

Title: Proposal to introduce packaging recovery and recycling targets for 2011 and 2012 Lead department or agency: Defra, Scottish Government, Welsh Assembly Government, Dept of the Environment Northern Ireland Other departments or agencies:	Impact Assessment (IA)
	IA No:
	Date: 20/08/2010
	Stage: Final
	Source intervention: EU
	Type of measure: Secondary legislation
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Summary: Intervention and Options

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

The externalities of having to deal with packaging efficiently at the end of its life are currently internalised through Producer Responsibility Regulations, which implement the EU Packaging Directive. The targets for packaging waste recycling in these Regulations only run until 2010. New mandatory targets are needed beyond then to ensure that EU targets on packaging waste recycling and recovery continue to be met, and maintain the gains achieved by packaging recycling in terms of GHG savings and resource efficiency.

What are the policy objectives and the intended effects?

The objective is to maintain packaging recycling levels and improve resource efficiency. In addition to this, the policy will contribute to meeting and exceeding landfill diversion targets, increasing the diversion of commercial and industrial waste from landfill, and increasing energy recovery from waste. The intended effects are to require obligated businesses to recover/recycle more of their packaging waste.

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

A consultation exercise ran from March to May 2010, on the basis of two options:

- a) roll forward the existing target levels to meet the minimum EU requirement; or
- b) raise targets to achieve greater GHG savings, address consumer concerns about the recyclability of packaging, and work towards the recycling rates achieved by the best EU performers.

In the context of the review of waste policy announced for England in July 2010, the preferred option is now to set targets which will deliver the EU minimum for 2011 and 2012 only, and consider future ambitions and how they are best delivered as part of the Waste Review - a variant on option a).

When will the policy be reviewed to establish its impact and the extent to which the policy objectives have been achieved?	It will be reviewed 04/2010
Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?	Yes

SELECT SIGNATORY Sign-off For final proposal stage Impact Assessments:

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

Signed by the responsible Minister: Lord Henley Date: 09/09/2010

Summary: Analysis and Evidence

Policy Option 1

Description:

Set packaging recycling targets for 2011 and 2012 only, at a level which delivers the EU minimum.

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: £1.62m	High: £18.06m	Best Estimate: £9.84m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	£1.76m	£14.65m
High	Optional	£12.59m	£104.73m
Best Estimate		£7.18m	£59.69m

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

Additional collection/sorting costs to packaging 'producers' (packaging manufacturers, users and retailers) of £14.65m - £104.73m for the 2 years. This is compared to a baseline of landfill tax only and assumes the extent to which packaging waste is sent for recycling, energy recovery and further landfill in the absence of targets.

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

Impacts of waste treatment options on local environment quality have not been included. The net impact would depend on the balance of local impacts of different treatment options.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	£1.96m	£16.27m
High	Optional	£14.76m	£122.79m
Best Estimate		£8.36m	£69.53m

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

Revenue from materials £6.12m - £47.69m
Savings in disposal costs £7.95m - £56.82m (excluding landfill tax)
Carbon benefits £2.20m - £18.27m

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

Impacts of waste treatment options on local environmental quality have not been included. The net impact would depend on the balance of local impacts of different treatment options.
Increased collection and recycling of packaging waste could have wider benefits by acting as a driver for collection and recycling of other waste streams.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5

We have included a range on the estimated recycling and recovery rates for packaging in the absence of targets for the baseline.

Impact on admin burden (AB) (£m):			Impact on policy cost savings (£m):	In scope
New AB: 15.02	AB savings: 0	Net: 0	Policy cost savings: 0	No

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?	United Kingdom				
From what date will the policy be implemented?	01/01/2011				
Which organisation(s) will enforce the policy?	EA in England and Wales, SEPA in Scotland, NIEA in Northern Ireland				
What is the total annual cost (£m) of enforcement for these organisations?	none additional				
Does enforcement comply with Hampton principles?	Yes				
Does implementation go beyond minimum EU requirements?	No				
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)	Traded: 0.11-0.8		Non-traded: 0.000394		
Does the proposal have an impact on competition?	No				
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?	Costs: N/A		Benefits: N/A		
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	Micro	< 20	Small	Medium	Large
Are any of these organisations exempt?	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

Specific Impact Tests: Checklist

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

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

Does your policy option/proposal have an impact on...	Impact	Page ref within IA
Statutory equality duties¹? Equality and Human Rights Commission: General guidance	Yes	17
Economic impacts		
Competition? Competition Impact Assessment	Yes	17
Small firms? Small Firms Impact Test	Yes	17
Environmental impacts		
Greenhouse gas assessment? http://www.defra.gov.uk/environment/index.htm	Yes	
Wider environmental issues? Guidance has been created on the Defra site	Yes	17
Social impacts		
Health and well-being? Health: Health Impact Assessment	Yes	17
Human rights? Ministry of Justice: Human Rights	Yes	17
Justice?	Yes	17
Rural proofing? Commission for Rural Communities	Yes	17
Sustainability? Defra: Think sustainable	No	

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

Evidence Base (for summary sheets) – Notes

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

References

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

No.	Legislation or publication
1	Impact Assessment (consultation stage): http://www.defra.gov.uk/corporate/consult/packaging-regs/impact-asses-a.pdf
2	Consultation document: http://www.defra.gov.uk/corporate/consult/packaging-regs/consultation.pdf
3	Consultation responses summary and Government response: [ADD LINK]
4	

+ Add another row

Evidence Base

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

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

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

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉
Transition costs										
Annual recurring cost										
Total annual costs										
Transition benefits										
Annual recurring benefits										
Total annual benefits										

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



Microsoft Office
Excel Worksheet

Evidence Base (for summary sheets)

1. INTRODUCTION

This Impact Assessment (IA) applies to proposed changes to the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (henceforth “the Packaging Regulations”).

The Packaging Regulations require businesses which handle more than 50 tonnes of packaging and have an annual turnover in excess of £2 million to carry out recovery and recycling of packaging waste, to enable the UK to meet its legally binding targets under the EC Directives on Packaging and Packaging Waste 94/62/EC and 2004/12/EC.

An earlier IA accompanied a government consultation document on ‘Implementing the Packaging Strategy: recovery and recycling targets, funding transparency and other technical changes’. The consultation covered new recovery and recycling targets for 2011-2020; new reporting provisions for accredited exporters and reprocessors, to promote transparency in how producer funding is spent; and technical changes to improve the clarity and operation of the Regulations.

This IA deals with the proposed business recovery and recycling targets for packaging waste for 2011-12. It presents the overall costs and benefits of the option chosen in the light of the review of waste policy announced for England in July 2010. It takes account of data submitted in consultation responses, as well as market data on packaging published by the Environment Agency in May 2010.

2. PURPOSE AND INTENDED EFFECT OF MEASURE

Packaging waste constitutes about 10% of the commercial and industrial (C&I) waste stream and about 20% of the household waste stream in the UK. Packaging recycling and recovery rates therefore have an important role to play in meeting municipal landfill diversion targets, increasing the diversion of commercial waste from landfill, meeting overall recycling targets, and recovering energy from waste. All of which contributes to reducing greenhouse gas emissions.

Appropriate recycling targets for packaging support the shift from landfill to recycling and recovery. Landfill is not a sustainable way of disposing of waste. In addition to the space additional land filling would require, there are a number of other adverse environmental effects:

- climate change primarily through the release of methane gas from biodegradable material;
- possible damage to soil and water quality through leaching from landfill sites;
- disamenities such as noise and odour.

By contrast, recycling packaging results in reductions in emissions of CO₂ because less energy is used to produce recycled raw materials than in the production of virgin raw materials. Increased collection and recycling of packaging waste could also have additional social benefits by acting as a driver for collection of other waste streams. Finally, increased recovery and recycling of packaging waste could have amenity benefits by contributing to a decrease in packaging litter.

Background

The EC Directive on Packaging and Packaging Waste (94/62/EC, as amended – hereafter referred to as ‘the Packaging Directive’) aims to harmonise the management of packaging waste by minimising the impact of packaging and packaging waste on the environment and by avoiding obstacles to trade and distortion and restriction of competition within the Community.

The Directive is implemented in the UK by (i) the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 in GB, and parallel Regulations in Northern Ireland; and (ii) the Packaging (Essential Requirements) Regulations 2003 (as amended).

The Directive as amended² sets minimum recovery targets of 60% (of which a minimum of 55% recycling) to be met by 31 December 2008, as well as material-specific recycling targets. These are 60% for glass, 60% for paper and board, 50% for metals, 22.5% for plastics, and 15% for wood.

After 2008, Member States must continue to meet these minimum targets, but they have the freedom to set higher targets if they so choose. The Commission has noted that the 60% recovery rate in the Directive is a minimum and has indicated that Member States will be encouraged to exceed this level.

Current achievement

Since 2008 the UK has met the Directive targets. This was a significant achievement of a key milestone in the UK's progress on packaging recycling. In 2008 the UK recovered 65% of packaging placed on the market, compared with 30% in 1998. The 2009 recovery rate was 66.7%.

The Advisory Committee on Packaging recommended in 2008 that future targets should be set for a minimum of the next 5 years in order to provide industry with greater certainty for planning and future investment purposes. The consultation proposals launched in March considered a 10-year time horizon, to allow maximum time for industry to plan compliance, but also included a commitment to reviewing the targets after 5 years to take account of market changes and possible EU developments. This Impact Assessment reflects decisions taken to set targets for 2011 and 2012 only, pending the outcome of the review of waste policy in England, announced in July 2010.

Risk assessment

Previous changes to the targets have aimed to ensure that the UK was on course to achieve the Directive targets in 2008. Apart from the clear risk of infraction, not meeting the targets would be misaligned with the ambitions of government waste strategies and would tarnish the UK's reputation in the EU.

Any future policy should continue to ensure that the UK meets the minimum Directive requirements. This assumes, as described in the consultation document, that the level of total packaging waste arising and the level of obligated tonnage move in concert and do not diverge.

The continued increases in landfill tax over the next few years will encourage packaging waste to be diverted from landfill. However, on its own the landfill tax will not necessarily incentivise efficient waste management across the waste hierarchy. For example, the landfill tax directs waste out of landfill but will not necessarily produce efficient amounts of recovery, recycling, reuse, and prevention. Once waste is incentivised out of landfill, market conditions will determine whether waste is sent for recycling compared to energy recovery or some other alternative treatment.

The higher landfill tax is likely to incentivise some additional recycling, but our modelling of the baseline indicates that it is not likely to drive recycling levels above the EU minimum for all materials. The level of landfill tax is already close to a point where on average it should make recycling less expensive than landfill as a waste management option in a well-functioning market, though costs will differ for individual businesses.

In analysing the data and compiling the scenarios it is assumed that those businesses that are obligated under the Packaging Regulations will comply with their obligation. With any regulatory system, there is always a risk that some obligated businesses might not comply, or might under-report their obligation, and if this occurs, there is a risk that overall targets might not be met.

