## Annexes to the Environment Bill Impact Assessment

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Background

Environmental governance is important to ensure that environmental law is being implemented and abided by and that the long-term goal of environmental improvement is being delivered, for example through the implementation of the 25 Year Environment Plan.

As a member of the European Union, the United Kingdom was subject to EU environmental governance arrangements. Now we have left the EU without the Environment Bill, the UK would not have in place a robust system of environment governance and would have reduced ability to meet the ambitions of the 25 Year Environment Plan.

The European Commission (EC) oversees Member States’ implementation of EU environmental law. The European Commission uses information in submissions and reports from Member States, its own assessments, and those of other EU bodies including the European Environment Agency (EEA). The EEA provides sound, independent information on the environment and is a major information source for those developing, adopting, implementing and evaluating environmental law and policy. The EEA’s information provision role includes producing and publishing independent assessments of progress in the implementation of the EU’s Environmental Action Programmes, which are the guiding frameworks for long-term EU environmental policy.

The EC also maintains a service through its website whereby individuals and organisations can lodge complaints, free of charge, about alleged breaches of EU law. The EC can take actions if it considers that EU law is not being properly implemented in a Member State. If necessary, it can refer the case to the CJEU (Court of Justice of the European Union). It can also ask the CJEU to order interim measures before judgment is given.

Problem under consideration and rationale for government intervention

After the end of the UK’s EU exit transition period, regardless of the nature of the future relationship negotiated, the UK will no longer be a party to the EU Treaties or under the direct jurisdiction of the CJEU. This provides an opportunity to replace the governance, information and advisory functions provided under the EU governance
regime with bespoke national arrangements designed to meet our specific needs and constitutional framework.

The Office for Environmental Protection (OEP) will provide independent assurance of government’s delivery of environmental law, its Environmental Improvement Plan and targets (the current EIP is the 25 Year Environment Plan). It will also provide impartial advice to support the development of improved measures for future application. The remit of the OEP is limited to public authorities, which is any legal or natural person carrying out a public function. The new body will bolster and complement our domestic governance framework, enabling the law to deliver its intended benefits. Further improvements are likely to include faster complaint response times and earlier correction of implementation matters that arise, due to the OEP’s creation as a national body. The establishment of the OEP will therefore help to ensure standards and environmental protection are upheld while:

- **Improving credibility, public engagement and accountability**
  The OEP will be viewed as a credible body able to effectively address complaints from the public relating to a failure of a public authority to comply with environmental law. It will also be able to monitor compliance of environmental law itself. Where deficiencies in delivery or enforcement are highlighted, the OEP will be able to open an investigation and use enforcement mechanisms where appropriate to ensure that environmental laws are complied with.

- **Considering long-term effects on the environment**
  Policy-making across government may be driven by short-term considerations without always taking sufficient account of long-term environmental effects and challenges and the opportunities that integrating the government’s environmental ambition will provide. This approach may lead to suboptimal decision-making over the long term (e.g. delaying action may result in higher costs into the future) as well as lowering the level of environmental ambition. By providing scrutiny and advice on environmental law and the Environmental Improvement Plan and targets over the long term, the OEP will be able to act as an independent adviser that is empowered to take the long-term perspective.

In addition, the OEP will improve information dissemination related to the environment by producing an annual progress report on the current Environmental Improvement Plan and targets taking into account new and emerging information, while providing recommendations to improve implementation as necessary.

The OEP will also provide advice to government regarding any changes to environmental law or on any environmental matter if requested by a minister. This advice will be based on the latest evidence and findings from internal and external sources. This advice will be intended to help address the market failures related to the environment.
Policy objectives and the intended effects

The policy objective is to establish effective domestic arrangements for environmental governance in order to support the development and implementation of the government’s environmental ambitions, once the current EU processes no longer apply.

The proposal is intended to lead to a more credible and complete implementation of environmental legislation, so that these laws can deliver their intended short-term and long-term benefits. The OEP is intended to provide independent assurance of government’s implementation of environmental law and its Environmental Improvement Plans and targets, and to provide impartial advice to support the development of improved measures for future application.

The OEP will also allow citizens to make complaints regarding alleged failures by public authorities to comply with environmental law. This process will increase confidence in the steps taken to protect and enhance the environment and improve citizens’ participation in achieving these objectives.

The duty for policy-makers to have due regard to the policy statement on environmental principles will fall within the definition of environmental law. The OEP will therefore be able to investigate and, if necessary, enforce the implementation of this duty in the same way as any other piece of environmental law.

Details of each function and its benefits are outlined below:

1. **A scrutiny and advisory function.** The scrutiny function will cover both the implementation of environmental law and the Environmental Improvement Plan and targets. It will provide government with independent information outlining areas where they are making good progress on environmental issues and highlight where focus could be concentrated in the future. This information should bolster public confidence and industry certainty that the government will deliver on its commitments. The advisory function will cover proposed changes to environmental law, as well as other matters relating to the natural environment when requested by government. This function will allow for constructive solutions and dialogue with government to occur rather than only having the potentially more adversarial options of investigating complaints or taking enforcement action against government in cases of alleged failure to implement the law.

2. **A complaints function** will provide for any organisation or member of the public (other than another public authority) to be able to submit a complaint to the OEP if they believe government or a public authority has failed to comply with environmental law. This function will create a clear, single forum for the receipt of complaints about the implementation of environmental law by these bodies. This function would allow individuals to express their concerns,
supporting democracy, transparency and citizen engagement on environmental issues, and leading to greater oversight of the implementation of environmental legislation. The OEP would investigate the most serious of these complaints and seek to resolve compliance issues by agreement with the public authority concerned.

3. **An enforcement function**, enabling the OEP to take steps to seek to bring about compliance where necessary. This function will provide environmental oversight by establishing a bespoke, national framework, developed to meet particular needs. It will operate once the functions of the EC and CJEU, who currently provide oversight and enforcement of the implementation of EU environmental law, no longer apply. Furthermore, an enforcement function will allow for failings by government and other public authorities (for example arm’s-length bodies and local authorities) to apply environmental law appropriately, ensuring that the legislation has the effect, and delivers the benefits, intended. This function is designed not only to provide an incentive for government and public authorities to implement the law properly and fully, but also to allow for the courts to clarify the law where necessary as a result of the OEP initiating legal proceedings in a proportionate manner, reducing ambiguities and uncertainties in its interpretation and application.

These functions are expected to lead to a reduction in the number and costs of third-party environmental judicial reviews, as citizens will be able to bring cases to the OEP, which will have powers to carry out investigation and enforcement action prior to legal proceedings. Through the OEP’s complaints and scrutiny functions, breaches of environmental law would be flagged. Through its enforcement function, the OEP would initially serve advisory notices based on these breaches. This arrangement will mean that public authorities will have the opportunity to take corrective action before litigation is required. Moreover, having an independent statutory body charged with overseeing the delivery of environmental law by government and public authorities, and providing a focal point for the receipt of complaints, means that it is likely that other organisations will feel it is not necessary to bring their own legal proceedings. As a result, the overall number of environmental judicial reviews is expected to be lower than in the counterfactual (do nothing) scenario, where there is no other alternative for third parties than to bring their own legal challenges.

The UK Government already has independent bodies similar to that proposed, for example the Equality and Human Rights Commission (EHRC) and the Committee on Climate Change (CCC). These two institutions provide scrutiny and advisory functions like those proposed in our intervention, while the EHRC may also take enforcement action. For example, the OEP’s power to propose improvements to government on existing environmental law is comparable to the EHRC’s powers related to equality and human rights law. The EHRC has the power to challenge,
protect and promote human rights by holding government to account, while the CCC provides reports to Parliament and advice to government on meeting its climate requirements and ambitions as laid out by the Climate Change Act 2008.

Policy options considered, including an alternative to regulation

Description of policy options considered

Defra has considered a wide range of options for establishing effective domestic environmental governance arrangements for the UK leaving the EU. A range of proposals has been explored and is outlined below:

1. Do nothing – under a ‘do nothing’ option, environmental governance would be provided through existing domestic functions. The scope of these functions would not change from today, and there would be no equivalent domestic governance mechanism to replace and improve upon all the existing EU functions. This would leave a significant gap in environmental governance at the end of the UK’s EU exit transition period.

2. New functions in existing bodies – Functions would be integrated into existing bodies where scope best align in order to scrutinise the 25 Year Environment Plan, targets and environmental law. For example, the Environment Agency or another body could expand its advisory function to include scrutiny of environmental policy and regulation. The Parliamentary and Health Services Ombudsman and the Local Government and Social Care Ombudsmen could play greater roles with additional, specialist expertise to consider complaints about the implementation of environmental law by government and public authorities.

3. New functions in a new body, the independent Office for Environmental Protection – option three would create a new independent Office for Environmental Protection as a non-departmental public body that encompasses the enforcement, complaints, scrutiny and advice functions set out in the previous section.

4. New functions in a parliamentary accountable entity — this option would provide for functions to be delivered by creating a new parliamentary body which reports to a parliamentary committee such as the Environmental Audit Committee, or establishing a new local government/devolved administration public body. A parliamentary body, like the National Audit Office, is directly accountable to Parliament. Such a body’s funding is more independent from government as it is sourced directly from Parliament rather than through a sponsoring government department.
Appraisal of policy options

The wide range of options considered were appraised against their ability to provide objective and impartial scrutiny, advice, enforcement and complaints functions. The appraisal for each is outlined below:

1) **Do nothing**

Whilst government has the capabilities to measure whether or not it is complying with environmental law and meeting its objectives, only through a separate mechanism can such scrutiny be, and be seen to be, truly objective and authoritative. In addition to NGOs, the existing domestic mechanisms for scrutinising government policies include parliamentary committees, advisory committees, and the National Audit Office. However, none of these mechanisms has sufficient breadth and depth of coverage to fully scrutinise environmental law and policy in a focused and systematic way. The same applies to the other functions, and in particular enforcement. **Therefore, ‘do nothing’ is not a viable option because it does not fully provide objective and impartial scrutiny, advice, enforcement and complaints functions.**

2) **New functions in existing bodies**

There is no existing body that could reasonably be given the function and powers to take enforcement action, including legal proceedings, against government where needed. As existing delivery bodies, such as the Environment Agency, have a role in regulating to ensure compliance with environmental law, they would not be able to impartially assess complaints or initiate enforcement action against themselves. This role also means that, even if the other functions were allocated to other bodies that already exist, they could not be integrated within a single entity. It is important that all functions are joined up under one body due to their interdependencies. For example, the enforcement function is dependent in part on effective scrutiny to understand where government has breached environmental law. Similarly, the complaints function provides cases for both the scrutiny and enforcement functions to explore further and the scrutiny function offers an opportunity to provide constructive advice on opportunities for improvement, rather than just having the harder options of seeking remediation of problems through the complaints and enforcement mechanisms. **Therefore, this is not a viable option because, given that it would not provide the enforcement function, it would not capitalise on the benefits of having all functions integrated in one body.**

3) **New functions in a new body, the independent Office for Environmental Protection**
Integrating all the functions outlined above in a new arm’s-length body would provide sufficient scope and capacity to deliver the strategic objectives required. This option would be able to be achieved for the end of the implementation period, ensuring that a governance gap is avoided. **Therefore, providing the new functions in a new arm’s-length body is the viable and preferred option because it would join up all functions in one single and independent entity.**

4) **New functions in a parliamentary accountable entity**

While this option would provide for the integration of all functions, it would be inappropriate in constitutional terms and without precedent for the new body both to be an emanation of Parliament and to take enforcement action (e.g. initiate legal proceedings) against the Government. Additionally, as the body will be spending public funds, an emanation of Parliament would offer less accountability, transparency and oversight than an arm’s-length body of the Executive in ensuring the entity adheres to the financial standards set out in “Managing Public Money”. These standards include accountability to Parliament through the roles of the Treasury, the NAO and the Parliamentary Accounts Committee. **Therefore, providing the functions in a parliamentary accountable entity is not a viable option, due in part to the difficulties in providing the enforcement function.**

This section outlines how option 3, new functions in a new arm’s-length body, is the only viable option to deliver all the functions required with the necessary level of independence. This is therefore the preferred option. Specifically, for the new body to realise the highest possible benefits it should have the power to provide scrutiny, advisory, enforcement and complaints functions in relation to the implementation of environmental legislation and the 25 Year Environment Plan and targets. This power is necessary as the environment is a long-term challenge and so a long-term system for oversight is required. By delivering this oversight it will assist the realisation of the economic benefits associated with environmental law by ensuring correct government delivery of law as designed.

**Expected level of business and wider impacts**

The establishment of the OEP is not expected to have any direct impacts on business (including small businesses) or community/voluntary sector groups, as the OEP’s remit covers only government and other public authorities. The only exception to this would be businesses carrying out statutory functions on behalf of the government; while the OEP could investigate complaints about such statutory undertakers, those businesses would not be required to do anything more than fulfil their existing statutory duties.
The OEP’s advice on proposed environmental law could influence future regulations in a manner that would have indirect impacts on businesses which need to comply with the new regulations. The direct impacts of such regulatory changes will be taken into consideration through impact assessments as the legislation is developed.

The establishment of the OEP will entail public set-up and ongoing costs covered by grant-in-aid. For example, extra financial costs which include both staff and non-staff resources required to fulfil its statutory functions sufficiently.

**Brief assessment of wider impacts**

The OEP intends to bolster the UK’s domestic environmental governance arrangements in preparation for the end of the EU exit transition period, by providing environmental safeguards in the form of a national framework that aims to maintain the current level of environmental protection. This framework will provide the following wider benefits:

- Reassurance to citizens and businesses that government will deliver on its legal requirements on the environment and thus provide certainty for business and reassurance for citizens concerned about our environment. According to a poll carried out in August 2016 by YouGov for Friends of the Earth, 46% of people said that, after leaving the EU, Britain should increase (compared to current EU laws) the level of protection for wild areas and wildlife species through new legislation, while 37% stated that new legislation should keep the same level of protection as it is currently under the EU regime. Only 4% of people argued that new laws should lower protection.¹

- Increased trust and confidence in national environmental authorities.

- Ensure long-term considerations are built into a system of delivery and not driven by short-term considerations, as the environment is a long-term challenge.

- Ensure that net benefits of existing regulation are realised. Previous evidence indicated net benefits of DEFRA regulatory stock (not all of which is

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environmental regulation) to be around £7.5 billion per year\(^2\). Even if the OEP contribute to secure these benefits in only a small way, they could still be very significant.

- Provide for the wider long-term economic benefits of environmental law being delivered on the ground by ensuring correct government delivery as designed.

- It should also create a more level playing field by supporting the consistent application of environmental law. The pressure for third-party challenges against government’s implementation of the law is expected to reduce as a result.

Annex 2: Statement of impacts – Environmental Principles

Background

Environmental principles are important because they play an important role in the shaping of environmental policy. They offer protection to the natural world by offering a guide for policy-makers to follow. While there is no single agreed list or definition of environmental principles, a number of internationally recognised principles have been developed that help shape environmental policy around the world. Applying the environmental principles consistently, and with greater clarity, has the potential to increase the level of protection afforded to the environment - as well as improving the effectiveness of policy-making.

