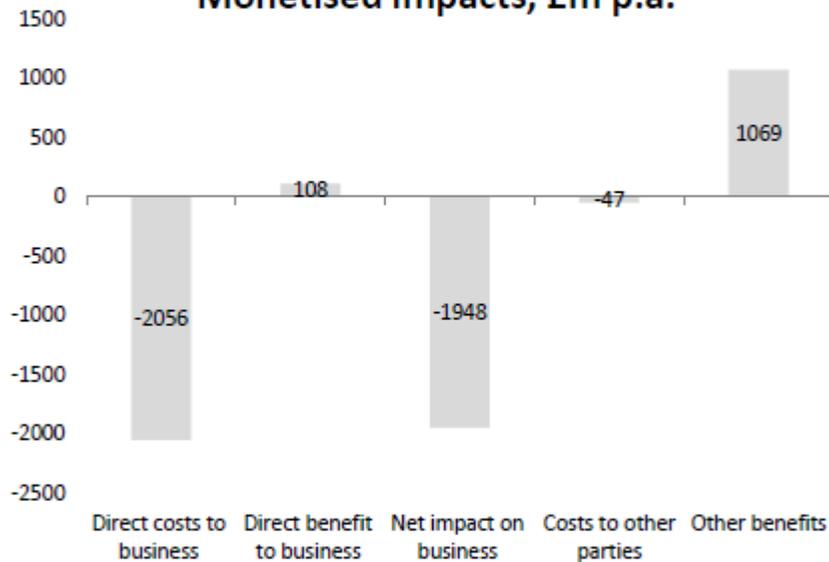
Reliability*:
4.2/5

Number of regulations: 33 (of which 17 are EU)

Direct costs by business sector



Monetised impacts, £m p.a.



Scope of monetised estimates

Include:

- Costs to relevant sectors of the Water Framework Directive (estimates from a former IA used as a proxy), the Nitrates Directive, the Water Supply (Water Fittings) Regulations and the Control of Pollution regs;
- Water industry capital and operational expenditure on other environmental regulations for 2010 to 2015;
- Administrative burdens for all regulations;
- Environmental benefits of the Water Framework Directive and the Private Water Supplies Regulations;

Do not include:

- Maintenance expenditure on capital improvements made before 2010;
- Environmental, business & other benefits of other regs.

Benefit : cost

1.1:1

Admin burden as % of business cost

2%

% of costs from EU legislation

92%

Notes:

- Capital and operational expenditure is treated as a cost to water companies although it will be passed on to households and other business sectors.
- Benefit-cost ratio includes 4 sets of regulations

* Refers to available cost estimates

Annex A - 2011 Baseline Adjustments

During the 2012 update a number of errors in the 2011 assessment were uncovered; concurrently, new evidence to enable estimation of impacts was found. Table A1 lists the changes to the 2011 baseline in 2012 pounds.

Table A2 shows the impact on the 2011 baseline figures as a result of these changes.

Table A1: Summary of adjustments to 2011 baseline impacts by policy area, 2012 £s

Policy area	Number of EU regs	Number of domestic regs	Direct costs to business, £m p.a.	Direct benefits to business, £m p.a.	Costs to other parties, £m p.a.	Other benefits, £m p.a.	Other Changes
Adaptation to climate change	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture management *	n/a	n/a	Added £268.m p.a. admin burden and £-1.9m p.a. compliance cost for Environmental Stewardship (England) Regulations 2005, Uplands Entry Level Stewardship and Countryside Stewardship	Added £270.4m p.a. for Environmental Stewardship (England) Regulations 2005, Uplands Entry Level Stewardship and Countryside Stewardship	Added £24.3m p.a. for Environmental Stewardship (England) Regulations 2005, Uplands Entry Level Stewardship and Countryside Stewardship	Added £947.1m p.a. for Environmental Stewardship (England) Regulations 2005, Uplands Entry Level Stewardship and Countryside Stewardship	n/a
	Subtracted one Regulation on Wheat Milled and Flour Production	n/a	Subtracted £0.0007m p.a. admin burden	n/a	n/a	n/a	Reliability rating of 3 now included