3. OPTIONS

The baseline

It is important to provide a baseline which models recycling and recovery rates in the absence of the packaging recycling targets in order to assess its costs and benefits to society. Currently both the packaging targets and the landfill tax have the potential to drive up packaging recycling and recovery rates over time above the 2010 levels. It is therefore essential to consider the two schemes independently in order to analyse what the additional value of each system is in increasing the recycling

² By Directive 2004/12/EC

of packaging waste.

The following baseline models the extent to which the landfill tax, landfill diversion targets and capacity conditions contribute to meeting the EU minimum targets in the absence of packaging targets. We have introduced a high and low scenario for the expected drop in recycling and recovery rates (Table1 below).

Assumptions

Table 1 % Drop in recycling rates from 2009 actual recycling levels

Material	Expected drop in R&R rate		PRN price
	low	high	
Paper	0%	0%	£2
Glass	-2%	-20%	£20
Aluminium	0%	-20%	£21
Steel	-15%	-30%	£16
Plastic	0%	-15%	£5
Wood	-50%	-80%	£2

The baseline percentage drop in recycling and recovery rates is based on economic factors and industry and policy assessment, with the rationale as follows:

Paper: The global market for waste packaging paper and board is a mature one, and reflected in a relatively low PRN price of £2 (the PRN price reflects the additional cost per tonne of waste to make reprocessing it economically viable, with a low PRN price indicating that reprocessing is close to being economically viable based on market conditions). Demand for paper for recycling has been consistently high over the years. In addition, weight-based landfill diversion targets and the landfill tax act as a strong incentive for collecting and recycling heavy materials such as paper. Therefore we have assumed a 0% drop in both scenarios.

Glass: Though in theory weight-based landfill diversion targets and the landfill tax should also incentivise the recycling of glass, achievement of the glass recycling targets has historically been tight. Without producer funding, the costs of collection may not be offset by the value of the material. Therefore removing targets is assumed to lead to drops of between 2% and 20%.

Aluminium: Aluminium is highly valuable. For that reason, in the low scenario we have assumed that without targets, established collections would not stop, leading to a 0% drop in current recycling rates. However, as a light and relatively bulky material it is more expensive to collect than denser materials, and offers less benefit in terms of avoiding landfill costs. Therefore the high scenario assumes that collections rates could be affected by decisions on the economics of collection, leading to a potential drop of 20%.

Steel: We have assumed drops of between 15% and 30% to account for the fact that packaging steel tends to be of lower quality than waste steel from other sources, and it is therefore relatively vulnerable to trading conditions. When targets are in place, this is normally compensated by producer funding topping up the value of the material or incentivising its trading.

Plastic: The main plastic fractions collected in the UK (bottles and film from commercial and industrial sources) are valuable, so the low scenario assumes that established collections would continue unchanged. However, as a light and bulky material, waste plastic packaging is relatively costly to collect and does not offer much saving in landfill costs. It is therefore vulnerable to decisions on the economics of collection. To reflect this, the high scenario assumes a reduction of 15% in recycling rates.

Wood: The demand for waste wood as a feedstock for energy from waste has been increasing over time. Responses to the consultation indicated that significantly more waste wood packaging would go into recovery if it was not for the packaging recycling targets because of the financial incentive offered by ROCs. We have therefore assumed drops in recycling rates between 50% and 80%.

In addition to the assumed drop in tonnages recycled in the absence of packaging targets, it is assumed that any tonnage which would otherwise have been recycled will be sent 90% to landfill and 10% to energy recovery (excluding wood, which we assumed 80% to energy recovery).

Methodology

Based on the assumed drop in tonnages recycled, the corresponding recycling and recovery rates in the absence of targets were assumed to be as follows. Multiplying this by the total packaging waste arisings forecast up to 2012 (Table 3) provides the corresponding tonnages.

Table 2: RR rates achieved in baseline

Material	RR rate achieved 2009 (%)	No Targets	
		RR rate low	RR rate High
Paper	84%	84%	84%
Glass	62%	60%	49%
Aluminium	41%	41%	33%
Steel	58%	49%	40%
Plastic	24%	24%	20%
Wood	77%	38%	15%

Table 3: Estimated total packaging in the UK waste stream

	2011	2012
Paper	3,817,860	3,848,403
Glass	2,739,989	2,767,388
Alu	148,680	149,869
Steel	648,740	645,496
Plastic	2,515,809	2,553,547
Wood	1,023,939	1,023,939
Other	22,443	22,555
Total	10,917,460	11,011,198

Source: **Based on Packflow**

[http://www.valpak.co.uk/nav/redir.aspx?l=/docs/packaging/packflow 2012 final report 19 11 2009.pdf](http://www.valpak.co.uk/nav/redir.aspx?l=/docs/packaging/packflow%202012%20final%20report%2019%2011%202009.pdf)]

In order to assess the extent to which the Directive Targets are met, Table 4 illustrates the recycling and recovery rates and tonnages that would be delivered under each of these scenarios.

Table 4a: Aggregate tonnage delivered in Baseline – **Low** Scenario

Material	2011		2012		Directive Target
	% achievement	Tonnages	% achievement	Tonnages	
Paper	84%	3,202,372	84%	3,227,991	60.0%
Glass	60%	1,656,762	60%	1,673,329	60.0%
Alu'm	41%	61,470	41%	61,961	
Steel	49%	318,887	49%	317,293	
Metal	48%	380,357	48%	379,254	50.0%
Plastic	24%	606,017	24%	615,108	22.5%
Wood	38%	393,404	38%	393,404	15.0%
Total	57%	6,238,913	57%	6,289,087	55.0%
Overall Recovery	61%	6,610,994	60%	6,661,179	60%

Table 4b: Aggregate tonnage delivered by BAU Option – High Scenario

Material	2011		2012		Directive Target
	% achievement	Tonnages	% achievement	Tonnages	
Paper	84%	3,202,372	84%	3,227,991	60.0%
Glass	49%	1,352,459	49%	1,365,983	60.0%
Alu'm	33%	49,176	33%	49,569	
Steel	40%	262,613	40%	261,300	
Metal	39%	311,789	39%	310,869	50.0%
Plastic	20%	515,115	20%	522,842	22.5%
Wood	15%	157,362	15%	157,362	15.0%
Total	51%	5,539,096	51%	5,585,047	55.0%
Overall Recovery	57%	6,216,371	57%	6,263,177	60%

On the low scenario, the UK would miss the EU material-specific recycling targets for metals, and would have no margin for manoeuvre in case market conditions for recycling changed (for example, for glass). The situation would be worse in the high scenario, where only the paper and wood EU minimum would be met.

Packaging recycling targets for 2011 and 2012 only and at the EU minimum - tonnages

We therefore recommend packaging recycling targets on UK businesses as follows. For some materials i.e. steel and plastic, the targets have been revised in line with information gathered as part of the consultation and data on actual packaging obligated tonnages for 2010 published by the Environment Agency in May 2010 (see the government response to the consultation, at [\[insert link\]](#) for more details).

The Packaging Regulations include a *de minimis* threshold, exempting businesses that have a turnover below £2m and who handle under 50 tonnes of packaging; they are 'not obligated'. Thus, not all packaging waste arisings are covered by these regulations. The estimates used for the obligated tonnage (i.e. the tonnage to which the statutory recycling targets under the Packaging Regulations apply, excluding tonnage from businesses which fall under the *de minimis*) are as follows.

Table 5: Obligated tonnage (actuals for 2010; estimates for 2011 and 2012) **source: NPWD; Defra estimate**

	2010	2011	2012
Paper	3,517,756	3,517,756	3,535,345
Glass	2,088,587	2,109,473	2,130,568
Alu'm	146,921	148,096	149,281
Steel	491,559	489,101	486,656
Plastic	1,840,439	1,868,046	1,896,066
Wood	894,554	894,554	894,554
Other	19,934	20,034	20,134
Total	8,999,750	9,047,060	9,112,603

In order to achieve EU minimum targets (that apply to total packaging waste), the recycling and recovery targets from the 'obligated tonnage' are higher than the targets for the UK packaging waste stream as a whole.

Table 6: Revised Packaging Targets for 2011 and 2012 targets (%)

Material	2010	2011	which will deliver an overall recycling % of	2012	which will deliver an overall recycling % of	EU minimum targets (%)
	(for reference) (%)	(%)		(%)		
Paper/card	69.5	69.5	64	69.5	63.8	60
Glass	81	81	62.4	81	62.4	60
Aluminium	40	40	39.8	40	39.8	-
Steel	69	71	53.5	71	53.5	-
Metals*			51		50.9	50
Plastic	29	32	23.8	32	23.8	22.5
Wood	22	22	18.6	22	18.6	15
Total recycling**	68.1	68.1	56.2	68.1	56.2	55
Total recovery	74	74	61.1	74	61	60

* There is only one EU target for metals, encompassing both aluminium and steel. The UK decided to have separate targets in 1997 when it became obvious that aluminium recycling levels were lagging behind and needed a different lever.

** The packaging that is handled by those exempt businesses still counts when calculating the UK's recycling targets therefore percentage is as a proportion of total packaging waste arisings.

Table 7 illustrates the tonnages that would be delivered by adopting these targets for the proposed period.

Table 7 Aggregate tonnage delivered by the proposed targets

	2011	2012
Paper	2,444,840	2,457,065
Glass	1,708,673	1,725,760
Alu	59,238	59,712
Steel	347,262	345,526
Metal	406,500	405,238
Plastic	597,775	606,741
Wood	196,802	196,802
Recycling	5,354,590	5,391,606
Recovery	6,694,824	6,743,326

Only those incremental volumes *above the baseline* are shown in the following tables for both the low and high scenario and reflect the additional obligated volumes.

Table 8a: Incremental tonnage delivered by targets compared to the baseline – Low scenario

	2011	2012
Paper	-	-
Glass	51,911	52,431
Alu	-	-
Steel	28,374	28,233
Plastic	-	-
Wood	-	-
Recycling	80,286	80,664
Recovery	83,830	82,147

Table 8b: Incremental tonnage delivered by targets compared to the baseline – High scenario

High	2011	2012
Paper	-	-
Glass	356,215	359,777
Alu	10,063	10,143
Steel	84,648	84,226
Plastic	82,660	83,899
Wood	39,440	39,440
Recycling	583,088	587,629
Recovery	478,454	480,149

Box 1

Packaging targets and the landfill tax

While the landfill tax incentivises waste out of landfill, it does not direct the waste to any particular level of the waste hierarchy. Market conditions, such as gate fees, collection costs, the value of materials recovered, and costs of various treatment options, determine the extent to which waste diverted from landfill are directed to recovery, recycling, and re-use. The baseline scenario models recycling rates for packaging achieved in the absence of targets. On the basis of this analysis, the landfill tax alone will not ensure EU minimum recycling targets are met for all materials – under both the low and high scenarios (refer to tables 4a and 4b). In some cases, landfill tax is able to deliver recycling levels similar if not additional to the packaging targets. However, this is not the case for a majority of materials in the high scenario, increasing the risk of infraction on the EU minimum directive. Thus, packaging targets are important in increasing recycling rates in line with minimum EU requirements for recycling and recovery.