Environmental principles are currently found in EU law and act as a basis for all European Union (“EU”) environmental policy-making. They form a foundation for EU environmental law and shape how EU environmental legislation is developed. They are important to avoid potential shortcomings, or ‘market failures’, in relation to regulation and protection of the environment. However, now we have left the EU the requirements relating to the principles in the ‘Treaty on the Functioning of the European Union’ (TFEU) will cease to apply to the UK. Therefore, we are developing a domestic list of principles and an accompanying policy statement, to ensure the environment is a central consideration when government makes policy.

Problem under consideration and rationale for government intervention

At a national level, the UK does not currently have the environmental principles in one place or define their role in policy-making. Now we have left the EU, this may lead to reduced standards on environmental decision-making due to the removal of a clear and consistent foundation on which to base environmental legislation that the environmental principles provide. To rectify this problem we will include the principles in primary legislation and embed them in domestic policy-making.

The principles are already considered in policy-making. However, including them in primary legislation should ensure that they are applied more consistently and with greater clarity, which will help to improve the effectiveness of policy-making as well as helping to protect the environment.

As well as placing the environmental principles in legislation, we will also be issuing a policy statement to provide direction on the application of the principles and the process by which they should be used. The rationale for publishing this policy
statement is to give clarity to policy-makers on how they should consider and apply the environmental principles.

The environmental principles proposed are already established in sources other than the TFEU, including international commitments to which the UK is a part. For example, principles are set out in the Rio Declaration on Environment and Development 1992.³

Including a list of environmental principles within primary legislation, and publishing a corresponding policy statement, should provide the following:

- **Certainty**: A degree of certainty for policy-makers, stakeholders and the public as it ensures that this list of principles cannot easily be edited or removed.

- **Predictability**: That those who are subject to government interventions can use the principles as a reasonable prediction of government actions and act accordingly.

- **Transparency**: Having open debate on the environmental principles should help to inform and define these environmental principles.

- **Longevity**: Long-term regard to the environment in future policy-making.

- **Coordination**: Better alignment of future policy which may impact the environment.

- **Clarity**: A degree of clarity for policy-makers as well as for the public to understand the legal expectations in the development of policy.

- **Consistency**: The environmental principles currently set out in the Bill have been included in international treaties for many years. To maintain the same list of environmental principles ensures a consistent approach.

- **Protection of the environment**: Continuity of existing, long-standing environmental protections.

In addition, embedding the environmental principles in policy-making addresses key ‘market failures’ in relation to the environment. These ‘market failures’ demonstrate how the environment may be negatively impacted when it is not considered in policy-making.

making. The environmental principles provide a framework for this consideration. For example, the environmental principles will address the following:

- **The environment as an open access resource.** As an open access resource, the environment is not exclusive, it is open for anyone to use and is therefore susceptible to degradation and over-exploitation. Not everyone’s intentions for using the environment are the same, and one person’s actions could hinder another’s. This can lead to its over-exploitation as individuals don’t take account of the diminishing benefit others can receive as a result of their own consumption.

- **Positive externalities.** The natural environment delivers socio-economic value. Whenever anyone invests in the maintenance of the environment, the private benefit they receive is lower than the overall benefit provided by their actions. For example, whilst individuals maintaining forests recognise a direct benefit from breathing the air filtered by a forest or for recreational purposes, they cannot appropriate some of these benefits. When this occurs, there is a reduced incentive for an individual to invest in improvements or maintenance of environmental assets. This is particularly the case if they cannot prevent others from enjoying the benefits of their investment - as they are unable to recoup their costs.

- **Negative externalities.** Individuals’ activities which impact the environment can generate costs that they do not fully face. As these negative impacts or costs do not accrue for those benefiting from the activity, there is no reflection in prices and this then leads to levels of consumption or production which are not optimal for the environment. Environmental principles can help us ensure that external costs are more effectively reflected in users’ decision-making. For example, introducing the minimum five pence plastic carrier bag levy, as an approximate application of the polluter pays principle, has ensured that the negative impact of single-use plastics is considered by the user. This has incentivised shoppers to switch to re-useable bags, resulting in reduced litter and therefore greater protection of wildlife.

- **Information failure.** The environment is complex and it is difficult for individuals to make fully informed decisions or to effectively monitor aspects of the environment. This may lead to ineffective decision-making and may increase the risk of harmful practices. The environmental principles can support individuals in being more fully informed about the environment around them and help them make better decisions, as well as providing a framework for environmental policy-making. This is made easier by the accompanying environmental principles policy statement which will outline how the environmental principles are to be interpreted and applied. Additionally,
environmental principles can act as heuristics (mental shortcuts) to policy-makers who may not be in possession of all of the necessary facts to make decisions about the environment. They can do this by applying the environmental principles to allow them to make the best decision possible.

**Policy objectives and the intended effects**

The intended effect of the principles themselves is to ensure incentives are in place to improve environmental outcomes i.e. that government has greater regard to environmental consequences in policy-making. We will also include two broad aims on the face of the Bill, to be achieved by the principles policy statement. These are that the statement will, when it comes into effect, contribute to: sustainable development and improved environmental protection.

It is intended that the government will be required to have due regard to a statutory policy statement on the environmental principles in its policy-making. This should also offer clarity to decision-makers, NGOs, the public and the legal community on how policies are developed. The list of principles also gives clarity to the public of governmental priorities in terms of policy-making.

**Policy options considered, including an alternative to regulation**

In part one of this section we examine the different environmental principles. Then, in part two, we look at the different options considered for how to implement the principles.

**Part one - Options for the environmental principles**

In the way the environmental principles are defined, there are two main options for consideration:

1) To maintain the list of environmental principles as they currently stand. **This is the preferred option**;
2) To introduce a different list of environmental principles.

As many of the principles are derived from internationally agreed conventions, such as the Rio Declaration, and the EU Treaties, the preferred option is to include them in their current form as opposed to developing new principles. This is because these principles are widely recognised and are currently applied in both domestic and international circumstances. Furthermore, as these principles are already widely applied, there are policies and court decisions to support their implementation. If new principles were to be developed, this would not be the case.
The principles to be included in the Bill are:

1. **Integration principle**: The integration principle states that environmental protection requirements must be integrated into the making of policies. This principle is important because it requires an integrated approach across government towards environmental protection. An integrated approach is needed to address environmental externalities which occur across all policy areas.

2. **Prevention principle**: The prevention principle states that preventive action should be taken to avert environmental damage. This principle helps to avoid environmental damage and therefore helps to protect the environment. Importantly, it helps to avoid additional costs and complexities that would be caused if environmental damage were not avoided. As a common pool resource there is little incentive for individuals to rectify environmental damage given the benefit to do so is distributed across society. The personal loss of the environmental damage to the polluter is minimal, thus creating a ‘free-rider’ effect. This principle averts the need for the investment challenge after an incident. Likewise, the cost of preventing environmental damage may be lower than the cost of irreversible environmental damage or cleaning up environmental damage after it has occurred - it may be more economically efficient to prevent than repair.

3. **Precautionary principle as it relates to the environment**: The definition as set out in the Rio Declaration is: “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation”. It is important to include the precautionary principle because it underpins many international treaties and pieces of legislation. The precautionary principle is important in contributing to greater environmental protection as it encourages policy-makers to anticipate, prevent and mitigate the causes of environmental harm (e.g. in those circumstances where scientific information is limited).

4. **Rectification at source principle**: The rectification at source principle is the notion that environmental damage should as a priority be rectified by targeting its original cause and taking preventive action at source. This principle is important because it reinforces the responsibility for managing environmental damage to the source of environmental harm - therefore linking it to the polluter. This results in a more equitable outcome (those who

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create environmental damage take responsibility) and prevents an unnecessary burden on government to be responsible for addressing environmental damage.

5. **Polluter pays principle**: The definition as set out in the Rio Declaration is: “national authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution”\(^6\). The polluter pays principle needs to be included as it helps to manage the costs of damage to the environment by setting out a clear direction that the costs of pollution control and remediation should be borne by those causing the pollution as far as possible. Practically, this principle enables a financial obligation or responsibility to address harm by a party. This is key in internalising the negative externalities of pollution – making sure those causing harm account for the wider costs, and take account for them in their decision-making. This also links to the common pool resource rationale – effectively assigning a property right of a clean environment to the common pool and ensuring individuals who are responsible for the degradation of the environment should be held accountable to disincentivise harming what is not owned solely by the polluter.

Keeping the principles as defined above has many benefits. This is exemplified by the numerous instances where the environmental principles have added environmental benefit both internationally and domestically. For example:

- Instances of the ‘polluter pays principle’ can be seen from the plastic bag charge. This charge, introduced in 2015, requires businesses to charge consumers five pence for any single-use plastic carrier bags they use. The purpose of this charge is to reduce the use of single-use plastic carrier bags, and the litter they can cause, by encouraging people to reuse their bags and think carefully about disposal after use. Since the introduction of the charge, plastic bag use has gone down by more than 80 per cent, which means that more than nine billion fewer plastic bags have been used, whilst also generating millions of pounds in donations to good causes by retailers. This is an example of a very successful application of the polluter pays principle, in reducing negative externalities (i.e. a reduction in plastic bag marine litter) and correcting information failure (i.e.

influencing habits around reducing the consumption of other single-use plastics).

Part two - Options for implementation

For how to utilise these principles, there are three main options for consideration:

1) **Do nothing** – this option would not embed the environmental principles in domestic policy-making. The principles could still be considered by policy-makers but there would be no legal requirement to do so (with the exception of a very small proportion of environmental regulation where the principles are given direct legal effect).

The risk with this option is that policy-makers would have less clarity on the key considerations in environmental decision-making, which may lead to significant, and lasting, environmental harm (i.e. negative externalities associated with a depletion of common pool resources, exacerbated by continued information failure, which impedes investment in the natural environment).

2) **Include the environmental principles within the Environment Bill, with a statutory policy statement under the legislation, to explain how they should be interpreted and applied. This is the preferred option.**

   Under this option, the Environment Bill would include:
   i. a set of environmental principles;
   ii. a requirement on the government to publish a policy statement explaining how specific environmental principles should be interpreted and proportionately applied;
   iii. a requirement for government to have due regard to the statutory policy statement on environmental principles in their policy-making.

3) In this option, the Environment Bill would include a requirement on government to have due regard to the policy statement and the policy statement would list the environmental principles. Unlike Option 2, the Environment Bill would not mandate the environmental principles to be covered by the policy statement.

   Under this option, the Environment Bill would include:
   i. a requirement on government to publish a policy statement explaining how environmental principles (as set out in the policy statement) should be interpreted and proportionately applied;
ii. a requirement for government to have due regard to the statutory policy statement on environmental principles in developing their policies; and

iii. a requirement for government to have due regard to the statutory policy statement on environmental principles in their policy-making.

The government will be taking forward option two. This has benefits over the other two options as it means that environmental principles are fixed in legislation. This option is broadly supported by stakeholders. It means that the government would have to go through significant scrutiny to change the environmental principles to be covered by the policy statement, meaning they become stable. This therefore offers more clarity to policy-makers, legal professionals and NGOs on the fixed nature of the environmental principles.

**Expected level of business and wider impacts**

The principles will be relevant to the act of government policy-making. How the policies will apply such principles will depend on types and extent of changes in policy measures. At this stage no impacts are therefore assumed (including small businesses). If the way government makes policy is changed then a further RTA and/or consultation would occur.

However, embedding environmental principles in policy-making will provide businesses with more regulatory certainty and a level-playing field that will facilitate long-term strategic investment decisions.

It is assumed that there will not be any significant distributional impacts of the policy on different business and sectors.

**Wider impacts**

Embedding these principles into policy-making should have positive environmental impacts. The principles are already considered in policy-making but this approach should apply them more consistently and with greater clarity. The application of the principles should the effectiveness of policy-making and ensures that new policy considers environmental impacts.

The specific principles chosen to be included in the Bill will also have positive environmental impacts. For example, the rectification at source principle, which outlines how, when environmental damage occurs, it should be rectified at its origin, is likely to avoid future damage to the environment once the source of the damage is identified.
By adopting and applying these environmental principles, the government can encourage stakeholders, business and the public to give consideration to the principles. This may have further positive impacts for the environment and even on society at large, as a result of a protected environment.

There are likely to be minimal financial impacts. There may be some cost implications of applying the principles in instances of policy-making, such as administrative burden on policy-makers or implementation costs but these principles should already largely be embedded in this process.
Annex 3: Statement of impacts – Environmental Improvements Plans

Background

The government has a manifesto commitment to be the first generation to leave the environment in a better state than we inherited it. In pursuit of this ambition, the government published its 25 Year Environment Plan (25 YEP) in January 2018. The plan sets out 10 strategic goals for environmental improvement up to 2043 and identifies over 230 actions that government will take to help deliver progress towards these goals in the short term.

Problem under consideration and rationale for government intervention

The actions identified in the 25 YEP are just a start; many of them simply signal future policy development (for example, the 25 YEP commits government to developing a Resource and Waste strategy which will contain further measures). There is widespread recognition that sustained action over the full 25 year period will be required to deliver environment improvement and start to address the pervasive market failures that have driven long-term environmental declines to date. In recognition of this, Defra is seeking to introduce duties on the government to 1) prepare and review (at least every five years) a plan for significantly improving the environment, 2) report annually to Parliament on progress, and 3) develop and publish a suite of indicators and metrics to measure environmental change to help measure long-term progress towards the 10 goals.

Policy objectives and the intended effects

Through the Environment Bill, the government intends to give the 25 YEP statutory status through a series of duties that will work in combination to drive an ongoing process of planning, monitoring and reporting to deliver the government’s manifesto commitment to protect and improve the environment.

Policy options considered, including an alternative to regulation

The current 25 YEP already commits government to updating the plan at least every five years, putting in place metrics and reporting annually on progress. Defra Ministers are seeking to turn these existing policy commitments into legislative requirements so the 25 YEP can fulfil its stated objectives. We anticipate these
measures will be welcomed (some stakeholders and parliamentarians may argue we should have made these commitments sooner).

It would be entirely possible to revisit the detail of the approach we are proposing (e.g. whether to report biannually instead of annually or to update the plans more regularly than every five years) but the arrangements included within the 25 YEP were subject to thorough scrutiny and close examination by other government departments so it is difficult to see any benefit in doing so.

What wider measures (e.g. selecting specific policy commitments from within the 25 YEP to become legal commitments) might be necessary to achieve the government's objective of significant environmental improvement is being considered as part of the process of developing the whole Environment Bill and is out of scope of the current proposals.

**Expected level of business and wider impacts**

There are no impacts on business or regulatory burdens to consider as the proposed duties fall entirely on government and are the formalisation of existing government policy. We could expect future government to bring forward environment policy proposals aimed at meeting the 10 goals set out in the 25 YEP. But it is not possible to foresee what mix of policies a future government might choose to pursue; the impacts on business should form an important part of the decision-making process when the plan is revised under each successive government.
Annex 4: Statement of impacts – Legally binding targets for environmental improvement

Background

The government has a manifesto commitment to be the first generation to leave the environment in a better state than we inherited it. In pursuit of this ambition, the government published its 25 Year Environment Plan (25 YEP) in January 2018. The 25 YEP sets out ten strategic goals for environmental improvement up to 2043 and identifies over 230 actions that government will take to help deliver progress towards these goals in the short-term. Many of the actions simply signal future policy development (for example, the 25 YEP commits government to developing a resource and waste strategy which will contain further measures). To continue delivering the 25 YEP actions and commitments government must turn this ambition into credible policies.