	n/a	n/a	Added £0.2m p.a. admin burden and £26.5m p.a. compliance cost for the Agriculture Wages Board 2011	n/a	n/a	Added £28.05m p.a. for the Agriculture Wages Board 2011	n/a
	Added one Commission Regulation on farm structure surveys and the survey on agricultural methods	Subtracted one Commission regulation on farm structure surveys and the survey on agricultural methods, that was incorrectly listed as a domestic regulation	Added £0.61m p.a. admin burden	n/a	Added £0.5m p.a.	n/a	Reliability rating of now 3 included
	Added one Commission Regulation on the economic accounts for agriculture in the Community	n/a	Added £0.2m p.a. admin burden	n/a	Added £3.0m p.a.	n/a	Reliability rating of now 3 included

	Added one Commission decision on Orchard Fruit Statistics	Subtracted two regulations on Vegetable and Fruit Surveys and the Orchard Fruit Survey	Subtracted £0.001m p.a. admin burden	n/a	n/a	n/a	n/a
	n/a	Subtracted one regulation on Glass House Survey	n/a	n/a	n/a	n/a	n/a
	Added one Commission regulation on laying down detailed rules for the application of Council Regulation EC no 479/2009 as regards the vineyard register, compulsory declarations and the gathering of information to monitor the wine market, the documents accompanying consignments of wine products and the wine sector	Subtracted one regulation EC Survey of Wine Stocks - Producers, Wholesalers and Retailers	n/a	n/a	Added £0.01m p.a.	n/a	n/a

	registers to be kept						
	Added one Commission Regulation concerning Crop Statistics	n/a	Added £0.01m p.a. admin burden	n/a	Added £0.002m p.a.	n/a	n/a
	Added one Commission Regulation concerning livestock and meat statistics	n/a	Added £0.01m p.a. admin burden	n/a	Added £0.1m p.a.	n/a	n/a
	Added one Commission Regulation on laying down detailed rules for implementing Regulation (EC) 1234/2007 as regards marketing standards for eggs and farmyard poultry chicks	n/a	Added £0.004m p.a. admin burden	n/a	Added £0.01m p.a.	n/a	n/a

	Added one Directive amending Council Directive 96/16/EC on statistical surveys of milk and milk products	n/a	Added £0.01m p.a. admin burden	n/a	Added £0.02m p.a.	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	Overall reliability downgraded to 2 to reflect uncertainty in the estimates
	n/a	n/a	Spreadsheet error not including £1.54m p.a. admin burden for the Fertilisers Regulations 1991 in the total sum of the direct cost to business	n/a	n/a	n/a	Spreadsheet error not including £1.54m p.a. for the Fertilisers Regulations 1991 in the total sum of the EU cost
Air quality	n/a	Overall one regulation added: The Crop residues (Burning) Regulations 2009	Overall added £87.3m p.a. admin burden and subtracted £333.5m p.a. compliance costs	Overall subtracted £171.4m p.a.	Overall added £3.0m p.a.	Overall added £975.1m p.a.	n/a
Animal health and welfare	n/a	n/a	Subtracted £9.5m p.a. admin burden and £0.01m compliance cost	Added £0.16m p.a.	n/a	n/a	The Pigs Order 2007 was replaced with the Pigs Order 2011 which

							came into force in 2011.
Biodiversity	n/a	n/a	Added £24.7m p.a. for the opportunity costs of Sites of Special Scientific Interest designation to landowners	n/a	n/a	n/a	EU costs reduced by £0.05m p.a. for Wildlife and Countryside (Registration and Ringing of Certain Captive Birds) Regulations 1982, as amended in 1991, 1994, 2004 and 2008
Chemicals and GMOs	n/a	n/a	n/a	n/a	n/a	n/a	1) Reliability rating for Plant Protection Product Regulations 2005 downgraded from 3 to 1; 2) reliability rating for Control of pesticides regulations downgraded from 3 to 1; and 3) all direct costs to business fall on manufacturing sector rather than agricultural sector

			n/a	n/a	n/a	n/a	All direct costs to business for the Control of Pesticides Regulations fall on manufacturing sector rather than agricultural sector
			Subtracted £0.01m p.a. admin burden and added £0.03m compliance costs for Regulation on Pesticide Statistics	n/a	Added £0.01m p.a. Regulation on pesticide Statistics	n/a	For Regulation on pesticide Statistics, sector split changed from 50% agriculture 50% retail to 26%, 56% and 19% falling on agriculture, manufacturing and public services respectively
			Added £0.3m p.a. compliance cost and subtracted £0.3m admin burden for REACH enforcement Regulations	Subtracted £4.0m p.a. For the REACH enforcement regulations	n/a	Added £2.7m p.a. for the REACH enforcement regulations	n/a