The landfill tax an important instrument for internalising the environmental impacts of landfill, and diverting excessive waste out of landfill. A world with packaging targets but no landfill tax would ensure that the required level of packaging recycling is achieved for the various materials. However, the packaging target alone would not ensure that the required levels of waste were being diverted from landfill. The relative costs of each of the treatment options lower down in the hierarchy – energy recovery and landfill – would determine the final destination of packaging waste over and above what is recycled in line with the EU Packaging Directive. Without the landfill tax and based on the private costs alone, we can assume that more waste would be sent to landfill, resulting in higher GHG emissions and reduced resource efficiency. It would also increase the risk of non-compliance with the EU Landfill Directive, and hence the risk of infraction. Moreover, packaging waste is only a fraction of total waste arisings – accounting for approximately 10% of C&I waste and 20% of the household waste – and packaging targets alone would not incentivise efficient behaviour and treatment of non-packaging waste.

Thus, packaging targets and landfill tax target different levels of the waste hierarchy, and contribute to the delivery of an efficient waste management system and to compliance with EU Directives on landfill and packaging waste. More work on the interaction and overlap between these two instruments in dealing with packaging waste will be taken forward in the context of the waste review.

4. COSTS AND BENEFITS

This cost-benefit analysis attempts to identify and quantify the range of social, environmental and economic impacts of increasing the recovery and recycling of packaging waste above the baseline.

No quantifiable social impacts have been identified; however the environmental and economic impacts identified are discussed below.

Benefits

The benefits of increasing diversion of packaging waste away from landfill relate predominantly to greenhouse gas emissions savings, as well as resource savings for products throughout their life-cycle and therefore economic efficiency. Savings are accrued both directly through reductions in methane

emissions from biodegradable waste being landfilled, and indirectly through avoided (fossil fuel) energy use in primary material or electricity production.

The disamenity costs associated with avoided landfill have not been quantified in this impact assessment as there is no equivalent data for the disamenity impacts associated with other waste treatments. However, given the lower land requirements of non-landfill treatments it seems likely that there will be a net benefit resulting from landfill diversion.

Benefits from recycling materials

The material extracted from the waste stream has an inherent market value to the economy, representing the resources that would be wasted if it were sent to landfill. This value may not be high enough to make it economically viable on private cost-benefit basis for companies to recycle the material themselves without government intervention. However, including the social benefits of recycling this material (i.e. including the value to society of the carbon and disamenity impacts) outweighs the social costs, making it an economically rational decision to recover the value (and benefits) of these materials.

All the packaging materials are traded in global commodities markets, but due to market fluctuations it is very difficult to assess the price of any material in future years. Therefore table 9 is based on recent material prices. Table 10 is the product of Tables 8 and 9 and shows the additional revenue that would be generated under the proposed targets by the sale of the recovered material, noting that the price for wood negative in the market place, i.e. owners of this material pay for it to be taken.

Table 9: Figures as of 5 August 2010 from WRAP Materials Pricing Report, except wood figure: July 2010 from letsrecycle

Material	Price per tonne (£)
Paper	68
Glass	20
Aluminium	675
Steel	110
Plastic	112
Wood	(5)

Tables 10a and 10b show the total material revenue that *could* be derived from recycling the additional tonnage above the baseline. This is shown for illustrative purposes, and does not take account of the different collection methods. The collection and sorting costs of co-mingled waste are net of the sale of materials. Therefore, to avoid double counting, the revenue from the sales of materials from co-mingled collections have been subtracted from the total revenue figures in the final NPV in Tables 19a and 19b below.

Table 10a: Associated material revenue – additional recycling from proposed targets – discounted to present values (£m) - Low Scenario

	2011	2012
Paper	0.0	0.0
Glass	1.0	1.0
Alu'm	0.0	0.0
Steel	3.0	2.9
Plastic	0.0	0.0
Wood	0.0	0.0
Overall recycling	4.0	3.9

Table 10b: Associated material revenue – additional recycling from proposed targets – discounted to present values (£m) - High Scenario

	2011	2012
Paper	0.0	0.0

Glass	6.9	6.7
Alu'm	6.6	6.4
Steel	9.0	8.6
Plastic	8.9	8.8
Wood	-0.2	-0.2
Overall recycling	31.2	30.3

Greenhouse Gas (GHG) Emissions

The key environmental benefit of the targets will be the greenhouse gas savings associated with the diversion from landfill and the resource efficiency (in particular, the associated energy savings) of replacing virgin materials with recycled materials. For biodegradable products, there is significant benefit from reduced methane emissions. WRAP has identified the relative GHG savings from the recycling of a tonne of key materials - see Table 11.

Table 11: Carbon factors (CO₂ equivalent)

Material	Carbon factor (Tonnes of CO ₂ equivalent / tonne of material recycled)
Paper	1.320
Glass	0.315
Aluminium	9.000
Steel	1.280
Plastic	1.167
Wood	0.303

Using the additional tonnages of waste diverted, shown in Table 8, and the carbon factors in Table 11, the savings in GHG emissions associated with the additional recovery/recycling activity are shown in Table 12.

Table 12a: Avoided GHG emissions (CO₂ equivalent, in thousands of tonnes) - Low Scenario

	2011	2012
Paper	0.00	0.00
Glass	16.35	16.52
Aluminium	0.00	0.00
Steel	36.32	36.14
Plastic	0.00	0.00
Wood	0.00	0.00
Overall recycling	52.67	52.65

Table 12b: Avoided GHG emissions (CO₂ equivalent, in thousands of tonnes) - High Scenario

	2011	2012
Paper	0.00	0.00
Glass	112.21	113.33
Aluminium	90.56	91.29
Steel	108.35	107.81
Plastic	96.44	97.88
Wood	11.95	11.95
Overall recycling	419.51	422.26

In accordance with the latest guidance from DECC on the valuation of carbon in policy appraisal, the

value of carbon varies depending on whether the reduction/increase in emissions occurs in traded or untraded sectors, or internationally. Traded meaning those sectors covered by the EU Emissions Trading System (ETS) for which a traded price is used (based in the short term on estimates of the future price of EU Allowances (EUAs)).

Outside of this sector, the 'non-traded price of carbon' is used, based on estimates of the marginal abatement cost (MAC) required to meet a specific emission reduction target. For reductions in emissions overseas, the traded price is again used. These figures are shown in Table 14. The central estimates have been used for the calculations in this IA.

Consequently, for paper and wood, where the main carbon saving is from reduced methane emissions and energy from waste by incineration (which is non-traded), the non-traded price has been used. For glass, aluminium, steel and plastics, additional reprocessing and the replacement of virgin materials occurs both in the UK and overseas for which the traded price is appropriate.

Based on PRN and PERN data for 2007 and 2008, the % of recyclate material exported for reprocessing is as shown in Table 13. The carbon price for the benefits of recycling these materials is the standard traded price.

Table 13: % of material exported for reprocessing

	% Export
Paper	55%
Glass	22%
Aluminium	55%
Steel	45%
Plastic	61%

Using the central estimates shown below, the value for the GHG savings are shown in Table 15.

Table 14: Carbon prices for the traded, non-traded and overseas sectors (£)

	Traded			Non-Traded		
	Low	Central	High	Low	Central	High
2010	12	22	27	26	52	78
2011	12	22	27	26	52	79
2012	13	22	28	27	53	80

Table 15a: Present value of the GHG savings from proposed targets (£m) – Low Scenario

	2011	2012
Paper	0.00	0.00
Glass	0.35	0.34
Aluminium	0.00	0.00
Steel	0.77	0.74
Plastic	0.00	0.00
Wood	0.00	0.00
Total	1.12	1.08
Discounted present value over 2 years (£m)		2.20

Table 15b: Present value of the GHG savings from proposed targets (£m) – High Scenario

	2011	2012
Paper	0.00	0.00
Glass	2.39	2.33
Aluminium	1.93	1.87
Steel	2.30	2.21

Plastic	2.05	2.01
Wood	0.59	0.59
Total	9.26	9.01
Discounted present value over 2 years (£m)		18.27

Other Benefits

The producer responsibility system incentivises the fact that recycling is a better thing to do with waste packaging, and more closely matches the thinking within the waste hierarchy. However we must be cautious that we are not accidentally over-incentivising recycling with the packaging targets. Using emissions in landfill as a proxy for externality, then this danger should be limited, but it is still worth mentioning as something to consider.

Finally, producer responsibility targets contribute to meeting landfill directive targets. Without the recycling targets and PRN system, there would be an increased risk that the landfill diversion targets are not met, which might mean that we face infraction proceedings from the European Commission.

Costs

The private costs of the incremental change under the proposed targets comprises of the variable cost of collection and sorting, either from households or from businesses.

Drawing on work from WRAP³, the average cost for collecting and sorting household waste co-mingled is around £102 per tonne; the figure for kerbside sort is £128 per tonne. Both of these figures assume an equal share of 'urban' and 'rural' waste. The co-mingled figure is net of material sales; the kerbside sort figure is gross.

For commercial and industrial waste collections, the figure varies between around £50 per tonne and £110 per tonne depending on the volumes and locations of the collected waste. In some cases, the cost may be above this range.

Table 16a: Collection costs of proposed targets compared to the baseline (£m) – Low Scenario

	2011	2012
Paper	0.00	0.00
Glass	4.81	4.69
Alu	0.00	0.00
Steel	2.63	2.53
Plastic	0.00	0.00
Wood	0.00	0.00
Discounted present value over 2 years (£m)		14.65

Table 16b: Collection costs of proposed targets compared to the baseline (£m) – High Scenario

	2011	2012
Paper	0.0	0.0
Glass	33.0	32.2
Alu	0.9	0.9
Steel	7.8	7.5
Plastic	7.7	7.5
Wood	3.7	3.5
Discounted present value over 2 years (£m)		104.7

Offsetting reduction in the disposal cost of refuse to landfill

³ "Kerbside Recycling: Indicative Costs and Performance. Technical Annex.", Tables 14 and 15.

By increasing recycling, handlers of waste will be able to save resource costs of disposal to landfill, equal to the landfill gate fee plus the avoided cost of collecting mixed waste. On average, the gate fee is around £22 per tonne for the UK and the average 'mixed waste' collection cost is about £30 per tonne. The savings in disposal costs for each material are shown in Table 17. In aggregate, the present value for these savings range from around **£7.9m to £56.8m**. In addition, there would be savings in cash outflow on landfill tax (estimated at between £9.2m and £65.5m), as shown in Table 18. However, in an IA looking at social cost-benefits, this element is excluded from the NPV assessment.