The policy issue and rationale for government intervention

Key stakeholders have been critical of the 25 YEP for lacking legally binding targets and the Environmental Audit Committee has publicly voiced calls for legally binding targets to be enshrined within the Environment Bill. This would provide a mechanism for Parliament to set the long-term ambition for future policy, and for the public to monitor government’s progress in improving the environment. It also sends an important message to assure the public that we are maintaining environmental standards now we have left the EU.

The government has set ambitious targets in the past such as the cross government Climate Change Act, which has been successful in signalling to industry stakeholders to invest in cleaner technologies and has led to mitigating greenhouse gas emissions by 42% (334 million tonnes CO₂) since 1990. The government has also signed up to legally binding targets developed by the EU, such as on Water
Quality and Air Quality, which have continued to challenge the government to develop more ambitious strategies and policies. This existing body of EU environmental law will be incorporated into the UK law through the EU withdrawal Bill. However, some of the existing mechanisms which scrutinise the achievement of environmental targets by government will no longer exist in the UK. The Office for Environmental Protection is therefore being created to undertake scrutiny of environmental policy and law, investigate complaints, and, if necessary, take action to bring about the proper delivery of environmental law by government.

Setting new legally binding targets provides a framework for analysing an environmental problem and ensuring there is optimal policy responses over long time horizons. The economic rationale for targets is based on their impact in providing an internal and external signal to key stakeholders responsible for enacting environmental change.

Policy intervention is required to address the pervasive market failures that have driven long-term environmental decline to date, specifically:

- **Negative externalities:**

  Activities which impact the environment can generate negative impacts or costs that are larger than the associated benefits from these activities. As these negative impacts or costs do not accrue for those benefiting, the market does not fully reflect externalities in prices and this leads to levels of consumption or production which are not optimal for society overall. These costs to the environment should ideally be internalised into the cost of the product or activity to achieve an efficient outcome both economically and for the environment. For example, contaminated and polluted land with heavy metals, pesticides, fertilisers and slurry from livestock often leads to the pollution of rivers and oceans, however the cost to society of this is not incurred by polluters and is not captured in the price of the final good.

- **Public goods:**

  The environment is often non-excludable, it is open for anyone to use. However, not everyone’s intentions for using the environment are the same, and one person’s actions could hinder another’s. This can lead to over exploitation as individuals don’t take account of the diminishing potential benefit others can draw from the resource as a result of their own consumption. For example, air pollution diminishes air quality and so reduces the benefits others in society get from having clean air. The individual carrying out the air pollution does not realise, or underestimates, the damage their pollution causes but, if everyone were to pollute, the commonly held resource, clean air, would be diminished. Similarly, there is no incentive for individuals to invest in improvements or maintenance of environmental assets which are
public goods as you cannot prevent others from benefiting or recouping the value of your investment. This means that whenever anyone would invest in maintenance of the environment the private benefit they receive is much lower than the overall social benefit. Meaning if one individual invests, the rest of society may free-ride, dis-incentivising the investment.

- **Imperfect Information:**

  The environment is complex and it is difficult for individuals to make fully informed decisions or to effectively monitor aspects of the environment. This may lead to ineffective decision making and increases the risk of harmful practices or unintended consequences negatively affecting the environment. Likewise, where information asymmetries occur these may be exploited. Environmental policy and the underpinning evidence increases access to information, and can support individuals in being more fully informed about the environment around them and help them make better decisions. Additionally, environmental policy can act as heuristics (mental shortcuts) to allow policy-makers who may not be in possession of all of the necessary facts to make decisions about the environment.

- **Equity:**

  Inequalities exist that have not been addressed by the market. They relate to different impacts on individuals across a range of socioeconomic and demographic characteristics. For example, unequal access to nature and greenspace which most affects those that live in the most deprived areas, who are also more likely to suffer from negative externalities such as pollution. The poorer you are, the more likely it is that your house, and your children’s school and playground are close to highly-polluted roads, and the less likely you are to enjoy ready access to green spaces.

**Policy objectives and intended effects**

Through the Environment Bill, the government intends to give the 25 YEP statutory status through a series of duties that will work in combination to drive an ongoing process of planning, monitoring and reporting to deliver the government’s manifesto commitment to protect and improve the environment.

**Targets deliver a powerful internal message**

Legally binding targets provide an internal signal to the rest of government (and to subsidiary jurisdictions) about the priority the government attaches to environmental issues. They create a legal obligation to deliver a policy outcome, an independent review process (e.g. by the Office for Environmental Protection) to check that the target will be achieved and reputational risks from a judgment finding that the
government has breached the target. Their legal force affects civil service (and ministerial) behaviour in a way which more weakly articulated priorities or statements of principles may not and reduces ambiguity over the level of ambition for policy intervention. It also focuses the efforts of departments across government and local authorities in delivering the target and underlying policies.

Long-term, legally binding targets also “entrench” a change and make it harder for subsequent governments to ignore or change policy direction as this would require the legislation to be amended or repealed. This makes government action more resilient with policy decisions on the targets taken over multiple political cycles. This is particularly important for environmental problems which are deeply embedded in economic activities and have long-term inertia such as air pollution. These issues require consistent future policy commitments over long timescales to move to a more sustainable path.

The process of setting long-term and interim targets focuses analysis over longer time horizons and on setting an efficient pathway to achieving an environmental goal. This informs policy decision making including identifying the optimal scope, scale and timing of action. For instance the analysis underpinning the Climate Change Act utilised energy system models to evaluate transitions in the energy system and to identify the least cost pathway to achieving long-term greenhouse gas emission targets. This recommended a major contribution from energy efficiency improvements in both buildings and transport between now and the mid-2020s, the radical decarbonisation of power generation by 2030, and the increasing application of electricity to transport from 2015 onwards and to heat production from the 2020s onwards.

**Targets deliver a powerful external message**

Successful targets provide a strong external signal to the public that environmental improvement is a short and long-term government priority. They also create the certainty required for industry to invest in environmental improvement, cleaner practices and technologies. This is important for issues with serious long-run implications such as climate change, which require certainty for businesses to develop a long-term investment framework. The greenhouse gas emissions interim targets provide a clear policy trajectory, which has instilled confidence in the market and has enabled longer term investments in low carbon industries such as renewable energy technologies, infrastructures and supply chains.

Through greater policy certainty and investment, targets incentivise innovation to develop new technologies that bring new growth opportunities. As a result of the greenhouse gas emission targets, the UK has been at the forefront of developing technologies to mitigate greenhouse gas emissions, the UK is a global leader in the development, production and exports of low emissions vehicles. In 2016 exports of
low emissions vehicles were estimated at £2.2 billion. In 2018, industry announced that it is investing over £500 million in projects relating to low emissions technology. In recent years the green economy has become a larger contributor to economic growth. In 2016, it was estimated that the low carbon and renewable energy economy generated £42.6 billion in turnover, a growth of 5% on 2015 and employed an estimated 208,000. We expect similar innovation with respect to other environmental targets in other areas. There would also be a stronger incentive for innovation once more ambitious environmental targets were introduced.

Becoming a global leader in improving the environment also helps with national branding and increases soft power internationally. The UK has long been a world leader on environmental issues, last year it was one of the first countries to ratify the Kigali amendment to the Montreal Protocol and World Health Organization (WHO) has welcomed clean air strategy as “an example for the rest of the world to follow”. The UK was also the first to introduce legally binding targets and carbon budgets through the Climate Change Act. Introducing further environmental targets through the Environment Bill will continue to enhance the UK’s environmental credentials.

The rationale for legally binding environmental targets are therefore twofold, from an internal policy perspective they add credibility to the 25 YEP, reduce ambiguity within central and local government over the priority attached to environmental policy and shape an important long-term roadmap to achieving environmental improvements making government intervention cheaper and more effective. From an external policy perspective they provide the long-term certainty to the public and industry to enable the investment required for the economy to adjust.

In recognition of this, we are introducing a power for the Secretary of State to set environmental targets in secondary legislation. This will enable the targets to be directly imposed on the current and future governments. The government will be required to establish at least one new target on Air Quality, Waste/Resource Efficiency, Biodiversity and Water, by the 31st October 2022. The government will be


under an explicit duty to achieve new long-term targets, as well as set out 5-yearly milestones towards them. Progress towards targets and milestones will become part of the new statutory cycle of monitoring, planning and reporting. Every 5 years, the government will review the suite of targets that have been set and consider whether, taken collectively, they are sufficient to achieve a significant improvement to the natural environment, and if not to set out steps to rectify that failure.

Targets may not always be an appropriate response to environmental issues though. Targets can produce perverse outcomes by, for example, focusing government efforts on the wrong issue if the measure is poorly specified, or inducing perverse behaviours. Insufficiently ambitious targets in the short term can give the appearance of action without actually committing on measures. At this primary legislation stage though, no impacts will be incurred as the Environment Bill will only introduce the ability for the SoS to set targets through secondary legislation and a requirement to do so in 4, broadly-defined areas by 31st October 2022. Detailed analysis will be developed to assess the costs and benefits of individual targets prior to their introduction through secondary legislation, with separate impact assessments/regulatory triage assessments developed for each target.

The Bill will require targets to be set that are objectively measurable, that specify a standard to be achieved and a date by which it must be achieved, and which the Secretary of State is satisfied can be met. Defra intend to set targets via a collaborative process with independent expert input, helping to ensure the targets deliver achievable outcomes which reflect the challenges faced by the environment and take into account the economic feasibility and availability of technology. This will also help to identify and mitigate against the risk of perverse outcomes.

**Description of potential novel and contentious elements**

The delivery of some environmental targets will be dependent on other public authorities, including departments across government, arm’s length bodies and local authorities. The Environment Bill will therefore need to include a duty on public authorities to consider the need to exercise relevant strategic functions so as to contribute to the achievement the environmental targets.

Introducing environmental targets and higher standards on domestic industry can hypothetically have an impact on their competitiveness internationally, particularly if there were a lack of strategic alignment with the Devolved Administrations.

Whilst the above measures will not impose any impacts prior to the introduction of targets through secondary legislation, there could be objections if the targets are perceived as being an additional future burden on public bodies responsible for their delivery or if they will lead to future impacts on businesses.
Policy options considered, including alternatives to regulation

The three options considered for this assessment are presented below:

**Option 1 – Baseline (do nothing)**

This option would be the Business as Usual (BaU) option, where there would be no legal requirement for government to set environmental improvement goals (e.g. cleaner air) and criteria the targets must meet in primary legislation. There would be no duty on the Secretary of State to subsequently set legally binding targets.

**Option 2 – Introduce primary legislation, with legally binding targets**

In this option, environmental targets would be introduced through primary legislation (the Environment Bill).

This would deliver specific legally binding environmental improvement targets across a number of 25 YEP goals within the Environment Bill. Legally-binding targets would provide a strong internal signal to government and drive long-term policy development and improvement in the state of our natural assets. It would also provide an external signal to give certainty around the acceptable condition of the environment’s natural assets.

The advantage of this option is that it would help to satisfy the appetite for early commitment to action that can’t readily be rescinded.

There are significant risks to introducing all the targets in primary legislation as the scientific, environmental and economic evidence required to justify specific targets is currently being developed. Detailed analysis is required on the costs and benefits of introducing the targets and this option provides very limited time to develop this, there is a high risk that the targets would be poorly specified with limited due diligence applied leading to potential perverse outcomes. It also means that there would be limited stakeholder engagement in setting the ambition of targets which could result in lack of commitment over delivering future policy measures designed to meet the target.

This option is also the most complex and challenging to update the targets should they prove to be unachievable or become outdated. Our advice is to avoid setting an early deadline by requiring targets to be set through primary legislation.

**Option 3 – Introduce primary legislation with a duty on the Secretary of State to subsequently set legally binding targets**

In this option, primary legislation (the Environment Bill) will create a framework for setting environmental targets and include the broad policy goals and a duty to
introduce specific targets through secondary legislation in key priority areas by 31st October 2022.

The priority areas under which targets are required relate goal areas of the 25 YEP such as ‘clean air’, ‘clean and plentiful water’, ‘thriving plants and wildlife’ and ‘minimising waste’.

As in option 2, this would deliver specific legally binding environmental improvement targets across a number of 25 YEP goals within the Environment Bill. Legally-binding targets would provide a strong internal signal to government and drive long-term policy development and improvement in the state of our natural assets. It would also provide an external signal to give certainty around the acceptable condition of the environment’s natural assets.

The advantage of this option is that there will be more time available to:

- Develop SMART (specific, measurable, achievable, relevant and time-bound) targets based on a thorough appraisal of their economic, social, and environmental impacts.
- Complete internal policy development and analysis allowing the targets to be robustly specified with a greater understanding of the system they aim to influence and a thorough assessment of the risk of perverse outcomes.
- Allow for greater external scrutiny of the targets, including by an independent specialist expert panel and for public scrutiny through a public consultation.

This is important for targets which are still at an early stage of development which require indicator development, include relatively novel policy objectives, or where there is limited scientific and socio-economic evidence on impacts.

Ensuring there is sufficient time for external scrutiny, including by an independent specialist expert panel and for public scrutiny through a public consultation, will help to ensure the targets and their appraisal is more robust and helps to mitigate the risks of perverse outcomes. It also helps to build public consensus on the environmental targets which will maximise their impact in delivering positive environmental outcomes.

Our preferred option is Option 3. The rationale for option 3 is that government intervention would deliver greater environmental benefits when compared to option 1 (do nothing). Option 3 would also have an edge over option 2 as it provides additional time to develop a set of robust targets using the approach explained above. Choosing option 2 is not optimal given the limited time to develop the targets.

Expected level of business and wider impacts

The intervention will create no impact/burdens to business as the proposed duties fall entirely on government, it is therefore expected that there will be no additional impact to businesses until secondary legislation is introduced at a later stage. The
duties are not anticipated to lead to significant volumes of litigation and unlikely to be a burden on the Ministry of Justice/legal system. It is also expected that the duties in primary legislation will have no immediate impact on local authorities, as the Bill itself does not create any targets.

We expect future governments to bring forward environment policy proposals aimed at meeting any targets that are set and these will be appraised via impact assessment(s)/regulatory triage assessment(s). However, it is not possible at this primary legislation stage to foresee what mix of policies a future government might choose to pursue in achieving long-term environmental targets, given that policies and pathways to deliver targets need to be developed; the impacts on business should form an important part of the decision making, and review, process attached to targets.

No monetised impacts have been estimated given that the duties for primary legislation here fall solely on government and are setting out the process to develop the secondary legislation where monetised impacts will be estimated via cost benefit analysis and impact assessments for each target and policies required to deliver them. The duties in primary legislation are therefore low-cost measures of under £5 million per annum to business and qualifies for a Regulatory Triage Assessment (RTA).
Annex 5: Statement of impacts – UK environmental protections

Background

The 2019 Conservative manifesto included a commitment to legislate to ensure high standards of workers’ rights, environmental protection and consumer rights.

The 25 Year Environment Plan published by the Government in 2018 sets out its ambition to leave the environment in a better state than we inherited it by creating richer habitats for wildlife, improving air and water quality and curbing the scourge of plastic in the world’s oceans. This Government will deliver the most ambitious environmental programme of any country on earth and is committed to being a global leader in championing the most effective policies and legislation.