			Added £42.6m p.a. policy costs for the Persistent Organic Pollutants Regulations 2007	n/a	n/a	n/a	Reliability rating downgraded from 4 to 2
			Added £0.2m p.a. compliance costs for Mercury Export Data	Subtracted £13.7m p.a. for Mercury Export and Data; benefits incorrectly recorded.	n/a	Added £14.4m p.a. for Mercury Export and Data	n/a
Cross-cutting	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Flood management	n/a	n/a	n/a	Added £7.4m p.a. for Flood and Water Management Act	n/a	n/a	n/a
	n/a	n/a	Added £0.06m p.a. for admin burdens for Flood and Water Management 2010	n/a	n/a	n/a	n/a
Food	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Land and soil	n/a	n/a	Added £237.1m p.a. policy costs for DETR Circular 2/2000 Contaminated Land: Implementation of part IIA of the Environmental Protection Act 1990	Clarified that benefits to business are £0m p.a.	Added £160.8m p.a.	Added £49.8m p.a. for the Soil Protection Review	Reliability rating of 3 included for the first time

	n/a	Subtracted one regulation. The Contaminated Land (England) Regulations 2000 has been grouped with the DETR Circular 2/2000 Contaminated land: Implementation of part IIA of the Environmental Protection Act	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	Added £21.5m p.a. for Soil Protection Review	Added £10.5m p.a. For the Soil Protection Review	n/a	n/a	Percentage of direct costs derived from the EU changed from 0% to 4%
	n/a	n/a	n/a	n/a	n/a	n/a	The reliability rating for the Agricultural land (Removal of Surface Soil) Act has been downgraded from 5 to 4
Landscape and outdoor recreation	n/a	n/a	n/a	n/a	n/a	n/a	Reliability rating of 4 included for the first time for all regulations under the following three regimes –

							Forests: grants and licensing, Forests: plant health, and forest reproduction
Marine	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Noise and nuisance	n/a	n/a	n/a	n/a	n/a	Added £425.0m p.a. on the Environmental Noise Directive (2002/49/EC)	n/a
	Subtracted one EU Directive on Noise and Outdoor equipment has been removed because it's not Defra's regulation	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	Subtracted one regulation on Noise and Vibration control on construction and open sites - Part 1: Code of practice for basic information and procedures for noise and vibration control; Part 3 : Code	n/a	n/a	n/a	n/a	n/a

		of Practice applicable to surface coal extraction by opencase methods; Part 4: Code of practice for noise and vibration control applicable to piling operations; Part 5 : Code of practice applicable to surface mineral extraction (except coal) sites					
	n/a	Subtracted one regulation on The Dog Fouling (Fixed Penalty) (England) Order 2002	n/a	n/a	n/a	n/a	n/a
	n/a	Subtracted two regulations on The Litter (Fixed Penalty) (England) Order 2002; and Street Litter Control Notices (England) Amendment)	n/a	n/a	n/a	n/a	n/a