Landfill tax is set to increase over the period 2010-14, so the cost of disposal of waste to landfill will become a relatively more expensive option compared with alternative waste treatments. Landfilled material will be subject to the following prevailing rates of landfill tax:

- £48/t in 2010/11
- £56/t in 2011/12
- £64/t in 2012/13
- £72/t in 2013/14
- £80/t in 2014/15 (being maintained at this level until 2020)

Table 17a: Savings in landfill disposal resource costs (£m) – Low Scenario

	2011	2012
Paper	0.0	0.0
Glass	2.6	2.5
Aluminium	0.0	0.0
Steel	1.4	1.4
Plastic	0.0	0.0
Wood	0.0	0.0
Discounted present value over 2 years (£m)		7.95

Table 17b: Savings in landfill disposal resource costs (£m) – High Scenario

	2011	2012
Paper	0.0	0.0
Glass	17.9	17.5
Aluminium	0.5	0.5
Steel	4.3	4.1
Plastic	4.2	4.1
Wood	2.0	1.9
Discounted present value over 2 years (£m)		56.82

Table 18a: 'Savings' in cash outflow on landfill tax – Low Scenario

	2011	2012
Paper	0.0	0.0
Glass	2.8	3.1
Aluminium	0.0	0.0
Steel	1.5	1.7
Plastic	0.0	0.0
Wood	0.0	0.0
Discounted present value over 2 years (£m)		9.2

Table 18a: 'Savings' in cash outflow on landfill tax – High Scenario

	2011	2012
--	------	------

Paper	0.0	0.0
Glass	19.3	21.5
Aluminium	0.5	0.6
Steel	4.6	5.0
Plastic	4.5	5.0
Wood	2.1	2.4
Discounted present value over 2 years (£m)		65.5

Box2:

PRN prices and the private costs and benefits of recycling

The Impact Assessment uses a bottom up approach to calculate the private costs and benefits associated with packaging targets. The various components include the additional collection and sorting costs of recycling, the cost savings from avoided landfill disposal costs (excluding the landfill tax), and revenues from recycled materials.

An alternative approach is to use PRN revenues. The PRN price is essentially the additional cost of incentivising an additional tonne of recycling that is not driven by the market or the landfill tax. For a typical producer, the PRN price is influenced by the cost of recycling that particular packaging waste (collection and sorting and the delivery of segregated packaging to reprocessors) minus revenues in the form of avoided landfilling and revenue from recycled materials. When the cost of recycling is less than revenues from avoided landfilling and from the sale of recycled materials, the PRN price is likely to be close to 0. Cases where the PRN price is high, reflects either high recycling costs or a low value of the recycled material.

These two approaches are not equivalent. First, the PRN price reflects the cost of landfilling including the landfill tax. As taxes are treated as transfers, the landfill tax is not included in social cost-benefit calculations. In addition, PRN prices are driven by a number of market-based factors, such as commodity prices and institutional and market structures in the waste management market. For example, whereas the IA assumes an average cost of £90 per tonne for collection and disposal of waste for recycling, this actually varies by material. Similarly, the market price of the materials also fluctuates and the figures used to derive the PRN price may have been significantly different from those assumed in the IA.

Packaging targets are to be considered as part of the review of waste policy, and will provide the opportunity to further evaluate the differences and similarities between the two approaches.

Summary – costs and benefits

The summary of costs and benefits are as set out in Table 22, indicating a net present value from the proposed targets of between £1.62m and £18.60m.

Table 19a: Summary – Option 1: Present Value of Costs and Benefits (£m) – Low Scenario

Low Scenario		2011	2012	PV (2 years)
Collection costs		(7.43)	(7.22)	(14.65)
Revenues*	Materials	3.11	3.01	6.12
Savings	Landfill resource costs	4.03	3.92	7.95
Benefits	Carbon	1.12	1.08	2.20
Net benefit		0.83	0.79	1.62

Table 19b: Summary – Option 1: Present Value of Costs and Benefits (£m) – High Scenario

High Scenario		2011	2012	PV (2 years)
Collection costs		(53.06)	(51.67)	(104.73)
Revenues*	Materials	24.18	23.52	47.70
Savings	Landfill resource costs	28.79	28.03	56.82
Benefits	Carbon	9.26	9.01	18.27
Net benefit		9.17	8.89	18.06

* revenue from the kerbside sort household fraction only, as the collection costs pertaining to the co-mingled fraction are net of material sales.

Incremental business costs to packaging producers– PRN/PERN costs

For the purpose of assessing the cost on businesses who are obligated under the Packaging Regulations, we have estimated the likely increase in the compliance costs of obtaining additional evidence notes (PRNs/PERNs) from accredited reproprocessors or exporters compared to current costs. These are the marginal costs visible to businesses; they are not the full social costs of the additional recycling. PRN/PERN values are dictated by supply and demand relationships, which are themselves a function of recycling capacity, market demand for materials, and the administrative costs of accreditation and reporting.

The negative figures in the tables below are the result of flat targets being applied to obligated tonnages that are predicted to decrease. This means that the predicted recycled tonnage is also going down compared to the previous year, hence a drop in costs.

The total incremental cost to business as a result of the proposed targets ranges from £1 m to £1.9m over two years. We have assumed PRN prices remain constant for this purpose, and applied them to the incremental additional tonnages recycled compared to the previous year.

Table 20a: Incremental increase in predicted obligation, year-on-year

Material	2011	2012
Paper	0	12,224
Glass	16,918	17,087
Aluminium	470	474
Steel	8,086	-1,736
Plastic	64,047	-9,994
Wood	0	0
'General recycling'	2,801	3,880
Energy from Waste	-57,313	26,568

* 'general recycling' is a category used to complement some businesses' material-specific recycling up to their overall 60% target (eg if a business only has a recycling obligation in plastic, the target that applies to plastic being 32%, it has to buy evidence notes in another material to take it to 60%). This shortfall is normally made up by obtaining paper or wood PRNs, which tend to be the cheapest.

Table 20a: Low - 2010 averages (January to June) prices - on marginal year-on-year increase

Material	PRN (£)	2011	2012
Paper	2	0	24,448
Glass	20	338,351	341,735
Aluminium	21	9,873	9,952
Steel	16	129,378	-27,781
Plastic	5	320,236	-49,970
Wood	2	0	0
'General recycling'	2	5,601	7,760
Energy from Waste	2	-114,625	53,135

Total		£ 688,815	£ 359,280
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Table 20b: High - Historical average prices - on marginal year-on-year increase

Material	PRN (£)	2011	2012
Paper	2.5	0	30,561
Glass	22	372,186	375,908
Aluminium	30	14,104	14,217
Steel	15	121,292	-26,045
Plastic	20	1,280,946	-199,881
Wood	4	0	0
'General recycling'*	2.5	11,203	15,521
Energy from Waste	4	-143,282	66,419
Total		£ 1,656,450	£ 276,700

5. SPECIFIC IMPACT TESTS

Equity and Fairness

The proposed changes have no undue effect on rural areas, racial groups, income groups, gender groups, age groups, people with disabilities, or people with particular religious views.

Small firms impact test

Businesses that do not simultaneously satisfy the two threshold tests in the Regulations (i.e. an annual turnover in excess of £2m and handle more than 50t of packaging) are excluded from the producer responsibility obligations in the Regulations. The proposed changes do not affect small businesses below these thresholds.

Competition

The proposed target scenarios will affect the recovery and recycling obligations of approximately 6,500 businesses in the UK. The costs incurred under any new targets (in the same way as for existing targets) will be greater for some businesses than others, since the costs are related to the amount of packaging the business handles. Therefore, the more packaging a business handles the larger the obligation and the higher the likely costs of meeting that obligation.

The Government does not expect the proposals to affect the current market structure or change the number or size of firms. New businesses will not face higher charges than existing companies and the proposals should not restrict businesses choice of products. The Government is not aware of the industry being characterised by technological change that would radically alter the state of the market.

The Government have examined competition in the recycling market, material specific market (e.g. glass and plastic) and the end user market (e.g. the market for bottles). In general, the Government has been unable to identify markets where there are serious competition concerns. Competition in the recycling market is unlikely to be adversely affected as a result of adopting any of the proposed options and related targets. Indeed, the setting of future targets for recycling of particular materials may well increase demand for recycling and this could lead to new entry in the market and increase competition in recycling services.

The proposal sets material specific targets and may therefore cause a distortion in the market for particular types of packaging. An example of this is the market for bottles where glass currently faces a higher recycling target than plastic. This recycling differential could put glass manufacturers at a disadvantage, for example when fillers are selecting the container for their goods, although plastics have greater difficulties in terms of collection, sorting and end-use markets. However, the proposed new targets will the targets for all the materials to similar levels and so will counter-act this effect.

It is anticipated that the increased cost of this regulation will be small in relation to a manufacturer's total costs. Therefore, the Government does not believe that competition will be significantly affected in either this or other sectors with potentially high or differing recycling rates e.g. the aluminium and steel markets.

Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added to provide further information about non-monetary costs and benefits from Specific Impact Tests, if relevant to an overall understanding of policy options.

Annex 1: Post Implementation Review (PIR) Plan

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

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

Add annexes here.

Title: Impact Assessment of proposed transparency improvements and technical changes to the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 Lead department or agency: Defra Other departments or agencies:	Impact Assessment (IA)
	IA No: DEFRA 1090
	Date: 01/01/2010
	Stage: Final
	Source intervention: Domestic
	Type of measure: Secondary legislation
	Contact for enquiries: Rob Rawlings 020 7238 5878

Summary: Intervention and Options

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

The Packaging Strategy identified the lack of transparency of funding as a key issue for producers and Local Authorities. Currently, producers are unable to report (e.g. to their boards or shareholders) on how the funding they provide is spent. Similarly, local authorities need better information about financial flows, so they are able to make informed planning decisions, or have informed discussions with their waste contractors. Without intervention, this situation will not be remedied.

In addition a total of 23 technical changes to the Producer Responsibility (Packaging Waste) Regulations 2007 are under consideration. The current Regulations have not kept up to date with changes in legislation, interpretation and best practice; and in some instances, there are errors.

What are the policy objectives and the intended effects?

The proposed amendments to the Regulations are intended to provide more detailed reporting and greater clarity regarding the amount of funding and the uses to which it is put, thereby highlighting how the revenue contributes to increasing recycling capacity. This will allow more informed planning decisions to be made.

The technical changes aim to reduce the administrative burden on both producers and the Environment Agencies by correcting errors, clarifying the Packaging Regulations where they are considered to be unclear, removing provisions that are no longer needed and ensuring that the Regulations are consistent in their treatment of both individual registrants and compliance schemes.

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

A number of options to improve transparency of funding flows were considered. Following a public consultation, the following options are recommended for implementation:-

Option 1: Optimising the effectiveness of the existing reporting system and revising categories for reporting PRN/PERN revenue expenditure. In regard to the technical changes the preferred option is to amend the Regulations to provide greater clarity, consistency and ensure that they are proportionate.

The following options are not being pursued at the present time:-

- Automatic reconciliation of revenue against expenditure
- Reports on expenditure in percentage terms for each accredited reprocessor/exporter

When will the policy be reviewed to establish its impact and the extent to which the policy objectives have been achieved?	It will/will not be reviewed 01/2010
Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?	Yes/No

SELECT SIGNATORY Sign-off For final proposal stage Impact Assessments:

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

Signed by the responsible Minister : Lord Henley Date: 09/09/2010

Summary: Analysis and Evidence

Policy Option 1

Description:

A number of proposals which will improve transparency of funding flows and technical changes to correct and update the Regulations.