Problem under consideration and rationale for government intervention

There is a need for greater transparency on the environmental impacts of future legislation. Greater transparency will help to ensure that the Government continues to legislate for high environmental protection standards. This will support the Government’s ambition to leave the environment in a better state than we inherited it and to deliver the most ambitious environmental programme of any country on earth as a global leader in championing the most effective policies and legislation.

Policy objectives and the intended effects

The policy objective is to help ensure that future legislation represents an increase in the level of protection provided for the environment by:

- Strengthening transparency and accountability through giving Parliament additional and specific information to enable it to better scrutinise the environmental impact of legislation brought forward by the Government.
- Ensuring that Ministers consider the environmental implications of a Bill before it is introduced.
- Keeping abreast of significant developments in international environmental protection legislation in driving forward our domestic environmental protection legislation.

In this Bill the Government is introducing a provision which will require the Minister in charge of a Bill containing clauses concerned with environmental protections to make a statement to Parliament. In that statement Ministers must make clear that in their opinion the Bill does not have the effect of reducing the level of environmental
protection below the level set in the previous legislation or that it does so but they wish the Bill to proceed anyway. The Bill will also require the Government to review significant developments in international environmental protection legislation on a two yearly cycle and produce a report which it must publish and lay before both houses of parliament.

**Policy options considered, including an alternative to regulation**

The following policy options are being considered:

1. **Do nothing**
   Future governments would be free to change environmental protections without specifically drawing this to the attention of Parliament. The 25 Year Environment Plan is clear that the Government intends to leave the environment in a better state than we found it. Doing nothing would not give Parliament the opportunity to properly scrutinise the environmental impact of new legislation and would not help support the achievement of that ambition. The Government would also not be required to review developments in international environmental protection legislation.

2. **Increased transparency over changes to environmental legislation**
   Future governments must make statements to Parliament about whether proposed changes to legislation would represent reduction in the level of environmental protection.
   The Government will publish a review of significant developments in international environmental protection legislation every 2 years.

Option 2 is the preferred option – increased transparency over changes to environmental legislation. This will give Parliament more information on the environmental impacts of legislation put before it. It will also provide Parliament with information on significant developments in international environmental protection legislation. This will ensure it can properly scrutinise legislation and hold the Government to account on the commitments it has made.

**Expected level of business and wider impacts**

The policy itself is not expected to lead to immediate and direct economic impacts to business. It will create a parliamentary process which may influence future governments’ approach to environmental legislation, however the impacts of any such future changes on business would be captured in detail by any relevant accompanying RTA/IAs.
There would be a small impact on government due to an increased administrative burden of producing additional statements to accompany proposed Bills.

Where future Bills contain provisions which, if enacted, would form part of the environmental law, the minister preparing the Bill must carry out a comparison between the level of environmental protection it provides, and the existing level of protection provided for in UK law.

Following comparison, the Minister would then make a statement to Parliament, before second reading, to demonstrate adherence to the commitment not to reduce the level of environmental protection provided by legislation. Alternatively, the Minister can confirm that they cannot make such a statement but nevertheless wish the House to proceed with the Bill.

The impact on government could be reduced by incorporating the obligation sufficiently into other processes such as other reports and statements on Bills and designing streamlined processes across other environmental reporting obligations.

There will be an extra burden on the government to review and produce a report on significant developments in international environmental protection legislation. Due to the uncertainty around these developments, costs have not been estimated as they are unknown and unquantifiable at this stage. As the report will focus on significant developments in the environmental protection legislation of other countries, it is expected that any extra costs will be small.

Background

Waste crime has significant impact upon people and the environment through pollution to air, water and land. It also has significant impact to the economy: it is estimated the cost to the UK economy in 2013 was between £568m and £808m per year\(^{14}\). The Environmental Services Association (ESA) reported in May 2017 that the cost to the English economy in 2015 was at least £604m and other estimates have calculated it in excess of £1bn. NRW’s commissioned Report on Waste Crime estimated the cost to the Welsh economy to be £15.2-£32.4m a year\(^{15}\). There is no separate economic impact estimate available for Northern Ireland. The main economic costs are lost business revenues to the legitimate waste sector, loss of Landfill Tax through misclassification of waste and costs to the public sector of clearing abandoned waste sites and fly-tipped waste. Defra’s 25 Year Environment Plan commits to seek to eliminate waste crime and illegal waste sites over the lifetime of the plan. The Waste Crime Report appraised the scale, cost and impact of waste crime in Wales. One of the recommendations was to increase resources to tackle waste crime. The Report stated there was a need to secure additional funding for NRW to tackle waste crime, with a particular focus on enforcement and inspection. It also stated there was a question around whether a long-term funding solution should be linked to illegal waste sites and landfill.

The Review of waste disposal at the Mobouy site resulted in a number of lessons for dealing with criminality in Northern Ireland and the need for effective sanction to make the polluter pay. These proposals are intended, in part, to address these issues.

The policy issue and rationale for Government intervention

These additional powers are designed to achieve some (approximate) cost recovery, either in the form of direct administration charges or for the indirect costs accruing for maintaining a satisfactory regulatory function that is needed to address market failures and that benefits those who are operating legally in the sector.

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\(^{14}\) Waste crime: Tackling Britain’s dirty secret, 2014, commissioned by the Environmental Services Association Education Trust (ESAET) and written by Eunomia

\(^{15}\) The 2017 Waste Crime Report was commissioned by NRW and written by Eunomia.
Policy objectives and intended effects

Reform of charging powers is required to provide the EA, NRW and DAERA with more flexible and reliable funding to tackle waste crime. As such they will secure and enhance the interventions the EA, NRW and DAERA makes to prevent, reduce and mitigate illegal waste activity and create a level playing field in the waste industry. These measures will enable reduction and mitigation of harm to people and the environment caused by waste crime. Additionally, there are significant economic benefits to removing illegal waste operations. By reducing waste crime, the EA, NRW and DAERA can contribute to protecting revenue of legitimate businesses, reduce costs the public sector to deal with implications of illegal waste activity, and prevent loss of Landfill Tax to the Treasury and the Welsh Treasury.

The charging powers proposed will provide the EA, NRW and NIEA, an executive agency within DAERA more secure funding to reduce waste criminality and its impacts. Existing charging powers are limited and do not adequately provide for the recovery of costs from those that act illegally. The proposed changes will help fund interventions against waste criminals and ensure that polluters pay. The measures will remove some reliance on grant in aid funding and remove some burdens on general taxation. The EA are uniquely placed to deliver the policy objectives in England as the regulator for environmental permitting.

The key policy objective is to reduce waste crime and its impacts. The charging measures proposed seek to enable this by providing a means to fund regulatory activity. Some of the measures would likely be regarded as a tax, and the EA would need agreement with HM Treasury and the Welsh Treasury to retain receipts. Such implications would need to be considered when the EA look to utilise such powers.

Policy options considered, including alternatives to regulation

Other Environment Bill proposals cover new powers and interventions to achieve to over-arching policy objective to reduce waste crime. These proposals complement the other waste crime measures in the Bill. They seek to enable policy by providing means to secure funding for regulatory interventions across the waste sector.

The specific charging powers we are seeking are:

i) Powers to recover costs from illegal waste operators when interventions are required (EA, NRW and NIEA)

ii) Powers to introduce a registration (EA and NRW only) and subsistence (EA, NRW and NIEA\(^6\)) charge for waste exemptions to fund compliance monitoring for these operations
iii) Power to add new charging powers for the EA in relation to new or amended duties conferred on it in the future [DN: should this be removed]; and
iv) In Northern Ireland, amendment of existing charging powers to absorb registration fees for waste exemptions (including hazardous waste exemptions), waste carriers, brokers and dealers into the charging scheme provided by way of Article 15(2) of the Waste and Contaminated Land (Northern Ireland) Order 1997.

Collectively these measures will fund activities to:
- better monitor compliance (thereby identifying non-compliance operation and potentially preventing illegal activity through early intervention)
- allow recovery of costs from those operating illegally outside of the permitting system (ensuring polluters pay) and
- fund enforcement campaigns against illegal operations

Both the 25 Year Environment Plan and the Serious and Organised Waste Crime Review identify the desire to eliminate waste, and a need to enhance the powers and the capacity of the EA to better address problems in the waste sector in England. More secure and flexible funding will enable the EA to properly resource their regulatory activity and provide powers to recover costs from those operating outside the law.

Doing nothing is not considered as a viable option. Current funding is reliant on grant in aid for enforcement activity, and existing powers to not provide a means for the EA, NRW and NIEA to recover costs from illegal operations when regulatory interventions are required.

**Expected level of business and wider impacts**

The measure we analyse here is to acquire the powers to reform charging powers in primary legislation. In acquiring these powers via primary legislation, there will be no immediate direct impacts on business or society. As such there is no need for an Impact Assessment.

However, when these powers are implemented in future, they may lead to direct impacts to business and society more widely. While it is not possible to assess the impacts of future legislation the specifics of these will be detailed at the time in impact assessments.

Northern Ireland already has a registration charge in place for exemptions. In relation to specific charging powers:

i) The implementation of Powers to recover costs when interventions are required would directly impact on illegal waste operators in specified and defined circumstances
ii) Powers to introduce a registration and subsistence charge to fund compliance monitoring for these operations would directly impact on holders of waste exemptions. The power could be implemented for all exemptions, or for a subset of specific exemptions and could be time limited.

iii) The amendment of existing powers to absorb registration fees for waste exemptions (including hazardous waste exemptions), waste carriers, brokers and dealers into the charging scheme provided by way of Article 15(2) of the Waste and Contaminated Land (Northern Ireland) Order 1997 would not have any impact as charges are already in place.

**Brief Assessment of Distributional Impacts**

The ability for the EA, NRW and DAERA to set charges is well-established; the Environment Act 1995 allows the EA and NRW to make their own charging schemes. In Northern Ireland, the key charging powers relating to waste are set out in the Waste and Contaminated Land (Northern Ireland) Order 1997, the Environment (Northern Ireland) Order 2002 and the Radioactive Substances Act 1993. When making charging schemes, public consultation and clearance from both the Secretary of State/Welsh Ministers and Treasury/Welsh Treasury is required. Analysis of economic and distributional impacts will be conducted by the EA/NRW and form part of their consultation and clearance processes to make amendments to their charging schemes. (This is an existing legal requirement of the EA when making charging schemes.) The EA would have to demonstrate that distributional impacts on charge payers is not disproportionate. In Northern Ireland, the charging scheme is made by DAERA and laid before the Northern Ireland Assembly.

**Brief Assessment of Small Business Impacts**

As above, assessment of impacts will be carried out as part of an EA/NRW process to make the charging scheme. Impacts on small businesses will be considered in that analysis. When gaining clearance for the charging scheme, the EA/NRW would expect to satisfy Secretary of State/Welsh Ministers and Treasury/Welsh Treasury that impacts on small businesses is not disproportionate.

**Brief Assessment of Wider Impacts**

The future measures proposed will have no immediate direct benefits in themselves, but they will enable policy delivery to reduce waste crime with significant benefits to wider society and the environment. Similarly, enabling reduction in waste crime will have economic benefits. The EA estimates that for every £1 spent on enforcement there is £5 benefit to the wider economy (through increased tax revenue, additional revenue to legitimate business and avoid costs of dealing with harm to the
environment and society). Without making the desired changes to the EA’s/NRW’s/NIEA’s charging powers, the ability to achieve the policy objectives will be reduced.
Annex 7: Statement of impacts – S57 and Art. 27 Emergency (Modernising) powers to direct collection of waste in England, Wales and Northern Ireland

Background

The waste recovery and disposal sector provides an estimated £6.8billion Gross Value Added (GVA) to the UK economy. This is through legitimate business and much through long standing contracts between waste companies and large organisations. Examples of these are contracts for the removal of clinical waste from NHS trusts and collection and disposal of household waste for Local Authorities.

However there are circumstances where rogue operators dump waste illegally with potentially severe consequences for local communities and the environment. There may also be situations where a waste collection contract fails, or a company or authority enters into receivership and it cannot carry out or pay for the waste collection and removal liabilities that it is contracted to deliver, again putting communities and the environment at risk.

The Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs have powers to direct waste to be taken to a specified place and to direct waste operators to take and treat that waste. However the powers are not available for Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs to direct a waste carrier to collect waste from specified places and take it to a specified waste site. The recommendation is to create a power for the Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs to be able to do this in circumstances where public health, communities or the environment are at risk.

The policy issue and rationale for Government intervention

Currently the Secretary of State and Welsh Ministers have powers under Section 57(1) and (2) of the Environmental Protection Act 1990 (as amended) to direct any person keeping waste on land to take that waste to a specified place and to direct waste operators to take and treat that waste.

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Specifically, the powers are as follows:

57(1)   The Secretary of State and Welsh Ministers may, by notice in writing, direct the holder of any environmental permit authorising a waste operation to accept and keep, or accept and treat or dispose of, waste at specified places on specified terms.

57(2)   The Secretary of State and Welsh Ministers may, by notice in writing, direct any person who is keeping waste on any land to deliver the waste to a specified person on specified terms with a view to its being treated or disposed of by that other person.

Further there is also provision under Section 57 to require payment and compensation as follows:

57 (4)   A direction under subsection (2) above may require the person who is directed to deliver the waste to pay to the specified person his reasonable costs of treating or disposing of the waste.

57 (7)   The Secretary of State and Welsh Ministers may, where the costs of the treatment or disposal of waste are not paid or not fully paid in pursuance of subsection (4) above to the person treating or disposing of the waste, pay the costs or the unpaid costs, as the case may be, to that person.

The Department of Agriculture, Environment and Rural Affairs has equivalent powers under Articles 27(1), (2), (4) and (7) of the Waste and Contaminated Land (Northern Ireland) Order 1997.

However, powers are not available for the Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs to direct a waste carrier to collect waste from a specified place and take it to a specified waste site. This means in circumstances where waste, particularly hazardous waste, has been dumped illegally and the landowner and/or criminal cannot be traced or the landowner cannot fund the removal, and in the case of major incidents, or where a waste collection contract fails, the Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs do not have the power to direct a waste carrier to remove the waste. This could put public health and the environment at risk if large quantities of untreated waste are left uncollected.

Additionally, the cost recovery powers do not currently extend to waste carriers. Costs for waste removal from a site will vary depending upon a number of factors, for example waste type and site location. As an approximate estimate, waste disposal costs, which include costs associated with loading, transport and ultimately disposal at landfill, may range from around £50 for inert waste up to £150 for hazardous waste, per tonne\textsuperscript{17}. If the cost recovery powers are not extended to include waste

\textsuperscript{17} Waste exemptions impact assessment, Defra and Environment Agency, 2017
carriers, there will be no regulatory mechanism to ensure carriers receive compensation for these costs.

We do not expect that the Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs would be required to use these amended powers very often, the same result can often be achieved by a simple ask to waste carriers. The current section 57 powers have previously only been used in an emergency and as a last resort (for example during the 2001 Foot and Mouth Crisis), but nevertheless it is important to address the current gap in the Secretary of State’s, Welsh Minister’s and Department of Agriculture, Environment and Rural Affairs powers.