		Order 2007					
	n/a	n/a	Overall added £16.0m p.a. for Noise and Nuisance regime regulations	Overall added £9.0m p.a. for noise and Nuisance regime regulation	Overall added £25.0m p.a. for noise and Nuisance regime regulation	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	Sector split apportionment changed for all regulations to 5% for agriculture, 5% for mining, 30% for manufacturing, 8% for energy supply, 5% for water, 15% for waste, 15% for construction, 2% for retail, 5% for transport and 10% for housing and leisure services.
Plants	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Sustainable products	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Waste	Removed one transposing regulation on Stop, search and seizure regulations, that was not yet in force.	n/a	Subtracted £0.9m p.a.	n/a	n/a	n/a	n/a

	n/a	n/a	Added £7.34m p.a. admin burden for the Waste Incineration Directive	n/a	n/a	Added £0.02m p.a.	n/a
	n/a	n/a	Added £0.3m p.a. policy costs for the Transfrontier Shipment of Waste Regulations 2007	n/a	Added £0.02m p.a.	n/a	n/a
	n/a	n/a	n/a	n/a	Added £0.2m p.a. for the Waste (England and Wales) Regulations 2011	n/a	n/a
	n/a	n/a	n/a	n/a	Added £0.04m p.a. for the Waste (Household Waste Duty of Care) (England and Wales) Regulations 2005	n/a	n/a
Water quality and quantity	n/a	n/a	Subtracted £131.2m p.a. for Water Industry Act 1991 and Water Resources Management Plan Regulations	n/a	n/a	n/a	n/a

			2007				
			Added £3.7m p.a. policy costs for the Environmental Permitting Regulations	Added £49.1m p.a. benefits to business for the Environmental regulations	n/a	n/a	n/a
			n/a	Added £11.8m p.a. for Nitrate Pollution Prevention Regulations 2008	n/a	n/a	n/a
			n/a	n/a	n/a	Added £4.9m p.a. for the Private Water Supply Regulations 2009	n/a
			n/a	Added £46.5m p.a. for Control of Pollution (Oil Storage) Regulations 2001	n/a	n/a	n/a

** Note that overall seven EU regulations were added and five domestic regulations were subtracted. But there was a typo in the 2011 report and all EU and domestic regulations were not summed correctly.*

Table A2: Summary of Defra's regulations and their costs and benefits for 2011 in 2012 £s, where monetised, by Defra policy area

Policy area	Number of EU regs	Number of domestic regs	Direct costs to business, £m p.a.	Direct benefits to business, £m p.a.	Net cost to business, £m p.a.	Costs to other parties, £m p.a.	Other benefits, £m p.a.	Admin burden %	Benefit-cost ratio	Benefits included in BCR, £m p.a.	Costs included in BCR, £m p.a.	% of costs EU	Reliability of cost estimates (1-5)
Adaptation to climate change	0	1	1	0	1	0	0	15%	n/a	n/a	n/a	0%	3.0
Agriculture management	22	16	502	277	225	28	1007	83%	n/a	n/a	n/a	88%	2.0
Air quality	10	5	692	1.0	691	5	1382	14%	2.3	1383	598	100%	3.3
Animal health and welfare	56	38	355	3	352	0	56	47%	5.6	40	7	92%	2.4
Biodiversity	5	31	32	10	22	113	970	14.6%	7.0	970	138	85%	3.0
Chemicals and GMOs	9	2	58	0.00	58	1.0	17	15%	17.9	17	1	81%	2.0
Cross-cutting	2	1	9	0	9	0	16	2%	1.7	16	9	24%	4.0
Flood management	1	7	275	1066	-791	798	3013	1%	3.8	4079	1072	0%	3.0
Food	37	0	58	39	19	6	0	10%	n/a	n/a	n/a	100%	3.7
Land and soil	0	3	546	12	533	183	50	0%	n/a	n/a	n/a	4%	3.0
Landscape and outdoor recreation	1	26	3	0	3	7	17	58%	2.2	17	8	3%	3.9
Marine	35	43	115	132	-17	44	0	25%	3.3	132	40	57%	2.8
Noise and nuisance	1	5	20	10	10	25	425	100%	9.7	435	45	0%	3.0
Plants	10	2	14	229	-215	6	2	18%	12.0	231	19	86%	3.7
Sustainable products	9	1	380	0	380	1	1291	1%	3.4	1289	377	100%	3.5
Waste	18	4	581	144	437	0	0	5%	5.1	144	28	95%	1.4
Water quality and quantity	17	15	2056	107	1949	47	1069	2%	1.1	1115	1039	92%	4.2
Totals	233	200	5696	2031	3666	1263	9314	14%	2.9	9868	3381	79%	3.2