Price Base Year 2011	PV Base Year 2011	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £3.07m	High: £3.56m	Best Estimate: £3.31m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)	
Low	£0.10m	10	£0.04m	£0.45m
High	£0.13m	10	£0.04m	£0.48m
Best Estimate	£0.11m	10	£0.04m	£0.46m

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

All costs in present value terms and cumulative over a 10 year period.

Changes to reporting categories: One off cost on public sector to amend NPWD database £28,986 and admin burdens of £66,080 - £101,355.

Oil platform inclusion results in additional collection and disposal costs of £349,959

Changes to Part C application charges incur additional fees of £218,685 – transfer cost therefore not in NPV

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

Majority of the technical changes to regulations do not impose additional costs.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)	
Low	Optional	10	£0.42m	£3.51m
High	Optional	10	£0.49m	£4.04m
Best Estimate		10	£0.45m	£3.77m

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

Benefits in NPV and cumulative over 10 year period. Monitoring savings for agencies from the requirement to inform if going into liquidation-£689. Small producers access to allocation method - £637,107-£977,204.

Reduction in disputes from clearly stating the deadline date for applications-£19,960

Obligating packaging sent to offshore oil platforms financial - £202,198 & GHG savings- £129,605. Removal of independent audit reports for large reprocessors & exporters - £2,578,148 - £3,095,684

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

Transparency benefits will allow producers, as well as LA's to have a much improved overview of where producer funding is flowing. Allow better and more informed decisions regarding future investment.

Correcting errors, clarifying the Packaging Regulations and removing material no longer required will reduce the administrative burdens on both producers and the Environment Agencies.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5%

We have modelled the savings over a 10 year period and assumed 0% growth in the number of producers and exporters.

Impact on admin burden (AB) (£m):			Impact on policy cost savings (£m):	In scope
New AB: 0.30	AB savings: 4.43	Net: 4.12	Policy cost savings:	Yes/No

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?	United Kingdom				
From what date will the policy be implemented?	11/01/2010				
Which organisation(s) will enforce the policy?	Environment Agencies				
What is the total annual cost (£m) of enforcement for these organisations?	No change				
Does enforcement comply with Hampton principles?	Yes				
Does implementation go beyond minimum EU requirements?	Yes				
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)	Traded:		Non-traded:		
Does the proposal have an impact on competition?	No				
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?	Costs:		Benefits:		
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	Micro	< 20	Small	Medium	Large
Are any of these organisations exempt?	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

Specific Impact Tests: Checklist

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

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

Does your policy option/proposal have an impact on...	Impact	Page ref within IA
Statutory equality duties¹? <u>Equality and Human Rights Commission: General guidance</u>	No	
Economic impacts		
Competition? <u>Competition Impact Assessment</u>	Yes	24
Small firms? <u>Small Firms Impact Test</u>	Yes	24
Environmental impacts		
Greenhouse gas assessment? <u>http://www.defra.gov.uk/environment/index.htm</u>	Yes	21
Wider environmental issues? <u>Guidance has been created on the Defra site</u>	No	
Social impacts		
Health and well-being? <u>Health: Health Impact Assessment</u>	No	
Human rights? <u>Ministry of Justice: Human Rights</u>	No	
Justice?	No	
Rural proofing? <u>Commission for Rural Communities</u>	No	
Sustainability? <u>Defra: Think sustainable</u>	No	

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

Evidence Base (for summary sheets) – Notes

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

References

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

No.	Legislation or publication
1	
2	
3	
4	

+ Add another row

Evidence Base

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

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

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

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉
Transition costs										
Annual recurring cost										
Total annual costs										
Transition benefits										
Annual recurring benefits										
Total annual benefits										

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



Microsoft Office
Excel Worksheet

Evidence Base (for summary sheets)

There is discretion for departments and regulators as to how to set out the evidence base. However, it is desirable that the following points are covered:

- Problem under consideration;
- Rationale for intervention;
- Policy objective;
- Description of options considered (including do nothing);
- Costs and benefits of each option;
- Risks and assumptions;
- Administrative burden and policy savings calculations;
- Wider impacts;
- Summary and preferred option with description of implementation plan.

Introduction

- 1.1 *This Impact Assessment (IA) applies to businesses obligated under the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (henceforth “the Packaging Regulations”).*
- 1.2 *The Packaging Regulations require businesses which handle more than 50 tonnes of packaging and have an annual turnover in excess of £2 million to carry out recovery and recycling of packaging waste, to enable the UK to meet its legally binding targets under the EC Directives on Packaging and Packaging Waste 94/62/EC and 2004/12/EC.*
- 1.3 *This IA deals with proposed changes to the Packaging Regulations with a view to increasing the transparency of PRN/PERN revenue and expenditure as well as a number of technical changes designed to improve the functioning of the Regulations. It presents the overall costs and benefits of the proposals.*

2. **Background**

- 2.1 The EC Directive on Packaging and Packaging Waste (94/62/EC, as amended – hereafter referred to as ‘the Packaging Directive’) aims to harmonise the management of packaging waste by minimising the impact of packaging and packaging waste on the environment and by avoiding obstacles to trade and distortion and restriction of competition within the Community.
- 2.2 *The Directive is implemented in the UK by (i) the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (as amended); and (ii) the Packaging (Essential Requirements) Regulations 2003 (as amended).*
- 2.3 The Directive as amended² sets minimum recovery targets of 60% (of which a minimum of 55% recycling) to be met by 31 December 2008, as well as material-specific recycling targets. These are 60% for glass, 60% for paper and board, 50% for metals, 22.5% for plastics, and 15% for wood. After 2008, Member States must continue to meet these minimum targets.

3. **Policy Objective**

² By Directive 2004/12/EC
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Transparency

- 3.1 *Packaging waste constitutes about 10% of the commercial and industrial (C&I) waste stream and about 20% of the household waste stream in the UK. Packaging recycling and recovery rates therefore have an important role to play in meeting municipal landfill diversion targets, increasing the diversion of commercial waste from landfill, meeting overall recycling targets, and recovering energy from waste. All of which contributes to reducing greenhouse gas emissions.*
- 3.2 *The Packaging Strategy published in June 2009³ described how producer funding (the money producers will have to invest in their own recycling activities, or what they will have to pay to acquire for PRNs/PERNs) goes to accredited reprocessors and exporters, and why its effects may not be visible to local authorities (who are responsible for the management of household packaging waste), or indeed to the producers.*
- 3.3 *This lack of visibility matters for two reasons:*
- *producers are unable to show (e.g. to their boards or shareholders) on what the funding they provide goes towards, beyond the mere fulfilment of a legal obligation. They need assurance that their money is going where it is needed to make a difference to recycling and recovery rates, especially in the context of rising targets, when their compliance costs will rise.*
 - *Similarly, local authorities need better information about financial flows, so they are able to make informed planning decisions, or have informed discussions with their waste contractors. If nothing is done, the extra producer funding which should result from higher packaging recycling targets will remain invisible. Without this source of funding, it is unlikely that local authorities would consider making the changes to their service necessary for recycling targets to be achieved.*
- 3.4 *Improved transparency will also be important if we increase targets in the future as producers will want to know that any increase in the amount of money they have to provide for packaging recycling in terms of PRN/compliance is being spent by reprocessors/exporters on packaging recycling and not anything else. This is important for producers for three reasons: firstly for reporting to boards, shareholders etc what difference the money has made in practice; secondly if the money is being spent as intended on developing recycling infrastructure then their costs will decrease as the more packaging recycled the cheaper the PRN/PERN; and thirdly it will help producers deal with criticisms from customers and local authorities about not sharing the costs.*
- 3.5 *Chapter 6 of the Strategy committed government to making the system more transparent. Governments across the UK consulted on a variety of options for doing so, formulated in consultation with the Advisory Committee on Packaging (ACP)⁴.*
- 3.6 *This section of the IA discusses the Government's proposed amendments, based on recommendations from the environment agencies, the Advisory Committee on Packaging and responses to the formal consultation which ended on 27 May 2010.*

Technical Changes

- 3.7 *The technical changes described in detail below aim to reduce the administrative burden on both producers and the Environment Agencies by correcting errors, clarifying the Packaging Regulations where they are considered to be unclear, removing material that is no longer*

³ <http://www.defra.gov.uk/environment/waste/producer/packaging/strategy.htm>

⁴ <http://www.defra.gov.uk/corporate/consult/packaging-regs/consultation.pdf>

needed and ensuring that the Regulations are consistent in their treatment of both individual registrants and compliance schemes.

4. Risk assessment

4.1 *Previous changes to the Regulations have been to ensure the effective functioning of the Regulations and largely to ensure that the UK was on course to achieve the Directive targets in 2008.*

4.2 *Apart from the clear risk of infraction, not meeting the targets would tarnish the UK's reputation with EU partners, and would be misaligned with the ambitions of the Waste Strategy.*

4.3 *Transparency of revenue and funding has a significant impact on the ability of obligated producers to meet future targets. If the achievement of future targets requires any further investment, this may not be forthcoming, or be as targeted, unless key stakeholders can see more clearly how the funding arising from PRN/PERNs is used.*

5. Description of Options

The Baseline

5.1 *The proposals are compared to a baseline scenario of no change to the requirements in the Regulations. This is the "business as usual" scenario.*

Proposal 1: Optimising the effectiveness of the existing reporting system

5.2 *Reprocessors or exporters of packaging waste who wish to be accredited to issue PRNs/PERNs have to submit a business plan. If the relevant agency is not satisfied with the business plan they may refuse the accreditation. In order to make it easier to assess business plans, we propose to amend the Regulations to allow the agencies to require a business plan to be submitted in a set format, to include projections for PRN/PERN revenue, planned expenditure on each of the new reporting criteria and timescales for such expenditure.*

5.3 *It is a condition of accreditation that reprocessors and exporters must as far as possible implement the business plan. In order to make it easier to reconcile expenditure against the business plans, we propose that the categories that the business plan should include be changed to match the revenue report. Further, any unspent revenue should be shown to roll over into the following year's report. We propose an amendment to paragraph 1 (o) (ii) of Schedule 5 to include a requirement for the revenue report to include a written explanation of any deviation from the business plan.*

5.4 *Under the terms Regulation 24 (2) of the Packaging Regulations, the environment agencies may suspend the accreditation of exporters and reprocessors if these have not complied with PRN/PERN reporting requirements throughout the year. This enforcement approach only works if reprocessors and exporters re-accredit from one year to the next. In practice, some of the businesses will make a decision on the basis of market conditions at the time. A proportion of them will not seek re-accreditation at the start of the year, and therefore no meaningful action can be taken against them.*

5.5 *To address this, the introduction of a fixed penalty for non-reporting of expenditure under the Regulatory Enforcement Sanctions Act in England and Wales has been suggested, but it is not included in the proposed amending Regulations.*