**Policy objectives and intended effects**

Defra intends to amend Section 57 (1) and (2) of the Environmental Protection Act 1990 and Article 27(1) and (2) of the Waste and Contaminated Land (Northern Ireland) Order 1997, at the request of the Department of Agriculture, Environment and Rural Affairs to create a power to allow the Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs to give direction to authorised waste carriers to collect waste from a specified place and take it to a specified waste management site in circumstances where public health, communities or the environment are at risk. Furthermore that the provision of 57(4) and 57(7) of the 1990 Act and 27(4) and 27(7) of the 1997 Order be extended to cover waste carriers as specified persons to ensure that their costs and any fees and charges pertinent to the activity carried out on behalf of the Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs are appropriately compensated.

The amendment to 57(1) and 57(2) of the 1990 Act and 27(1) and 27(2) of the 1997 Order will prevent waste which poses an immediate risk to the environment or public health from remaining uncollected, if for example the landowner and/or criminal cannot be traced or the landowner cannot fund the removal.

It would also enable the continued running of public service where for example a contract for municipal waste collection has failed. The Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs will be able to direct a waste carrier to collect the wastes, preventing large quantities of potentially untreated and infectious waste being left uncollected until the contract is retendered.

The amendment to 57(4) and 57(7) of the 1990 Act and 27(4) and 27(7) of the 1997 Order will ensure waste carriers are not financially disadvantaged as a result of carrying out waste carriage on behalf of the Secretary of State, Welsh Ministers or the Department of Agriculture, Environment and Rural Affairs.
Policy options considered, including alternatives to regulation

**Option 1: Do nothing.** The Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs would not have powers to direct authorised waste carriers to collect waste from a specified place and take it to a specified waste management site.

**Option 2:** Amend Section 57 (1) and 57(2) of the Environmental Protection Act 1990 and Article 27(1) and 27(2) of the Waste and Contaminated Land (Northern Ireland) Order 1997 to create a Power to allow the Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs to give direction to authorised waste carriers to collect waste from a specified place and take it to a specified waste management site. Further to make amendments to 57 (4) and 57 (7) of the 1990 Act and 27(4) and 27(7) of the 1997 Order to enable those so directed to recover costs from the Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs if they are not paid for by the originally designated collector or the landowner. This is the preferred option.

There is no alternative to regulation option being considered. In most circumstances a simple request to carriers would be made in the first instance. If this fails, the power to direct a waste carrier would be required, and achievable only through regulation.

Expected level of business and wider impacts

*Brief Assessment of Business Impacts*

The measure we analyse here is to acquire the powers to reform emergency powers (detailed above) in primary legislation. In acquiring these powers via primary legislation, there will be no impact on society. This measure will lead to equivalent annual net direct cost to business (EANDCB) below the +/- £5million threshold.

**Option 1: Do nothing.** The Secretary of State, Welsh Ministers and the Department of Agriculture, Environment and Rural Affairs would not have powers to direct an authorised waste carrier to collect waste from a specified place and take it to a specified waste management site. There would be no impact to waste carrier businesses.

**Option 2:**
In the event of being directed to collect and transport waste, a waste carrier will be receiving new business, and have additional workload, but would not be financially disadvantaged due to the proposed payment and compensation amendment to section 57 (4) and (7) of the 1990 Act and 27(4) and 27(7) of the
**1997 Order.** There may be a period of time during which the carrier is awaiting reimbursement from the Secretary of State, Welsh Ministers or the Department of Agriculture, Environment or Rural Affairs. Disposal costs for waste removal from a site, which include costs associated with loading, transport and ultimately disposal at landfill, may range from around £50 for inert waste up to £150 for hazardous waste, per tonne\(^{18}\). The volume of waste at an illegal site can vary greatly, a recent Environment Agency study reported an average tonnage per site of between 65 to 1452 tonnes\(^{19}\). However as stated, costs incurred by carriers would be reimbursed, hence no overall financial losses to businesses.

The amended powers would only be required during emergencies and major incidents where public health, communities or the environment are at risk. For example, section 57(1) powers were used during the 2001 foot and mouth outbreak. The amendment would prevent large quantities of potentially untreated and infectious waste being left uncollected. It is expected that the powers would be used very infrequently and as a last resort, based on previous usage this is likely to be only once every 15-18 years.

*Brief Assessment of Distributional Impacts*
New business will be directed to authorised waste carriers and Illegally deposited waste will be diverted into legitimate industry.

*Brief Assessment of Small Business Impact*
None

*Brief Assessment of Wider Impacts*
The measures should deliver Public health, amenity and environmental benefits as potentially hazardous, untreated waste will not remain uncollected.

This measure will lead to estimated equivalent annual net direct cost to business (EANDCB) below the +/- £5million threshold.

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\(^{18}\) Waste exemptions impact assessment, Defra and Environment Agency, 2017  
\(^{19}\) Waste crime interventions and evaluations project, Environment Agency, December 2017. Data refers to tonnage of waste on illegal sites at point in time when they were stopped.  
Annex 8: Statement of impacts – Waste exemptions

Background

The Environmental Permitting Regulations (EPRs) are designed to provide a consistent, proportionate and risk-based framework of permitting and compliance for the regulation of potentially polluting activities. The regulation of waste operations sits within this framework, alongside the regulation of industrial, water discharge, radioactive substances and other activities.

It is vital for the purposes of addressing waste crime, that this framework continues to work well to provide flexible and risk-based regulation. In particular, as part of current initiatives to tackle waste crime we are planning to add additional waste activities into the regime. These activities include waste carriage, broking and dealing, and we need to make sure that the regime can support these additional activities in the most flexible way.

The policy issue and rationale for Government intervention

The EPR framework provides 4 basic tiers of regulation, namely bespoke permits, standard rules permits, registered exemptions and other types of exemption / exclusion. The EPRs currently allow the Environment Agency (EA) and Natural Resources Wales (NRW) to make standard rules for specified activities, subject to prior consultation. However, given the existing Pollution Prevention and Control Act (PPCA) (1999) powers, it is currently not possible for changes to exemptions to be made other than by regulations. This can lead to delays in ensuring that the legislation provides optimum levels of regulation at any given time.

The economic and technological climate around waste management can change frequently and rapidly and we need the EA and NRW to be able to respond quickly with appropriate regulatory change. Market changes for certain materials can lead to a rapid build-up of stockpiled materials at exempt sites, pushing them way above the limits given by the exemption. Stockpiling large amounts of undocumented or unsuitable waste can cause serious pollution to the natural environment and misery for nearby communities in the form of odour, litter, dust, vermin, fly infestations and fires. The 2017 bans on certain materials being accepted by China for recycling is one such example. In these situations, the EA and NRW need to be able to react more rapidly to meet market needs and protect human health and the environment. The EA and NRW would need to consider the risks associated with the exemption or explore whether an extension of limits would be possible, or if sites are required to
be moved into standard rules permits to enable better compliance checking. Recyclables will always be subject to national and international market forces and it is likely that now we have left the EU such examples as this will increase as more diverse markets are required for materials. The EA’s and NRW’s ability to flex with markets, whilst maintaining their key environmental protection role, relies on whether they can allow certain activities to be carried out under exemptions and at what scale. To take several years to deliver this flexibility does not promote and support businesses, or allow the EA and NRW to make considered risk judgements.

Therefore we want to give the Environment Agency and NRW the ability to keep under review and amend the conditions, rules and thresholds under which a waste operation can be regulated by a registered exemption, rather than by permits. This will ensure that we can introduce new waste activities into the EPRs, and manage existing EPR waste activities, in a more targeted, risk based, proportionate and flexible way, which can be more readily reviewed and adjusted, in the same way as standard rules.

If appropriate powers were available in the PPCA, we could give effect to this policy in the EPRs in a similar way to the present provisions on standard rules (see Part 2, Chapter 4 of the EPRs), by which the EA and NRW can make new rules subject to prior consultation. However for waste exemption designations we would also include an additional requirement for Secretary of State and Welsh Ministers approval. Secondary legislation would be required to support this approach, including setting out the rules and processes the agency would need to follow in changing exemption conditions.

Policy objectives and intended effects

To secure more flexibility for the EA and NRW in how it regulates waste operations and activities, so that its regulation can be as targeted, proportionate and risk based as possible, at all times, and in the face of constantly and rapidly changing social, economic and technological factors. This will be an important tool in the fight against waste crime.

Policy options considered, including alternatives to regulation

This should describe the main viable policy options that are actively being considered. This should include any alternatives to regulation as well as the highest cost regulatory option. This section should include the ‘do nothing’ (baseline) as option 1.

This section should clearly say what the preferred option is.

1. Do nothing: changes to exemptions will need to be made by regulations
2. Include a power in the Pollution Prevention and Control Act (PPCA) to enable the Environment Agency and NRW to designate, keep under review and amend the conditions, rules and thresholds under which a waste operation can be regulated by a registered exemption, rather than by permits. **This is the preferred option.**

No alternative to regulation is being considered.

**Expected level of business and wider impacts**

The measure we analyse here is to acquire the powers in primary legislation only. In acquiring these powers via primary legislation, there will be no impact on society or businesses.

However, when these powers are implemented in future, it may lead to direct impacts to business and society more widely, the specifics of these will be detailed in impact assessments accompanying the necessary secondary legislation or EA and NRW consultations on changes to exemption criteria.

**Brief Assessment of Business Impacts**

Where exemptions rules and criteria are subsequently changed, this could lead to a number of businesses moving out of exemptions and requiring a standard rules permit instead, or may allow businesses to move from permitting to exemptions. Rule and condition changes may also necessitate changes to business practice, for example changing the length of time material can be stored under an exemption, and lead to reduced impacts on the environment and local communities, for example by reducing fire risk. The scale and direction of the impact would be dependent on the specific change to the exemption in question.

The amendment will enable the Environment Agency and NRW to be more flexible in how it regulates waste operations and activities, so that its regulation can be as targeted, proportionate and risk based as possible, at all times and in the face of constantly and rapidly changing social, economic and technological factors, providing clarity on how new developments are regulated. This will be an important tool in the fight against waste crime and therefore of direct benefit to the businesses being regulated.

**Brief Assessment of Wider Impacts**

The ability to be more flexible in how exempt waste operations are regulated means the Environment Agency and NRW is in a better position to respond appropriately, and in a timely manner, to the often frequent and rapid economic and technological developments in the waste industry. This flexibility will be an invaluable tool in the ongoing fight against waste crime and in reducing the risk of environmental harm from waste operations.
If exemption rules and criteria are subsequently changed, this may cause distributional impacts between businesses currently operating under permits and those currently under exemptions. The scale and direction of the impact would be dependent on the specific change to the exemption in question.

By their nature, exemptions are often used by small businesses, and so any subsequent change to rules and conditions will impact small businesses. Small businesses may benefit if larger operators with correspondingly larger environmental risks are moved on to the permitting system.

This measure estimates equivalent annual net direct cost to business (EANDCB) below the +/- £5million threshold
Annex 9: Statement of impacts – Fining Powers in England and Wales

Background

Waste crime, for example fly-tipping, illegal waste businesses and abandoned waste sites, costs the English economy £600m a year\(^2\text{0}\) and the Welsh economy an estimated £15.2-£32.4m a year\(^2\text{1}\). Costs include clean-up and enforcement activity, lost turnover to legitimate waste management companies and lost tax revenue. We want to deter waste crime by ensuring regulators have the resources and tools they need to take swift and effective enforcement action. One such tool is being able to issue Fixed Penalty Notices (FPNs) for environmental offences.

In respect of certain environmental offences which attract a criminal penalty, FPNs can be issued as an alternative to prosecution, as a different means to discharge liability for the offence. The benefit to the Environment Agency (EA), Natural Resources Wales (NRW) and Local Authorities (LAs) is that prosecuting an offender can be expensive. FPNs offer them a proportionate alternative to prosecution and enable straightforward cases to be diverted from the court system. It is up to the EA, NRW and LAs to decide whether to issue a FPN in any individual case, and up to the offender to decide whether to pay it within a set period, or to defend the case in court risking prosecution and conviction.

The policy issue and rationale for Government intervention

As the cost of waste disposal changes, either due to developing practices and technologies, new legal requirements, inflation or other factors, the levels of these FPNs risk becoming inappropriately low or high. This risks the EA, NRW and LAs losing FPNs as a proportionate tool and becoming reliant upon prosecution even for the most straightforward of cases. A number of these FPNs were introduced through secondary legislation using section 2(2) of the European Communities Act 1972 (“ECA”). Repeal of the ECA will remove the current power to alter the levels of these penalties through secondary legislation, and so a new power is required to enable the level of fines to be amended either up or down.

Policy objectives and intended effects

\(^2\text{1}\) Waste Crime Report, commissioned by NRW and written by Eunomia in 2017.
The policy objective is to create a regulation making power in England and Wales to update FPN amounts via secondary legislation, including the power to set a lesser amount for early payment and to update the circumstances in which that lesser amount can be offered. Defra and the Welsh Government also want to amend the text that specifies payment methods for some FPNs where it is too prescriptive.

**Policy options considered, including alternatives to regulation**

**Do nothing**

Over time, the fees for FPNs set in legislation will become less effective due to inflation, changes to waste management practices and the cost of disposal, or other factors, and we will not be able to act if Ministers want to review and change them in the light of changing circumstances (e.g. increased offences) except by amending the amounts using primary legislation.

Payment of FPNs under HWR, HWWR and TWSR will continue to only be made by cash, cheque, postal or money order which would remain very restrictive particularly as cheques, money orders and postal orders are used less than electronic BACS payments.

**Preferred option**

Introduce a new power to make secondary legislation, which enables the Secretary of State to amend the existing penalties for the FPNs relating to the following offences:

- Fly-tipping: Environmental Protection Act 1990, Section 33(1)(a) offence (section 33ZA FPN: England and section 33ZB FPN: Wales);
- Householder duty of care: Environmental Protection Act 1990, Section 34(6) offence (in relation to the section 34(2A) duty) and section 34ZA FPN: England and section 34ZB FPN: Wales;
- Waste shipments: Transfrontier Shipment of Waste Regulations 2007, Regulations 17 to 45 and (regulation 59 FPN);

The Secretary of State should also have the power to amend the minimum permissible amount for early payment, and the conditions for offering it relating to the following offences:

- Fly-tipping: Environmental Protection Act 1990, Section 33(1)(a) (section 33ZA FPN: England and section 33ZB: Wales)
- Householder duty of care: Environmental Protection Act 1990, Section 34(2A) and (6) and section 34ZA FPN: England and section 34ZB: Wales.
We also propose to futureproof both regulation 70(7) of HWR 2005 and HWWR 2005, and Regulation 59(3) (a) of TWSR by replacing the specific format for FPNs with something less prescriptive, ensuring only that FPNs contain:

- the amount
- the payment method (must include BACS, cash and cheque)
- the alleged offence
- the circumstances constituting the offence
- that no proceedings will be taken for this offence before the expiration of 28 days from the date of the notice
- the recipient will not be liable to conviction for the offence is the fixed penalty is paid within 28 days of the date on the notice.

**Expected level of business and wider impacts**

The measure we analyse is to acquire the powers in England and Wales to update FPN amounts via secondary legislation, including the power to set a lesser amount for early payment and to update the circumstances in which that lesser amount can be offered. Defra and the Welsh Government also want to amend the text that specifies payment methods for some FPNs where it is too prescriptive. In acquiring these powers via primary legislation, there will be no impact on society. However, if these powers are implemented in the future, it may lead to direct impacts to business and society more widely, the specifics of these will be detailed in impact assessments accompanying the necessary secondary legislation.