Proposal 2: Revised categories for reporting PRN/PERN revenue expenditure

- 5.6 *As described in the consultation document, it is believed that better defined expenditure categories and better guidance are needed to capture better how revenue derived from the producer responsibility system is spent by reprocessors and exporters.*
- 5.7 *This would require changes to be made to the functionality of the National Packaging Waste Database (NPWD) and require greater detail from reprocessors/exporters when reporting.*
- 5.8 *The proposed new reporting categories are described fully in the consultation document (see Chapter 2).*

Proposal 3: Amend the Producer Responsibility (Packaging Waste) Regulation

- 5.9 *20 proposed “technical changes” to improve the way the Regulations work, including clarification of definitions, key dates for data returns and payment deadlines, and update of references to legislation revised since 2007. The following groups will be affected as follows:*

Packaging producers

- 5.10 *The Packaging Regulations define obligated producers as any business which handles more than 50 tonnes of packaging per annum, has a turnover of more than £2 million per annum, and is involved in one or more of the following activities:*
- *manufacturing raw materials for packaging (including reprocessing scrap metals);*
 - *converting raw materials into packaging;*
 - *filling packaging (i.e. putting goods or products into packaging);*
 - *selling packaged goods to the final user (which can be other businesses or the public).*
- 5.11 *There are currently 6,740 registered packaging producers in the UK. Table 1 details the costs and benefits of proposals which will impact on all producers.*

Compliance schemes

- 5.12 *The Regulations provide that producers may meet their obligations individually or, they may choose to join a compliance scheme that will meet the producer responsibility obligations on the producer’s behalf. There are currently 41 packaging compliance schemes operating in the UK*
- 5.13 *The costs and benefits of proposals which will affect compliance schemes and their members are in Table 2.*

Reprocessors/Exporters

- 5.14 *Regulation 2(1) provides a definition of a reprocessor. This is a business that “in the ordinary course of conduct of a trade, occupation or profession, carries out the activities of recovery or recycling”.*
- 5.15 *Regulation (2)1 defines an exporter as a “person who, in the ordinary course of conduct of a trade, occupation, or profession, owns and exports packaging waste for reprocessing outside the United Kingdom”.*

- 5.16 *Only reprocessors and exporters who have been accredited can issue PRNs and PERNs respectively for tonnages of packaging waste delivered for reprocessing, provided it is waste that arose in the UK waste stream. There are a total of 413 accredited reprocessors and exporters operating in the UK.*
- 5.17 *The costs and benefits of proposals which will affect reprocessors and exporters are in Table 3.*

Regulators

- 5.18 *The Environment Agencies (The Environment Agency, The Scottish Environment Protection Agency (SEPA) and the Northern Ireland Environment Agency NIEA) enforce these regulations. Their role includes ensuring that all companies who meet the two threshold criteria discussed above are registered and that all registered organisations are able to and do satisfy their obligations. The Environment Agencies also regulate and accredit reprocessors and exporters of packaging waste who apply to issue PRNs and PERNs. A number of the proposed changes impact on the Regulators only, as shown in the tables below.*

Minor changes

- 5.19 *Table 4 of the Impact Assessment details a number of minor updates and corrections which will have no impact on the working of the Regulations.*

6. Costs and Benefits

- 6.1 *This cost benefit analysis attempts to identify and quantify the range of social, environmental and economic impacts of increasing the recovery and recycling of packaging waste. No specific social impacts have been identified; however the environmental and economic impacts identified are discussed below.*

Proposal 1: Optimising the effectiveness of the existing reporting system

Benefits

- 6.2 *The proposal would allow producers, as well as Local Authorities, to have a much improved overview of where producer funding is flowing. This would allow better and more informed decisions to be made regarding future investment.*

Costs

- 6.3 *There are no anticipated additional costs to business associated with this option. The proposed amendment will have a small cost one-off cost on the public sector since it will require the National Packaging Waste Database (NPWD) to be amended. In present value terms this is estimated to be £29k.*

Proposal 2: Revised categories for reporting PRN/PERN revenue expenditure

Benefits

- 6.4 *The proposed categories would allow producers, as well as government, to have a much improved overview of where producer funding is flowing. Coupled with the proposal for the functionality for automatic reconciliation, it should give a better view of the extent to which various parts of the recycling chain are benefiting from producer funding.*
- 6.5 *It would facilitate greater accountability for the use of the funds at all levels in the packaging recycling chain. We expect that the increased visibility would make it more likely that producer funding would flow to activities which will build the capacity of the recycling system.*
- 6.6 *The information on PRN/PERN spend for individual reprocessors and exporters would not be published by the Agencies, but producers and compliance schemes could make its availability a*

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condition of their contract. For reprocessors and exporters, this could be a way of differentiating their PRN/PERN offer from the competition's.

Costs

6.7 *The additional reporting would increase administrative burdens on accredited reprocessors and exporters for the first year in which this proposal comes into operation, as they get used to the new categories. Consultation responses gave a figure of 2-3 days which we have used to extrapolate sectoral costs. Reprocessors and exporters could choose to pass down any financial costs accruing from the extra requirements to producers in whole or in part, in the form of slightly higher PRN/PERN prices. The proposed amendment will have an estimated £30,000 one-off cost on the public sector since it will require the National Packaging Waste Database (NPWD) to be amended.*

Proposal 3: Amend the Producer Responsibility (Packaging Waste) Regulation

6.8 *The following tables identify the potential costs and benefits of the amendments to the Regulation on each of the different parties involved; producers, compliance schemes and their members and reprocessors and exporters.*

Table 1: Amendments which will impact on all producers

Issue (nos refer to the consultation document)	Proposal	Cost of making the amendment	Benefit of making the amendment
<p>1. Packing/filling and conversion- at the same time. It is unclear whether a company which carries out a final process e.g. Blowing pre-form bottles attracts a convertor obligation.</p>	<p>To remove the wording at the “same time” from Paragraph 1(2) of Schedule 1 of the Regulations. This will give the relevant agencies greater discretion on what they define as a packer filler carrying out a final convertor operation and filling the packaging <i>as part of the same process</i>.</p>	<p>The proposed change is likely to be cost neutral, but will affect a few companies who are currently interpreting the Regulations differently to the policy intention.</p> <p>Some companies may pick up higher costs than under the present system, but there will be other groups who will have lower costs⁵.</p>	<p>The proposed amendment will allow the relevant agency to clarify, in guidance, who is responsible for the convertor obligations in cases where the final converting process takes place at the packer/filler stage</p>
<p>9. Accreditation Schemes, reprocessors and exporters are not required to inform the relevant agency when they are going into liquidation/receivership. This creates a risk that accredited companies experiencing financial difficulties could issue evidence for packaging which, by virtue of the fact that the company ceases to operate (due to financial circumstances), does not go on to be reprocessed.</p>	<p>To insert a new regulation that will require registered producers, schemes, exporters and reprocessors to inform the relevant agency when they are going into liquidation/receivership. The proposed amendment will enable the relevant agencies to monitor the compliance of an accredited company, experiencing financial difficulties, more closely. This will reduce the risk of accredited reprocessors and exporters issuing evidence for packaging which, by virtue of the fact that the company ceases to operate (due to financial circumstances), does not go on to be reprocessed.</p>	<p>The proposed amendment will put a small cost on those companies going into liquidation to inform the relevant agency of their situation. Although hard to forecast, this would only have affected 6 reprocessors and exporters in 2008 and 4 in 2009.</p>	<p>The proposed amendment will enable the relevant agencies to monitor the compliance of an accredited company, experiencing financial difficulties, more closely. This will reduce the risk of accredited reprocessors and exporters issuing evidence for packaging which, by virtue of the</p>

⁵ An example in respect of the blowing of pre-form bottles and the filling of them with a beverage: On a strict interpretation of the Regulations the packerfiller would pick up both the converting and the packfilling obligations. This is because they both inflate the bottle (the final converting activity) and fill it with the beverage (the packing/filling activity). The proposed change will enable us to ensure that the company *before* this stage picks up the converting obligation i.e. the pre-form bottle converter. So this change will lead to increased costs for the pre-form bottle converter as they will pick up the converting obligation but decreased costs for the company filling the bottles with a beverage as they will only pick up the pack filling obligation.

			<p>fact that the company ceases to operate (due to financial circumstances), does not go on to be reprocessed.</p> <p>The amendment will also provide a saving to the relevant agencies in reducing the time taken to carry out their administrative duties, expected to be around £16.56 per company.</p>
<p>5. Small Producers access to allocation method Regulation 2 (2) defines a small producer as a producer who satisfies the threshold tests in schedule 1 paragraph 3 but whose turnover is £5,000,000 or less.</p> <p>Schedule 1 para 3 reads “satisfies threshold if turnover....was more than £2,000,000.”</p> <p>This means small companies who are a subsidiary of a larger company can only follow the allocation method if their turnover is between £2 - £5m but not below £2m</p>	<p>To amend the definition of a small producer so that subsidiary companies with a turnover below £2,000,000 can follow the allocation method to satisfy their obligation. The allocation method is a method by which producers of packaging, with a turnover between £2m and £5m, can have an obligation allocated to them based on their turnover and not taking into account the amount of packaging they have handled in a year. By extending this to subsidiary companies, they too can have an obligation allocated to them based on turnover and without the need to keep data relating to the packaging they handle.</p>	<p>There is no cost to this amendment.</p>	<p>The proposed change is expected to save businesses an estimated £76,606 - £117,500 .The proposed amendment is expected to benefit over 257 companies.</p>
<p>7. Small producers SIC information Small producers who are a member of a compliance scheme currently have to provide SIC</p>	<p>To require all small producers to provide SIC information, irrespective of the method of registration. This will ensure equitable treatment of producers and assist the relevant agencies in enforcing the Regulations in an efficient way.</p>	<p>The proposed amendment will put a very small cost on individual registrants to provide the relevant</p>	<p>The proposed amendment will provide a saving to the relevant agency by allowing them to target their</p>

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information whereas individual registrants do not.		agency with the SIC information.	enforcement activities more effectively.
<p>19. Payment deadline issues Regulation 7(4) (e) states that applications should be accompanied by the relevant fee. All applications are now sent via NPWD. As such the wording in the Regulations is mis-leading in the sense that the application fee cannot physically accompany the application.</p>	<p>To amend regulation 7(4) (e) to make it clear that the application fee must be received by a specific deadline date. This will reduce the likelihood of applicants missing the deadline and so reduce the administrative burden on both applicants and the relevant agency in pursuing a disputed payment.</p>	<p>There are no costs associated with the proposed amendment.</p>	<p>This will reduce the administrative burden on the relevant agencies by providing a clear deadline for payment of the registration fee. This clear deadline will reduce the likelihood of legal opinion being required in the case of a dispute, though this is rare – occurring only 6 times in 2008 at a cost of around £2,880.</p>
<p>2. Off shore issue - To clarify that packaging which becomes waste on marine structures is counted as part of the obligation of the company who send it to the structures</p>	<p>The current definition of “packaging waste” - specifically excludes packaging that becomes waste outside the United Kingdom. This has created some confusion with regard to marine structures e.g. oil and gas rigs and whether packaging which is transported to these structures is classed as exported and so does not attract an obligation.</p> <p>This material should attract an obligation as it is brought back into the UK for disposal.</p>	<p>There over 300 oil and gas platforms in operation on the UK continental shelf. These generate an estimated 15,585 tonnes of general waste and segregated recyclables, a proportion of which will be packaging waste. This proportion will form part of the producers obligation and so will increase their costs. Assuming that 5%⁶ of this waste constitutes packaging and assuming a sorting and collection cost of around</p>	<p>This material is brought back into the UK for disposal and so should attract an obligation. The costs of recovery and recycling are currently being borne by other parts of the packaging chain. The change in the Regulation will be in accordance with the ‘polluter pays’ principle and promote economic efficiency whereby the producer imposing costs on society must pay to reduce those economic costs.</p>

⁶ The 5% estimate is based on general waste arisings – we have a higher figure for the proportion of household waste which is packaging but brought this estimate down to account for the significant proportion of waste generated on these structures which is likely to be commercial and industrial waste. The 5% figure is what we consulted on and was sent to the Oil and Gas UK the main trade association for the industry.