There will be no immediate effect on businesses. The proposals are designed to ensure that FPNs provide the regulators with an effective tool with which to tackle environmental offences and the associated costs to society and the environment from pollution risks and disamenity. They are therefore unlikely to impact legitimate business in a negative manner and aim to help make it easier for enforcing authorities to directly tackle illegality. Due to the high number of small waste carriers these future changes are likely to impact small businesses however, those affected will have been operating outside of the law and/or will be poor performing operators.

Potential positive impacts could include incentivising business to transfer from illegitimate businesses to legitimate businesses as a result of illegitimate businesses facing the risk of increased penalties. We would expect to see continued environmental and social benefits from FPNs remaining a credible deterrent and no increase in expensive and avoidable prosecutions.

Amending these penalty amounts will eventually require secondary legislation but this is likely to be sometime in the future (when the level of penalty has been rendered unsuitable by inflation, changes to the cost of waste disposal or for other reasons).

Background

Waste crime has significant impact upon people and the environment through pollution to air, water and land. It also has significant impact to the economy: it is estimated the cost to the UK economy in 2013 was between £568m and £808m per year\(^2\) and the cost to the English economy in 2015 was at least £604m\(^3\) and the Welsh economy an estimated £15.2-£32.4 million a year\(^4\). The main economic costs are lost business revenues to the legitimate waste sector, loss of Landfill Tax through misclassification of waste and costs to the public sector of clearing abandoned waste sites and fly-tipped waste. Defra’s 25 Year Environment Plan commits to seek to eliminate waste crime and illegal waste sites over the lifetime of the plan. The Waste Crime Report commissioned by NRW appraised the scale, cost and impact of waste crime in Wales.

The causes of waste crime and poor performance are multifaceted and complex, as highlighted by the independent Serious and Organised Waste Crime Review, 2018. This report recommends that to better address the problems we face, mandatory electronic (digital) tracking of waste should be introduced at the earliest opportunity\(^5\).

We are responding to the review’s recommendation by committing to mandate the digital recording of waste movements, subject to consultation. This follows on from previous Government commitments to work with industry on waste tracking which were set out in the Industrial Strategy and the 25 Year Environment Plan.

We seek to provide powers to make regulations in relation to waste tracking to support this work, in line with these strategies and the recommendations of the Serious and Organised Waste Crime Review.

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\(^2\) Waste crime: Tackling Britain’s dirty secret, 2014, commissioned by the Environmental Services Association Education Trust (ESAET) and written by Eunomia
\(^3\) Rethinking Waste Crime, 2017, commissioned by the Environmental Services Association and written by Eunomia
The policy issue and rationale for Government intervention

Data on what happens to waste in the UK is fragmented and has significant gaps, particularly regarding commercial and industrial waste. The independent Serious and Organised Waste Crime Review, 2018, found that the lack of digital record-keeping in the waste industry is frequently exploited by organised criminals, as it provides ample opportunity to hide evidence of the systematic mis-handling of waste. It also observed that the lack of digital records undermines efforts to improve transparency, as it presents a significant barrier to information access by interested members of industry, academia and the public. This echoes a report from the Government Chief Scientific Adviser on the value of waste, which identifies a lack of data on waste as a key barrier to making the most of waste as a resource.26

The Waste Crime Report commissioned by NRW includes a recommendation to mandate the use of electronic waste transfers. This would make the system more auditable: business would be able to manage, interrogate and retrieve WTNs more easily. Also, the provision of near real-time data would allow NRW to identify and react to suspicious movements of waste in a more timely fashion.

We are committing to mandate the digital recording of waste movements, subject to consultation. In order to support this work we require powers to make regulations in relation to waste tracking.

This is an enabling power and we would expect any changes to regulations using this power to be subject to consultation and the appropriate parliamentary procedure.

Policy objectives and intended effects

The objectives of mandating the digital recording of waste movements are:

- To integrate and simplify recording of all waste movements – bringing together separate systems covering commercial, household, and hazardous waste and linking this to other waste systems (for example waste carriers, permitting).
- To improve the quality and accuracy of data on waste movements by ensuring the right data is captured at each point in the waste chain to meet diverse user needs.
- To realise the full value of the data captured by making it easily accessible and usable

• To realise efficiencies and resource savings and remove risks associated with existing legacy systems
• To ensure that waste tracking data supports key Government Policies and Strategies – including those on waste crime and resource productivity

We want to ensure that through an electronic waste tracking system all waste movements can be easily recorded, checked, and tracked through the waste management chain, leading to more effective waste regulation and policy, and helping drive improved business productivity and investment.

Policy options considered, including alternatives to regulation

1. Do nothing. We do not introduce powers to make regulations in relation to waste tracking. This will not facilitate our work to mandate the digital recording of waste movements as recommended by the Serious and Organised Waste Crime Review, and will not enable Scotland to benefit from lessons learned through the EU LifeSmart waste crime project, nor address the action recommended in NRW’s commissioned Waste Crime Report.

2. Powers are provided in order to make regulations in relation to waste tracking. This would be an enabling power and we would expect any changes to regulations using this power to be subject to consultation and the appropriate parliamentary procedure. This is the preferred option.

Expected level of business and wider impacts

The measure we analyse is to acquire the powers to form regulation regarding waste tracking in primary legislation. In acquiring these powers via primary legislation, there will be no impact on society.

There are no direct impacts on business as a consequence of this proposal. This would be an enabling power and we would expect any changes to regulations using this power to be subject to consultation and the appropriate parliamentary procedure. Analysis of economic and distributional impacts will be conducted and form part of those consultation processes.

Digital record-keeping in the waste industry reduces the opportunity for waste criminals to hide evidence of the systematic mis-handling of waste. When these powers are implemented in the future it will provide government and regulators with more robust data; a better understanding of waste movements will, members of industry, academia and the public with more transparent access to data; and could lead to better utilisation of waste as a resource, and a reduction in waste crime.
Brief summary of distributional impacts

The implementation of secondary legislation may result in more information being available to a wider section of the waste industry (rather than the larger companies who can invest in data collection now). This may in turn lead to greater competition within the sector.

Brief summary of small businesses impacts

Impacts on small businesses will also be considered in impact assessments accompanying secondary legislation.

Brief summary of wider benefits

The powers will enable policy delivery to reduce waste crime with significant benefits to wider society and the environment. Specifically, they could help maximise the value we extract from our resources and boost productivity whilst minimising damage to the environment through illegal waste exports and fly-tipping for example.

Direct impacts of the proposals are expected to be nil. Any changes to regulations using this power, and the detailed policy design stage for waste tracking, will be subject to consultation and the appropriate parliamentary procedure.
Annex 11: Statement of impacts – Section 108 Enforcement powers in England and Wales

Background

Waste crime and poor performance in the waste sector damages the natural environment, causes harm to nearby people and costs the taxpayer money. It also impacts the UK reputation internationally through illegal waste exports and in the worst cases directly threatens human health. Illegal and poorly performing waste sites cause pollution to air, water and land, as well as causing smell, vermin and fly infestations. They can cause fires that damage and disrupt, for which the economic and social costs are high.

In its May 2017 report on “rethinking waste crime” the Environmental Services Association (ESA) reported that the waste sector was estimated to have generated £6.6bn in Gross Value Added (GVA) in 2015. Whilst the financial costs of crime to legitimate business, tax loss etc. are difficult to quantify (by their very nature) it was estimated then at £604m and other estimates have calculated it in excess of £1bn.

Waste crime also has far reaching consequences beyond the direct economic cost and impacts to the natural environment and human health in the UK. For example, figures from the anti-slavery charity “Hope for Justice” show that two thirds of victims of modern slavery report being forced to work in UK waste sites. 100s of 1000s of tonnes of waste material are exported annually for recycling, refuse derived fuel (RDF) etc. allowing for further illegality to exploit the opportunities. The export to Brazil (in one case) of 89 shipping containers consigned as plastic for recycling but actually containing 1500 tonnes of degrading waste damaging the international reputation of the UK. So far this year targeted dockside inspections have seen ~15% of shipments returned to the site of production.

The Environment Agency (EA) is responsible for regulating the waste sector in England and Natural Resources Wales for Wales. Illegality at waste sites can include non-compliance with permit conditions, misclassification of waste at permitted sites to avoid treatment/containment costs and paying the correct (or any) landfill tax and stockpiling large volumes of waste at a site then abandoning it. EA and NRW are also responsible for enforcing activities that do not happen at permitted facilities, including operating a waste site without a permit or exemption (illegal waste sites), large scale illegal dumping of waste and transferring of waste without a waste carrier licence. In 2016/17 the EA closed down over 824 illegal waste sites - over 15 per week and dealt with 218 incidents of large-scale illegal dumping of waste in England.
Section 108 of the Environment Act 1995 gives the EA, NRW and local enforcing authorities (“enforcing authorities”) enforcement powers to enter any premises necessary including waste sites and residential premises to carry out their regulatory duties with Schedule 18 providing supplemental provisions on the manner of exercise of those powers and conditions for obtaining a court warrant to enforce them where necessary. What constitutes the ‘exercise’ of a power of entry is not defined, however it has been considered that any entry onto premises in regard to undertaking a statutory function for example regulation, monitoring, incident attendance or enforcement purposes, may be deemed to be exercising powers of entry, even where full consent is given, or even where entry is at the specific invitation or request of the occupier, for example to deal with pollution or flooding.

The policy issue and rationale for Government intervention

The powers under Section 108 have limitations and the way it is currently drafted has been overtaken by developments in modern business practice and technology over the last 20 plus years and is now considered to be outdated. Section 108 was written primarily for regulatory purposes at a time when information technology was still developing, the internet was not widely used, mobile phones were in their infancy and social media and online sales had yet to be created. Businesses were usually operated from physical, occupied business premises using paper-based systems, not remotely or using predominantly electronic documentation, transmission and communication. Because the powers were drafted on that basis the increasing disparity as technology and business practices have evolved has become a significant hindrance to enforcing authorities when investigating waste crime in particular and taking rapid, appropriate enforcement action.

Section 108 requires enforcing authorities (except in an emergency) to provide 7 days’ notice of the proposed entry to residential premises and to have either the consent of the person who is in occupation of those premises or authority under a warrant issued by a justice of the peace (and even then the 7 days’ notice still applies). The advanced notice provision weakens the enforcing authorities’ ability to enter premises to gather evidence as the occupier must always be given seven days warning of the impending investigation, often defeating the object of the entry, leading to the power not being used even where available.

These additional powers are needed to support and render more effective the operation of the legal framework in this area. The major economic function of criminal law is to address the possibility of a market failure by people bypassing the market system and/or undermining the regulatory provisions designed to safeguard the public interest. This creates a market failure in that a business operating from business premises may be subject to inspection without notice, but one operating from a residential premises must be given seven days warning whether they consent
to the inspection (as a legitimate business normally would) or refuse (as an illegal operator is more likely to). If a business operating from non-residential premises refuses entry then a warrant can be applied for immediately.

Additionally, Section 108 contains no specific power to “search” or “seize” material for use as evidence in proceedings. Enforcement officers have a power to require “production of, inspect and take copies” but unlike search and seize it in effect requires the officer to know what already is available (e.g. records of waste movements that must be kept), for it to be produced and for the officer to have the capability there and then to copy it. What it does not explicitly allow for is for the officer to search for it either at the time or to remove an item and search that e.g. where specialist analysis of electronic media is necessary.

Schedule 18 requires an enforcement officer to produce ‘evidence of his designation and other authority’ before they exercise any of their powers under s108. When enacted it must have been presumed that these powers would ordinarily be used for regulatory functions at occupied premises, and that it would only rarely be required at unoccupied premises where a court warrant and notice could be provided. The modern reality is that many premises and business activities can and are remotely managed and controlled. Additionally the incursion, since the Act came into force, of serious and organised crime into waste disposal has led to the illegal use of unoccupied land and premises for rapid large scale illegal waste disposal and abandonment, creating an imbalance in the application of regulatory powers between the legitimate sector and those operating illegally.

Enforcing authorities, including both the EA, NRW and local authorities, have called for amendments. These amendments are a priority for the Environment Agency and Natural Resources Wales and viewed as essential to its ability to tackle illegality in the waste sector. We are seeking similar amendments to Section 108 and Schedule 18 of the Environment Act 1995 which the Scottish Government have already identified and made.

Defra wants to:

1. remove the requirement for the enforcing authorities to provide 7 days’ notice when entering residential premises (s108(6)(a)) where a court warrant has been issued;

2. amend the powers of entry to enable the enforcing authorities to specifically “search” for and where necessary “seize” and remove material evidence (s108(4)(k)); and

3. amend the powers of entry so an enforcement officer, whilst still required to show their authorisation if so required (i.e. where the premises are
occupied), is nevertheless able to enter abandoned or unoccupied premises when they have the authorisation to do so (Schedule 18, Para 3).

Policy objectives and intended effects

In modifying the provisions of s108 of the Environment Act 1995 the policy objective is to update and bring the legislation in England and Wales into line with that in Scotland, empowering the enforcing authorities to tackle deliberate serious waste offending reducing the impact on legitimate business, the environment, people and communities.

Measure 1: Remove the requirement in Section 108 of the Environment Protection Act (1995) to give occupiers seven days’ notice to enter residential properties

We are proposing to remove the requirement for enforcing authorities to provide 7 days’ notice when entering residential premises, where they have a court warrant to do so. Instead, the enforcing authorities would be able to enter a residential premise as soon as they have applied for and been granted a warrant from a magistrates’ court or have obtained consent from the occupier.

Under our proposal, enforcing authorities would still need to obtain a warrant to enter a residential premises in all circumstances, apart from in an emergency or where consent has been given. However, our proposed change will mean that the enforcing authorities can take quick enforcement action against suspected waste operators and fly-tippers operating from residential premises, without giving warning thus allowing them the opportunity to destroy, hide or render information inaccessible. It will significantly strengthen the enforcing authorities’ ability to tackle the increasing trend of waste criminals taking advantage of the limitations in legislation when operating from residential premises.

Measure 2: Amend Section 108 of the Environment Protection Act (1995) to allow the Environment Agency and Natural Resources Wales to search premises and seize materials (including computers, digital storage and mobile phones)

We are proposing to amend the powers of entry to enable the enforcing authorities to search for, seize and remove evidence, with the same protections and safeguards under the Police and Criminal Evidence Act that apply to other law enforcement bodies who have these powers.

This will build on the current powers in section 108(4) (k) to inspect and take copies of documents. It will apply to both business and residential premises. This change will enable the enforcing authorities to remove important evidence, such as
documents (receipts, contracts etc.) IT and digital records containing complex financial information. It will allow them to spend the necessary time interrogating the information at their offices, rather than rapidly doing this during a raid at a premises. It will significantly strengthen the enforcing authorities’ ability to obtain the necessary evidence to demonstrate to identify all of the offenders involved and demonstrate this to the courts.

**Measure 3: Remove requirements in Section 108 of the Environment Protection Act (1995) for officers to show authorisation at unmanned or remote sites**

We are proposing to amend Schedule 18 so an enforcement officer is able to enter abandoned or unoccupied premises when they have the authorisation to do so and will not be prevented from entering a site if there is no one at the site to show their personal authorisation authorising their access. This change will mean that enforcement officers will be better able to deal with the impacts from abandoned waste sites and pollution across the sector.

**Policy options considered, including alternatives to regulation**

**Do nothing option**

1. **7 days’ notice:** maintaining the current position of advanced notice will continue to hamper the enforcing authorities’ ability to enter premises to gather evidence when investigating waste crime and take rapid, appropriate enforcement action. As this aspect has now been raised in a legal challenge it is likely to become more widespread adding to the case for change now. This requirement to give notice, in circumstances where a court warrant has been obtained, would continue to give people time to remove evidence and dispose of, destroy, delete or encrypt records, before their premises are entered.

2. **Search and Seizure:** Enforcing authorities’ would continue to be unable to search for and seize material for use as evidence, that is often the only means of identifying and demonstrating the full scale of offending and links with offenders, evidencing this for the courts and securing meaningful sanctions against criminals including the recovery of the illegal gains under the Proceeds of Crime Act.

3. **Showing of personal authorisation prior to exercising powers:** Enforcing authorities would continue to be unable to rapidly and effectively deal with pollution incidents at abandoned or unoccupied waste sites or remote or unoccupied land where the owner/occupier is unknown or overseas, an offshore entity etc.
Preferred option

The three policy measures outlined in section 3 are the preferred option for addressing the limitations in the EA’s/ NRW’s enforcement powers. Non-legislative options are not viable to fulfil the policy objectives. Enforcement of the waste sector needs to be underpinned by legislation and powers to enable the regulators to enforce against illegal activity and for that enforcement activity to be robustly defended in court.

Expected level of business and wider impacts

The measure we analyse is to acquire the powers to reform Section108 in primary legislation. The estimated equivalent annual net direct cost to business (EANDCB) of this measure is below the +/- £5million threshold.

The proposed modifications to s108 are aimed at dealing with the increasing criminal activity in the waste sector, they are unlikely to impact legitimate business in a negative manner and aim to help level the playing field by making it easier for enforcing authorities to directly tackle illegal operators. The proposed changes will additionally be subject to the provisions of well-established statutory codes of practice and the protections they provide.

Business Impacts

1. The proposal to remove the 7 days’ notice period for entry to residential premises is unlikely to impact legitimate business which invariably operates from business premises. Even where they do operate from a residential premise entry could only be effected by consent of the occupier or under a warrant issued by the courts, as is currently the case, hence there is no anticipated additional impact of the modifications to this section, to legitimate business.

2. The addition of the explicit power to search and seize is only in relation to gathering evidence where offences are suspected and this is necessary. It is acknowledged that e.g. seizure of computers used for operating a business would be disruptive to that business, at least in the short term (e.g. whilst back-up systems were engaged, or equipment returned once copies were made). However this power is only for use in gathering evidence and equally in the case of disruption to an illegal activity, legitimate business would benefit.
3. Showing of personal authorisation, “if so required”: the clarification of this aspect of the Act to explicitly allow for officers to enter unoccupied premises (e.g. abandoned waste sites, open land that has been subject to illegal dumping of waste etc.) will not have any cost impact for business. Entry in these circumstances already occurs and is subject to the relevant statutory codes of practice on powers of entry, and the protections they contain. The benefit to legitimate business and landowners will be the rapid addressing of illegality that undermines the legitimate sector and impacts absent landlords.

**Distributional Impacts:**

1. By enabling greater enforcement of waste crime, there will be a positive transfer of business from illegal to legitimate operators as illegal operators find it harder to operate and are removed from the sector.

**Small business impacts specifically:**

1. Measure 1 would only be expected to impact illegally operating small businesses as larger businesses are far less likely to be operating out of residential premises. This is because the measure is specifically designed to address a problem with people operating illegal businesses where records etc. are kept on residential premises. Legally operating small businesses are unlikely to be affected as the matter would either have to be serious enough to convince a court of the grounds to grant a warrant, or the occupier had freely agreed to the entry.

2. Measure 2. In all cases the measures relate to the search for and seizure of evidence for use in criminal proceedings, i.e. dependent on the reasonable suspicion of offences occurring and necessity to seize items for those purposes. Hence the impact to legitimate business would be low/negligible. As regards illegal/offending businesses, the police have (where jointly interested) seized computers and this is disruptive to larger businesses, at least in the short term, however they are more likely to have backup copies/systems and the items would only be kept for as long as necessary (e.g. to copy) in line with the Code of Practice. Smaller companies would be more heavily impacted by such a seizure, but they are less likely to be the subject of it due to their smaller level of offending. As above it would only be for the purposes of criminal investigation and proceedings, and then only retained for so long as necessary (e.g. to copy).

3. Measure 3. The change to showing a warrant to showing it “where so required” does not have any impact on legitimate business and will be subject to one or other of the Code of Practice.

**Wider impacts**
1. Reduced waste crime with benefits to the legitimate economy, social amenity, the natural environment, public health and in the case of international; waste shipments (some 3.7m tonnes pa exported) protected and improved international reputation of the UK.

Whilst the malpractices of illegal operators are known to occur, they are not by their nature readily quantifiable, given that they take place clandestinely. The regulator, the Environment Agency, is continuously trying to bear down on them and hence the costs currently to legitimate business are unlikely to be significant. However going forward, if it is not strictly curtailed it could speedily expand. Also it is important to recognise that these illegal practices will have adverse consequences not only on legitimate competitors but also on a range of related aspects, including ecological features that would be impacted, the natural environment and the social amenities associated with these. Similarly they could have serious implications for the treatment of hazardous substances and the health and safety of both workers and the general public which would be affected.

2. Reduced tax evasion from illegal waste operations (i.e. landfill tax)
Annex 12: Statement of impacts – Vehicle seizures in England and Wales

Background

The majority of waste crime involves the use of vehicles, as this is the method waste is transferred from one location to another. From small-scale fly tipping to large illegal waste sites, vehicles are the key element to how waste is illegally kept, treated or disposed of. Being able to seize vehicles used in waste crime is a relatively new but valuable prevention and disruption tool particularly with regard to serious and organised crime networks thus stopping them from depositing waste on unpermitted land and reducing the impact on the environment, amenity and human health.

Police seizing vehicles without an EA/NRW officer present

Many EA/NRW investigations involve working closely with the local Police forces. Where the EA/NRW has evidence a vehicle has been involved in committing an offence under s1(1) CoP(A)A, s33 EPA, s34 EPA or Reg 38 EPR, it can work with the local Police force to add that vehicle onto the ANPR system. In practice, Police forces will only add a vehicle onto the ANPR where the EA/NRW have evidence the vehicle was used in the commission of an offence. Once added to the ANPR system, the cameras record if that vehicle passes them and this alerts the Polices monitoring unit. The monitoring unit then alerts the radio dispatcher who then alerts the mobile units in that area.

The policy issue and rationale for Government intervention

Police seizing vehicles without an EA/NRW officer present

If a vehicle the EA/NRW have asked to be seized is stopped by the police, it could be at any time of the day or night. It can therefore be difficult for the EA/NRW to discharge an officer straightaway to meet the current requirement to have an EA/NRW officer present. Any delay would incur a delay on the Police having to wait for an officer to attend the scene. Under this scenario, the vehicle can only be seized by the Police on behalf of the waste collection authority not the EA/NRW unless the vehicle has caused other offences of which the Police have a seizure power. The EA/NRW then, subsequently, have to seize the vehicle off the waste collection authority, both increasing the overall cost and bureaucracy.

Defra intends to change section 5(6) of CoP (A) A and 34B (6) of EPA to allow for a constable without an EA/NRW officer present, to seize vehicles on behalf of the
EA/NRW. This will reduce overall costs and increase efficiency in seizing vehicles involved in waste crime.

**Policy objectives and intended effects**

In modifying CoP (A) A and EPA, the policy objective is to update the legislation allowing the Police to seize vehicles on behalf of the EA/NRW when an EA/NRW officer is not present. This will assist the Police and the Environment Agency/Natural Resources Wales in disrupting waste criminals from depositing waste on unpermitted land and reducing the impact on the environment, amenity and human health. This would replicate the abilities of the waste collection authorities, assist in tackling waste crime and reduce the overall costs where vehicles have to be subsequently seized from the waste collection authority by the EA/NRW.

**Policy options considered, including alternatives to regulation**

**Do nothing**

This would maintain the current position where, if the Police seize a vehicle without an EA/NRW officer being present, they can only seize on behalf of the waste collection authority. The EA/NRW then, subsequently, have to seize the vehicle off the waste collection authority, both increasing the overall cost and bureaucracy. The current position may also discourage local Police forces from seizing vehicles where an EA/NRW officer is not present, particularly if they do not recover their fees for vehicle recovery.

**Preferred option**

The preferred option is to have section 5(6) of CoP (A) A and 34B (6) of EPA amended to allow the Police to seize a vehicle on behalf of the EA/NRW when an EA/NRW officer is not present.

**Expected level of business and wider impacts**

The proposed modifications are aimed at dealing with the increasing criminal activity in the waste sector, they are unlikely to impact legitimate business in a negative manner and aim to make it easier for enforcing authorities to directly tackle illegal operators.

The measure we analyse here is the primary legislation to acquire the powers to allow the Police to seize a vehicle on behalf of the EA/NRW when an EA/NRW officer is not present. In acquiring these powers via primary legislation, there will be no impact on society.
There will be no cost to legitimate businesses, however, it is likely that there will be a benefit to legitimate businesses as the new power could prevent an illegitimate business from continuing to operate. This could return future waste streams to the legitimate waste management sector.

We anticipate, based on the first year of seizing vehicles, that an additional 10-25 vehicles would be recovered. We are simplifying the process for the EA/NRW and Police, not changing what it means for business.

Brief Assessment of Distributional Impacts

There will be no distributional impacts.

Brief Assessment of Small Business Impacts

We estimate an additional 10-25 vehicles a year will be seized. Since the majority of waste crime involves the use of vehicles this greater enforcement against non-compliant waste operators and carriers, who undercut legitimate operators, could return future waste streams to the legitimate waste management sector and therefore have a minor positive impact on small businesses.

Brief Assessment of Wider Impacts

The savings will be linked to reducing the burden on the taxpayer for duplicate recovery and transport of the vehicle. Currently for the Police to seize a vehicle the EA/NRW are interested in without the EA/NRW being present, the Police would use their contractor to retrieve the vehicle and transport it to a compound. The EA/NRW would then have to arrange for their contractor to retrieve and transport, thus duplicating the fees associated with vehicle seizures.
Annex 13: Statement of impacts – Extended Producer Responsibility – Scheme Regulator

Background

The Clean Growth Strategy\textsuperscript{27} makes a commitment to explore how we can better incentivise producers to manage resources more efficiently through producer responsibility schemes. The 25 Year Environment Plan\textsuperscript{28} goes further and commits to reform the producer responsibility system (including the Packaging Waste Regulations). These commitments are taken forward in the new Resources & Waste Strategy where Extended Producer Responsibility (EPR) is presented as a flagship policy measure.

Defra has responsibility for the four UK Producer Responsibility (PR) regimes – Packaging Waste, Batteries, Waste Electrical & Electronic Equipment (WEEE) and End-of-Life vehicles (ELVs).

These regimes are derived from EU Directives, transposed into domestic legislation, but under different primary legislation (in particular, the European Communities Act 1972). They require that an element of financial responsibility is placed on producers for the collection, recycling and waste management of their products and packaging at end of life (i.e. when discarded by the final user).

We are now seeking measures to place more responsibility on producers for the end-of-life and environmental impacts of the products they place on the market. When EPR is in place, there are incentives for producers to design their products with a more sustainable use of materials, and to make it easier for them to be reused, or dismantled and recycled at the end of their life.

Reform of the packaging waste producer responsibility is the immediate priority - consultations on packaging producer responsibility reform have recently closed. Following packaging, we will review our other producer responsibility systems, starting with a consultation on the WEEE and batteries regimes. We will then look at other product types and waste streams where EPR offers the best way to ensure desired policy outcomes.

We need EPR measures included in the Bill in order to update existing regimes and expand EPR measures to new regimes. This will also allow us to reform the

\textsuperscript{27} HMG’s blueprint for Britain’s low carbon future.
\textsuperscript{28} HMG’s Plan to improve the Environment within a generation.
packaging system in line with Ministerial priorities and commitments made by the Government.

The particular measure here is to make provision such that designated regulatory bodies (scheme regulators) may take specific enforcement action to ensure full compliance with the regulations, and to ensure that these costs can be recovered from producers in accordance with the polluter pays’ principle (as defined below). We believe that without this provision, our ability to carry out the commitments and aims mentioned in the strategies and consultations will be significantly curtailed.

**The policy issue and rationale for Government intervention**

The Environment Act 1995, in section 93 on producer responsibility, allows the Secretary of State to make regulations to impose producer responsibility obligations for the purpose of promoting or securing an increase in the re-use, recovery or recycling of products or materials. This power may only be exercised after consultation with representative interested bodies or persons.

The Environment Act 1995, in section 94 on producer responsibility, states that any producer responsibility regulations made under section 93, may make provision for or with respect to the registration of persons who are subject to a producer responsibility obligation, as well as the approval, or withdrawal of approval, of exemption schemes by the Secretary of State. However, there is no specific reference to regulatory activity from the Environment Agency, or other devolved agencies (collectively, agencies). There are no specific powers, for example, to tackle ‘free riders’ (e.g. producers, retailers, reprocessors, etc., who have specific obligations and payments that they must meet under an EPR scheme, but who manage to avoid meeting these obligations). Furthermore, there is no specific mechanism for regulatory agencies to recover costs of enforcing an EPR scheme, under section 94.

The only way, currently, that the Environment Agency are able to recover costs from producers is through an indirect legal mechanism. This does not allow for the pursuing of ‘free riders’ or non-compliant producers who are abusing the system. The Environment Act 1995, section 41 to 42 enables the environment agencies to make charging schemes in relation to ‘environmental licenses’ as defined in section 56(1). These include environmental permits, waste exemptions, and various approvals under the Waste Electronic and Electrical Equipment Regulations 2013 (‘WEEE Regulations’). Whilst these limited charging powers apply for WEEE and batteries, the packaging producer responsibility regulations still do not allow the Environment Agency to set and vary charges on producers as necessary. Instead, the only way that these charges (registration fees) can be changed is through an amendment of the regulations.
We have laid out in another Bill measure specifically on waste charging powers, that regulation of the waste sector reaches beyond environmental permitting. Reform of charging powers is necessary to achieve the desired change, so that the costs of regulating EPR schemes can be passed to producers and other obligated persons. The proposed changes will allow benefits to be realised across the environment by tackling waste crime, non-compliance, waste management and export issues, while also levelling the playing field for compliant producers.

The Bill will also list the total possible functions and duties that may be conferred on a scheme regulator through secondary legislation (although this list will not be prescriptive). These will allow for enhanced enforcement and compliance related powers that will ensure our commitments for EPR are not undermined by non-compliance and illegal activity.