		£90 per tonne, the additional costs will be £42,080.	In addition, the value of the material will be recovered and the costs of disposal of waste to landfill of around £52 per tonne, i.e. £24,313 in total –will be saved excluding landfill tax. There would also be GHG savings from avoided landfill disposal.
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Table 2: Changes which will impact on compliance schemes and their members

Issue (nos refer to the consultation document)	Proposal	Cost of making the amendment	Benefit of making the amendment
<p>21. Scheme Registrants Compliance schemes must apply for registration by the 7th April and are encouraged to enclose the necessary information for registration including number of members, statement of turnover etc by the 7th April. However if the information does not accompany the application then it can be submitted by the 15th April. This often creates double handling by the relevant agency of the same information.</p>	<p>To remove the 7th April deadline in Regulation 14 “Application for registration of a scheme” para (1). This is the deadline by which compliance schemes must provide initial information. Instead there will be a single date of the 15th April for schemes to submit all information for registration.</p>	<p>There are no costs associated with the proposed amendment</p>	<p>The proposed amendment will reduce ‘double handling’ of the same application by the relevant agencies as they will only need to scrutinise the application once, leading to reduced application processing time and saving them money.</p>
<p>6. Class of Producer Compliance schemes are not currently required to notify the relevant agency of what class of producer (packer filler, converter etc) they have in their membership whereas individual registrants must</p>	<p>To amend the Regulations to require compliance schemes to notify the Environment Agencies of what class of producers they have within their membership. This will ensure equitable treatment of producers and assist the relevant agencies in enforcing the Regulations in an efficient way.</p>	<p>The proposed amendment will put a minimal cost on compliance schemes, and hence their members, to collate information they are</p>	<p>The proposed amendment will provide a saving to the relevant agencies in carrying out their enforcement activities.</p>

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inform the relevant agency of what class of producer they are.		collecting anyway and forward it to the agencies.	
8. Approved Persons Compliance schemes are not required to ensure submissions, SoCs, applications for registration and data resubmissions are signed by an approved person whereas individual registrants SoCs and application forms must be signed by an approved person.	To amend the provisions on approved persons to require data submitted by compliance schemes to be submitted by approved persons. This will ensure equitable treatment of producers and assist the relevant agencies in enforcing the Regulations in an efficient way.	Any additional cost to compliance schemes is likely to be negligible.	The proposed amendment will provide a saving to the relevant agencies in carrying out their enforcement activities.
10. Scheme Approval The Regulations do not currently specify an expiry date for letters of approval from Defra. If a scheme chooses not to register in the year in which it is approved or up until 7th April the year following such approval, the information provided at the time of application becomes outdated, and so it is difficult to have confidence that the scheme will meet its obligations	To specify that a scheme that obtains approval in a year but chooses not to register in that year will need to re-apply for approval. Any break in registration will also require re-approval. This change will help to strengthen confidence that all compliance schemes will meet their obligations.	The proposed change will impose no new burden on new compliance schemes who apply for registration in the year in which they receive approval, as this is the current situation.	The change will clarify the Regulations and provide assurance for the relevant agencies when registering schemes.
17. Evidence of Approval Compliance schemes have to provide evidence of approval from the appropriate authority on an annual basis	To remove the requirement that compliance schemes must provide evidence of approval from the appropriate authority on an annual basis. Instead compliance schemes will be required to provide evidence of approval if they are a new applicant or if there has been a break in annual registration. This will reduce the administrative burden on compliance schemes	There are no costs associated with the proposed amendment	This is an administrative change that will provide a nominal reduction in the administrative burden placed on compliance schemes.
23. Definition of scheme member There is currently no clarity as to when a producer is classified as a member of a compliance scheme.	To clarify in the Regulations that a producer is a scheme member once it has provided: <ul style="list-style-type: none"> • Corporate information • Packaging data 	This should have no cost impact on producers or compliance schemes.	The proposed change should provide clarity regarding the legal status of both producers and schemes,

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<p>In some cases, producers have failed to provide data/fee but have claimed to be a scheme member which causes the agency problems with prosecution.</p>	<ul style="list-style-type: none"> • Fee 		
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Table 3: Changes that will impact on reprocessors and exporters

Issue (nos refer to the consultation document)	Proposal	Cost of making the amendment	Benefit of making the amendment
<p>4. Part Cs Exporters of packaging waste who wish to export to reprocessors, other than those identified in their initial application, must submit a Part C form to the relevant agency with details of the new reprocessor.</p> <p>Currently exporters can submit an unlimited number of Part C's as part of the same application and pay a single fee of £110.</p> <p>The £110 fee does not cover the relevant agencies costs of processing multiple Part C's submitted as part of the same application.</p> <p>The Part C form includes essential information on the destination reprocessor. The relevant Agency must process these forms checking the data provided and confirming all relevant details</p>	<p>To amend the Regulations so that applicants must pay a fee of £85 for each application which covers administration and assessment of one Part C form, then £35 for each additional Part C form submitted as part of that application. This fee structure will more closely reflect the man-hours expended by the relevant agencies in the processing of these applications</p> <p>In 2009 a total of 3,255 Part C's were submitted.</p> <p>Of this a total of 1,089 were additional Part C's submitted as part of 197 applications during the year. This amounts to a £21,670 (197 batches x £110)</p> <p>The new system proposes that for the first additional part C (the single form) will be charged at £85, with all additional forms in the batch charged at £35.</p> <p>This would mean in 2009, the costs would be 197 x £85= £16,745 plus 892 (additional forms 1089 – 197) x £35 = £31,220.</p> <p>Total cost of £16,745 + £31,220 = £47, 965</p> <p>Therefore, the additional costs to business of this change would be £26,295 (£47,965 – £21,670).</p> <p>However, these fees need to set against the revenue derived from export of packaging waste materials to the accredited sites. In 2008, around 2.6m tonnes of material was exported generating around £28m in PERN revenue.</p>	<p>The proposed amendment will cost UK exporters accredited under the Regulations an estimated £26,295 per annum</p>	<p>The cost of processing these forms is currently being born by the relevant agencies</p>

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<p>3. Independent Audit Reports The requirement on accredited reprocessors and exporters, who issue evidence for in excess of 400t of reprocessing, to provide an independent audit report is an unnecessary administrative burden.</p>	<p>To remove this requirement from the Regulations</p>	<p>There are no costs associated with the proposed amendment</p>	<p>A total of 143 reprocessors and exporters were required to provide independent audit reports in the 2008 compliance year. Following feedback from consultation respondents, it is estimated that these reports cost between £1,500 and £10,000 each to prepare. As such the proposed change will save UK businesses between 310,000 and £332,276 per year.</p>
<p>11. Reprocessor/ Exporter Change of Status Regulation 24(6) specifies that a reprocessor or exporter who exceed their undertaking to issue 400 tonnes or less of PRNs or PERNS in a compliance year is liable from the date of that breach to pay the relevant Agency an additional fee. However the Regulations do not specify a deadline by which this payment must be made to the relevant Agency.</p>	<p>To introduce a 28 day deadline from the breach for when a reprocessor or exporter who has breached the undertaking in relation to the tonnage of evidence that they intend to issue has to pay the relevant Agency the additional fee by</p>	<p>There are no costs associated with the proposed amendment</p>	<p>The proposed amendment will benefit both reprocessors/exporters and the relevant agencies by providing a clear deadline for payment of the fee.</p>
<p>18. Reprocessor Exporter Returns In Schedule 5 Conditions of Accreditation (g) the date specified for the submission of surplus PRNs is the 15 February, whilst quarter returns and end of year reports are due on the 28th</p>	<p>To change the date for submission of surplus PRNs to the 28th Feb. This will mean that quarter returns, submission of surplus PRNs and end of year reports are all due on the same date.</p>	<p>There are no costs associated with the proposed amendment</p>	<p>The proposed amendment will benefit reprocessors, exporters and the relevant agencies by providing a clear, single deadline in February for the</p>

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February.			submission of all data.
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Table 4. Updates, corrections and minor changes (There are no costs associated with any of the below proposals)

Issue (nos refer to the consultation document)	Proposal
12. The Companies Act - The Companies Act 1985 and 1989 have been superseded by the Companies Act 2006	To change all references to the Companies Act to refer to the Companies Act 2006
13. Definition of SIC- The definition of SIC code in Regulation 2(2) is now out date	To amend the definition of SIC code to reflect the definition in the UK Standard Industrial Classification of Economic Activities published Jan 1 st 2008
14. Scheme Monitoring Plans There is an incorrect reference in paragraph 12 h of schedule 3 to obligations in regulation15(f)	To replace reference to regulation 15(f) in paragraph 12(h) of schedule 3 with a reference to regulation 12(1)
15. PRN/PERN books - There are still references to and activities associated with PRN/PERN books in the Regulations. These are no longer relevant as all evidence is now issued electronically.	To remove all references and activities associated with PRN/PERN books as all PRNs and PERNs are issued electronically through the National Packaging Waste Database (NPWD)
16. Deadline for obligation data The relevant Agency is required to provide Defra with data on the size of the UK obligation by the 31 st January The data can never be ready for this date. This is because the deadline for submission of certificates and schedules of compliance from producers and schemes, which contain the necessary data to compile this information is also due by this date of 31 st January.	To change the 31 st January deadline to the 28 th February. This will provide the relevant agencies with an achievable deadline.
20. Public Register Updates Regulation 33 Public Register, para 4 currently requires the relevant agency to note the date on which any amendment to the information in the Public Register is made. This is quite onerous on the agencies since it requires that even the change of an exporter's address needs to show the date it was changed	To remove the requirement on the relevant Agency to include the date of every amendment to the public register. This will reduce the administrative burden on the relevant agencies.
22. Operational Plans Action to be taken for non-receipt of a revised operational plan is different for Direct Registrants compared to Schemes. For compliance schemes, if an operational plan has not been received, the relevant agency is required to register the scheme, then cancel their registration for not complying with the conditions of registration under Regulation 15(g).	To change the Regulations so that the same procedure is followed for direct registrants as for compliance schemes. This will mean that where a compliance schemes fails to submit an operational plan or revised operational plan their registration can be refused. This will ensure equitable treatment of producers and assist the relevant agencies in enforcing the Regulations in an efficient way. It will have no impact on compliance schemes or producers.

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Summary of all Costs and Benefits in present values terms over 10 year period

All Proposals			No. Of busin esses affect ed	Unit cost/ben efit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Transparency															
Benefit		Transparency benefits - better and more informed decisions to be made regarding future investment													
Cost	Revised categories for reporting PRN/PERN revenue expenditure	This will incur a one off estimated cost on the public sector as the NPWD will need to be amended.	1	-£30,000	-£28,986										
		Admin burdens savings of (£8.28 *36hrs) £298.08 * 257 = £76,606 to (£12.70 * 36hrs) = £457.20 *257 £117,500	257	High-£8.28	-£66,080										
				Low-£12.70	-£101,355										
Packaging/filling and conversion – at the same time															
Benefit	To remove the wording at the “same time” from Paragraph 1(2) of Schedule 1 of the Regulations.	Allow the relevant agency to clarify who is responsible for the convertor obligations where the final converting process takes place at the packer/filler stage													

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Cost		Cost neutral, but will affect a few companies who are currently interpreting the Regulations differently													
Accreditation:															
Benefit	To insert a new regulation that will require registered producers, schemes, exporters and reproducers to inform the relevant agency when they are going into liquidation/receiver ship.	The amendment will also provide a saving to the relevant agencies in reducing the time taken to carry out their administrative duties	5	£16.56	£107,840	£104,193	£100,670	£97,266	£93,976	£90,798	£87,728	£84,761	£81,895	£79,126	
Costs		Put a small cost on those companies going into liquidation to inform the relevant agency of their situation.													
Small Producers access to allocation method															
Benefit	To amend the definition of a small producer so that subsidiary companies with a turnover below £2,000,000 can follow the allocation method to satisfy their obligation.	This will reduce the administrative burden on small businesses that are part of a subsidiary company as they will not have to keep data relating to the packaging they handle.	257	(£8.28* 36hrs)	£74,016	£71,513	£69,095	£66,758	£64,501	£62,319	£60,212	£58,176	£56,209	£54,308	
				(£12.70* 36hrs)	£113,527	£109,688	£105,979	£102,395	£98,932	£95,587	£92,354	£89,231	£86,214	£83,298	
Cost		No cost to the amendment													
Small Producers SIC information															

[Type text]

Benefit	To amend the definition of a small producer so that subsidiary companies with a turnover below £2,000,000 can follow the allocation method to satisfy their obligation	Very small cost on individual registrants to provide the relevant agency with the SIC information												
Cost		saving to the relevant agency by allowing them to target their enforcement activities more effectively												

Payment deadline issues

Benefit	To amend regulation 7(4) (e) to make it clear that the application fee must be received by a specific deadline date.	Reduce the likelihood of legal opinion being required in the case of a dispute	5	£480	£2,319	£2,240	£2,165	£2,091	£2,021	£1,952	£1,886	£1,823	£1,761	£1,701
Cost		There is no cost to the amendment												

Off shore

Benefit	To clarify that packaging which becomes waste on marine structures	The value of the material will be recovered and the costs of disposal of waste to landfill of around £52 per tonne will be saved.	468	£52	£23,490	£22,696	£21,929	£21,187	£20,471	£19,778	£19,109	£18,463	£17,839	£17,236
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[Type text]

Benefit	is counted as part of the obligation of the company who send it to the structures	Environmental GHG savings from not sending to landfill			£14,228	£13,861	£13,454	£13,413	£13,045	£12,990	£12,533	£12,184	£12,120	£11,778
Cost		The proportion of waste will form part of the producers' obligation and so will increase 300 oil and gas platforms costs.	468	-£90	-£40,657	-£39,282	-£37,953	-£36,670	-£35,430	-£34,232	-£33,074	-£31,956	-£30,875	-£29,831

Scheme Registrants

Benefit	To require schemes to give the relevant agencies details of the class of producers (packerfiller, convertor etc) in their scheme.	Reduce 'double handling' of the same application by the relevant agencies - reduced application processing time and saving money												
Cost		There are no costs associated with the proposed amendment												

Class of Producer

Benefit	To amend the Regulations to require compliance schemes to notify the Environment Agencies of what class of producers they have within their membership.	Saving to the relevant agencies in carrying out their enforcement activities												
Cost		Minimal cost on compliance schemes, and their members, to collate information they are collecting												

[Type text]

		anyway and forward it to the agencies.												
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Approved Persons

Benefit	To amend the provisions on approved persons to require data submitted by compliance schemes to be submitted by approved persons.	Saving to the relevant agencies in carrying out their enforcement activities												
Cost		Any additional cost to compliance schemes is likely to be negligible.												

Scheme Approval

Benefit	To specify that a scheme that obtains approval in a year but chooses not to register in that year will need to re-apply for approval.	Clarify the Regulations and provide assurance for the relevant agencies when registering schemes.												
Cost		Impose no new burden on new compliance schemes who apply for registration												

Evidence of Approval

Benefit	To remove the requirement that compliance schemes must provide evidence of approval from the appropriate	Administrative change that will provide a nominal reduction in the administrative burden placed on compliance scheme												
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[Type text]

Cost	authority on an annual basis.	There are no costs associated with the proposed amendment												
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Definition of Scheme member

Benefit	To clarify in the Regulations that a producer is a scheme member once it has provided, corporate information, packaging data and the fee.	Provide clarity regarding the legal status of both producers and schemes,												
Cost		No cost impact on producers or compliance schemes.												

Part Cs

Benefit	To amend the Regulations so that applicants must pay a fee of £85 for each application which covers administration and assessment of one Part C form, then £35 for each additional Part C form submitted as part of that application.	Cost of processing these forms is currently being born by the relevant agencies												
Cost		Exporters of packaging waste who export to reproprocessors, other than those identified in their initial application, must submit a Part C form to the relevant agency with details of the new reproprocessor. TRANSFER COST therefore not included in NPV		-£26,295	-£25,406	-£24,547	-£23,717	-£22,915	-£22,140	-£21,391	-£20,668	-£19,969	-£19,293	-£18,641

Independent Audit Reports

[Type text]

Benefit	To remove the requirement from the Regulations to provide independent audit reports	A total of 143 reprocessors and exporters were required to provide independent audit reports	143	£1,500	£300,616	£290,451	£280,629	£271,139	£261,970	£253,111	£244,552	£236,282	£228,292	£220,572
Cost	To provide independent audit reports	There are no costs associated with the proposed amendment												

Reprocessor/Exporter Change of Status

Benefit	To provide a single deadline of the 28 th February for reprocessors/exporters to provide submissions to the relevant agency	Providing a clear deadline for payment of the fee												
Cost	To provide independent audit reports	There are no costs associated with the proposed amendment												

Reprocessor/Exporter Returns

Benefit	To change the date for submission of surplus PRNs to the 28 th Feb.	Providing a clear, single deadline in February for the submission of all data												
Cost	To provide independent audit reports	There are no costs associated with the proposed amendment												

Total				Low	£360,282	£440,063	£425,244	£411,278	£397,455	£384,401	£371,384	£358,900	£347,111	£335,441
				High	£386,041	£499,033	£482,219	£466,327	£450,643	£435,790	£421,035	£406,872	£393,461	£380,224

[Type text]

7 Equity and Fairness

- 7.1 *The proposed changes have no undue effect on rural areas, racial groups, income groups, gender groups, age groups, people with disabilities, or people with particular religious views.*

8. Consultation with small businesses: the small firms impact test

- 8.1 *Businesses that do not simultaneously satisfy the two threshold tests in the Regulations (i.e. an annual turnover in excess of £2m and handle more than 50t of packaging) are excluded from the producer responsibility obligations in the Regulations. The proposed changes do not affect small businesses below these thresholds.*

9. Competition assessment

- 9.1 *The proposed changes will affect approximately 6,500 businesses in the UK. The Government does not expect the proposals to affect the current market structure or change the number or size of firms. New businesses will not face higher charges than existing companies and the proposals should not restrict businesses choice of products. The Government is not aware of the industry being characterised by technological change that would radically alter the state of the market.*
- 9.2 *The Government have examined competition in the recycling market, material specific market (e.g. glass and plastic) and the end user market (e.g. the market for bottles). In general, the Government has been unable to identify markets where there are serious competition concerns. Competition in the recycling market is unlikely to be adversely affected as a result of adopting any of the proposed options and related targets. Indeed, the setting of future targets for recycling of particular materials may well increase demand for recycling and this could lead to new entry in the market and increase competition in recycling services.*
- 9.3 *It is anticipated that the increased cost of this regulation will be small in relation to a manufacturers total costs. Therefore, the Government does not believe that competition will be significantly affected in either this or other sectors with potentially high or differing recycling rates e.g. the aluminium and steel markets.*

10. Enforcement and Sanctions

- 10.1 *The Packaging Regulations are enforced by the Environment Agency in England and Wales, by the Scottish Environmental Protection Agency in Scotland and by the Northern Ireland Environment Agency.*
- 10.2 *The proposed changes to the targets and this Impact Assessment do not include proposals for additional sanctions.*

11. Monitoring and Review

- 11.1 *The UK packaging system is monitored continually by Government, the Agencies, the Advisory Committee on Packaging and industry generally.*
- 11.2 *The Advisory Committee on Packaging, which represents the packaging industry, also monitors the effectiveness of the Packaging Regulations and advises Government as and when changes are needed. The Government expects the Committee to continue to provide input in the future.*
- 11.3 *Accredited reprocessors and exporters are required to provide quarterly returns to the Agencies, which include data on the amount of reprocessing that has taken place that quarter. This enables the Government to track progress throughout the year against packaging targets. This data is also published on the Environment Agency website so that industry too can monitor the UK's performance.*
- 11.4 *Each year, the Department produces a Data Note which shows current and historical packaging data including for instance the amount of reprocessing that has taken place each year and the corresponding information on PRN and PERN revenue.*
- 11.5 *Furthermore, the UK is required to provide the European Commission with data, 18 months after the end of each year obligation year.*

12. Consultation

Within Government

- 12.1 The Department for Business, Innovation and Skills (BIS), Treasury, Cabinet Office, Scottish Government, Welsh Assembly Government, Department of Environment Northern Ireland, Environment Agency, Northern Ireland Environment Agency (NIEA), Scottish Environmental Protection Agency (SEPA).

Public Consultation

- 12.2 A public consultation was held between 4 March and 27 May 2010. The 96 responses received have been reflected in this revised Impact Assessment.
- 12.3 Informal consultation with the ACP, key materials organisation and trade bodies, other government departments and regulators took place in developing a number of the proposals contained within this Impact Assessment and consultation document.

Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added to provide further information about non-monetary costs and benefits from Specific Impact Tests, if relevant to an overall understanding of policy options.

Annex 1: Post Implementation Review (PIR) Plan

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

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

Add annexes here.

[Type text]