We believe that if this measure is not included in the Bill, then we would be severely limited in our options for implementing EPR. We believe that it may make it more difficult to meet our obligations under the Circular Economy Package (CEP), if we were forced to implement EPR without any sort of scheme regulator. Article 8a of the CEP-revised Waste Framework Directive imposes general minimum requirements for EPR schemes. These include requirements on establishing a reporting system, gathering data on products, producers, collection and waste material flows, monitoring and enforcement, etc. Without a scheme regulator, achieving even the minimum requirements stated in Article 8a will be made significantly more difficult.

For instance, Article 8a (5) has specific requirements on establishing an ‘adequate monitoring and enforcement framework’. This ensures that producers of products, and organisations implementing EPR obligations on their behalf, implement their EPR obligations appropriately, including in the case of distance sale. In addition, the framework should ensure that the financial means are properly used and that all actors involved in the implementation of the extended producer responsibility schemes report reliable data. To meet these additional requirements, we have argued that both a scheme administrator and regulator will be needed. Ensuring that all actors are captured under the system, and all are fully compliant with their obligations (including online distance sellers) and will entail significant extra cost (including additional IT, extra staff required, enforcement costs, etc.), which will have to be internalised by government if there is not a mechanism to pass these costs back to producers and other obligated persons. Failing to do so would therefore also be a failure to fully implement the ‘Polluter Pays’ principle, upon which our framework for EPR rests.

Government intervention is needed so that a scheme regulator with appropriate powers will ensure that the EPR principles are applied and enforced appropriately. By allowing the EPR system to function successfully, the scheme regulator will support the aims of the EPR system which is to correct market failures, specifically:
- **Negative environmental externalities**: associated with products’ lifecycle environmental impacts, which are not being taken into account when they are manufactured and placed on market. Examples include suboptimal use of virgin materials; increased greenhouse gas emissions associated with production use and disposal of products; litter costs to the environment and so on.

- **Lack of information** resulting from consumers not being aware of the environmental costs associated with products they buy and lack options of more environmentally friendly disposal of their products.

- **Free riding**: ‘free riders’ are companies who are obligated under EPR regulations but who do not comply appropriately with the given system. Assuming that producers act rationally, it is expected that obligated persons will respond to the existence of a scheme regulator by ensuring that they are sufficiently complying with the EPR requirements, in order to prevent facing charges imposed by the scheme regulator.

The EPR system, supported by a scheme regulator, will help remedy these market failures by enforcing the polluter pays principle. Producers can have an influential position in ensuring that high-polluting products do not enter the market as they decide, through product design, what products are manufactured. Full Net Cost Recovery (FNCR) will make producers responsible for the future full net costs of their products at the end-of-life stage – in line with the polluter pays principle.

**Policy objectives and intended effects**

Defra wants to introduce through the Bill:

i. the power to designate by statutory instrument a scheme regulator for any EPR scheme. This could be one of the existing regulators or another body as designated by the Secretary of State;

ii. the possible functions and duties of a scheme regulator, to monitor compliance, maintain adequate data records, and properly enforce an EPR scheme according to product-specific needs;

iii. the power to charge producers and other obligated persons, as necessary, for the full costs of monitoring compliance (across registered and non-registered actors), and for enforcement of the regulations, including activities such as site-visits and auditing;

The intended effects are to allow the secondary legislation to determine the specifics of the functions of the scheme regulator for each individual EPR scheme. The primary legislation is intended to be flexible enough to allow for product-specific needs, and the outcomes of future consultations.

**Description of Novel and Contentious Elements (if any)**
The regulator will be given much more flexibility in setting charges, than is currently available. Charges may vary significantly depending on the enforcement action necessary. This may prove contentious to obligated businesses, who would prefer charges to be set in secondary regulations, as is currently the case with the registration fee for packaging. There may also be concerns around the transparency of how the charges are set.

Other novel or contentious elements associated with a scheme regulator are likely to come from the concept of EPR rather than the scheme regulator itself.

**Policy options considered, including alternatives to regulation**

**Option 1 – Do nothing (don’t include a scheme regulator measure in the Bill)**

With this option, as currently, there would be no EPR-specific provision for regulatory agencies (the EA) to flexibly recover the full costs of enforcement and compliance activities from the regulated sector. This would mean that several functions listed would either be limited in scope to the current powers available under the Environment Act 1995, or they would not be possible to perform at all.

It would make it more difficult for the regulatory agencies to pass the actual costs of regulation onto obligated producers, as the current charging powers in section 41 of the Environment Act 1995 do not allow the costs of discrete enforcement and investigative action to be passed onto the regulated sectors. For the existing producer responsibility systems, the regulatory agencies (the Environment Agency) may only recover costs relating to compliance monitoring for those producers who are registered. In such a case of, this would likely mean that any reformed or future EPR scheme would be subject to significant ‘free riding’ by producers. This goes against government commitments for reform, and runs contrary to the ‘polluter-pays’ principle.

Without any scheme regulator there would likely be:

- No central registry
- No central data gathering, reporting, monitoring
- An inability to manage redistribution of funds to LAs to ensure fair funding
- No independent oversight of labelling requirements
- No central communications or awareness campaigns, no oversight of campaigns independently carried out by producers
- Inability to distribute funds for litter campaigns and litter clean-up
- Reduced transparency in the system
- Significant ‘free-riding’
- Limited central investment into R&D, reprocessing capacity, and innovative tools such as waste shipment tracking and smart databases
- An inability to react to the changing costs of enforcement
- Difficulty for the regulatory agencies in maintaining environmental standards for waste exports

This would also eliminate the option to implement certain ‘models’ of EPR. For example, it would be impossible to reform or introduce EPR schemes with a ‘single producer responsibility organisation (PRO)’ model.

Not having a scheme regulator as specified in the Bill measure would severely undermine our efforts to reform current producer responsibility and to introduce new EPR schemes. For example, since a landfill ban already exists, introducing EPR for tyres can only be effective to the extent that there is adequate enforcement power and money in the system to tackle small-scale waste carriers who are neglecting their duty of care obligations, and to tackle the wider problem of systemic waste crime in the system.

**Option 2 (preferred) – Setting up powers that allow the Secretary of State and devolved ministers to appoint a scheme regulator as necessary for new and reformed EPR schemes and to confer new enhanced powers on the regulator.**

This would allow Government to reform or introduce EPR in a way that, according to the different needs of each material/waste product type, would best achieve the social, economic and environmental outcomes that we seek.

The charging powers proposed, alongside enhanced powers to enforce the system, will provide regulatory agencies with more secure funding to reduce non-compliance and waste criminality. The proposed changes will help fund interventions to ensure that polluters pay for the full net costs associated with their products – a foundational principle that we have laid out in our Resources and Waste Strategy.

Additionally, there are significant economic and environmental benefits as a result of minimising the amount of illegal and non-compliant actors in the system. For example, through funding better enforcement, we can improve the quality of waste exports, and better monitor their end destination – thereby reducing potential adverse impacts on the environment through below-standard reprocessing. By tackling ‘free riders’, the regulator can contribute to protecting the revenue of compliant businesses, and more fairly distributing the costs of regulation across the obligated sector.

By introducing new powers into the Environment Bill, we would establish a consistent and flexible approach to the regulator’s ability to recover costs and impose charges for its enforcement and compliance functions. The regulator should be able to charge:

- Persons obligated under an EPR scheme (e.g. producers, retailers, suppliers) for compliance and enforcement activities, and to cover relevant administrative costs.
• For costs for reactive enforcement and compliance activities, such as interventions required to bring free riders into compliance.
• Accreditation and registration of exporters and reprocessors.

Collectively, these measures will fund activities to:

• Better monitor compliance (thereby identifying non-compliant operations and potentially preventing illegal activity through early intervention) and,
• Fund enforcement campaigns against non-compliant operations, and ensure that waste is being exported and reprocessed to the required standard.

**Expected level of business and wider impacts**

Acquiring powers in secondary legislation will not have any direct impacts on businesses at present. Should the powers obtained be acted upon this may lead to direct business impacts.

If secondary legislation requires participation of small businesses, this could then result in reporting and compliance costs specific to each producer responsibility scheme. These would be estimated in detail in specific impact assessments.

*Assessment of Impacts on Business*

The impacts on business will depend on the nature of the scheme regulator that is designed and option chosen. Acquiring powers in primary legislation will not have any direct impacts on businesses at present.

Should the powers obtained be acted upon this may lead to direct business impacts. For example, for packaging, once the regulatory powers detailed in Option 2 are applied, the associated costs with running a scheme regulator would be covered by obligated packaging producers.

There are no immediate direct impacts on business as a consequence of these proposals.

*Brief Assessment of Distributional Impacts*

Acquiring powers will not have any distributional impacts.

If the powers obtained were acted upon, it is likely that there would be a redistribution of compliance costs faced from compliant producers to ‘free riding’ producers. The scheme regulator will have the required powers to ensure all obligated-producers comply with FNCR – this will increase the financial burden on those previously ‘free riding' the system and the FNCR will be shared amongst a greater number of producers, thus it is possible that compliant obligated producers will pay for a smaller share of FNCR.
In addition, at present, ‘free riding’ obligated producers may be able to optimise on their zero compliance costs and charge lower prices for their products compared to a compliant competitor. A scheme regulator would prevent this trade advantage from skewing the market and ensure that businesses are not ‘squeezed out’ of the market on account of complying with government regulation. Thus similarly, there may be a distributional impact of market share, with those previously ‘free riding’ losing out and those previously complying increasing their market share.

**Brief Assessment of Small Business Impacts**

Acquiring powers will not have any immediate small business impacts.

If secondary legislation requires participation of small businesses, this could then result in small businesses reporting and facing compliance costs specific to the relevant producer responsibility scheme – including the costs of covering a scheme regulator. These would be estimated in detail in specific impact assessments. In addition, if there are small businesses who are not meeting their obligations they’re likely to be bought into compliance by a scheme regulator.

**Wider Impacts**

Acquiring these powers will not have any immediate wider impacts.

Should the powers obtained be acted upon we expect that the scheme regulator would help to deliver the following non-monetised benefits:

- Single point of information reporting and data registration, improving data quality for relevant products and packaging materials covered under extended producer responsibility.
- Improved enforcement for the regulator tackling online retailers and free-riders or any other producer responsibility leakages.
- Efficiency gains in terms of levying and redistribution of funds, including the full net cost recovery funds.
- Independent review of producers’ performance, fair fees and necessary funding for well-functioning EPR schemes.

Through achieving the operational benefits outlined above there will be associated non-monetised environmental benefits, including:

- Reduced GHG emissions associated with waste being incinerated/sent to landfill
- Reduced use of virgin materials due to a greater stock of recycled-materials being available

Appointing a new scheme regulator would result in potential burden to Government (e.g. core Defra) and industry in terms of establishing the scheme. These potential costs are currently unknown and are dependent on future EPR schemes.
The measure of acquiring relevant powers would only be relevant to government policy making and the implementation of environmental legislation by Government and its public delivery bodies. Therefore it is not envisaged as having any direct impact on businesses or community or voluntary sector groups. Direct impacts may occur in the future due to the powers arising from this intervention but they will not appear immediately.

Background

Producers’ responsibility is the concept of businesses, typically manufacturers and importers, taking environmental and financial responsibility for the products and associated packaging that they place on the market when those products and packaging are discarded and become waste. Producer Responsibility requires that those that place products on the UK market pay towards the recycling and the environmentally safe disposal of these products when discarded by the final user.

Producer Responsibility systems aim to achieve a more sustainable approach to resource use; by applying the ‘polluter pays’ principle. Such systems require that a significant proportion of obligated products are reused, recycled or recovered at the end of their useful life, and that brands and manufacturers contribute towards the waste management costs of their products. This reduces the quantity of resources going to landfill or incineration; as well as the need for virgin materials for use in new products, which in turn assists in the reduction of the carbon footprint.

Although a devolved matter, Defra has responsibility for the four existing UK Producer Responsibility regimes – Packaging Waste, Batteries, Waste Electrical & Electronic Equipment (WEEE) and End-of-Life vehicles (ELVs). These regimes are derived from EU Directives, transposed into domestic secondary legislation.

Under these Regulations, businesses are financially responsible for ensuring they obtain appropriate evidence to prove they have met their specific recycling obligations, which contribute to both domestic legislative targets and the UK’s overarching targets to the EU.

In the past, the sole focus for the UK has been on minimising financial obligations for business whilst still meeting EU/national recycling targets. This has meant that financial obligations have covered largely only the costs of product recycling/recovery, instead of their whole waste management journey.

Now that we have left the EU, we want to place more responsibility on producers for the environmental impact of the products they place on the market, through the application of Extended Producer Responsibility (EPR). The rationale behind EPR is that, with the extension of producer responsibility to all the phases of the life-cycle of
products, producers are incentivised to make their products more suitable for reuse, repair and recycling, leading to better resource use and end-of-life management. Producers will also be responsible for the full net costs of managing their products at end of life. The ‘net’ feature means producers would be expected to keep the revenue from the sale of materials for recycling.

The policy issue and rationale for Government intervention

We want to see producers taking greater stewardship or ownership of the resources used in their products, from the design phase through to managing products at end of life. A key principle of EPR is that producers cover the net cost (taking account of revenue from the sale of materials for recycling) of managing their products at end-of-life.

At present, the ‘polluter pays’ principle, is not fully implemented by our existing producer responsibility regimes – producers do not internalise the full end of life and environmental costs associated with their product at its end of useful life when manufacturing it. These costs then tend to be paid from the public purse and potentially having detrimental environmental impacts (e.g. wider environmental pressures of landfilling or littering) because those who manage the waste have no power to determine what packaging is placed on the market. As a result, there is a market failure from the production negative externalities, where government intervention is required.

In line with the polluter-pays principle, the Full Net Cost Recovery (FNCR) intends to change producer behaviour by requiring producers to pay for the recycling and waste management costs of their products and hence ensure that a significant proportion of obligated products are reused, recycled or recovered at the end of their useful life. We expect that by requiring producers to foot the financial burden for their products at the end-of-life stage, these producers will then have a stronger motivation to design products that are easier to fix, make more recyclable products, use less packaging, use more recycled content in their products and have less of an environmental impact if littered.

Producers can have an influential position in ensuring that high-polluting products do not enter the market as they decide. They choose which products to manufacture for sale and how they are designed. Full Net Cost Recovery (FNCR) will correct the identified market failure by making producers responsible for the future full net costs of their products when it becomes waste. The net feature means producers would be able to offset some of the costs of managing their product once they are waste with revenue from the sale of materials for remanufacturing, reuse or recycling. Behaviour change at a producer level could alter the products available to consumers. For example, producers would pay more if their product cannot be recycled, is difficult to
recycle, or contains less recycled material – and hence producers would be likely to alter the product/packaging that they place on the market as this would reduce their full net cost recovery (FNCR) fee paid to the EPR scheme.

**Policy objectives and intended effects**

As set out above, the policy intention is to implement the polluter pays principle in respect of products and packaging and to incentivise producers to take more responsibility for the end of life impacts by requiring producers to pay the FNCR associated with their product/packaging becoming waste. To strengthen and amplify this incentive to change behaviour, this measure seeks two additional powers related to how FNCR could be raised. The powers requested require:

a) FNCR to be raised by modulated fees. The profile of these fees would be based on a set of criteria. This modulation could be used to reward producers who design and make products that are easier to repair, are more recyclable, use less packaging and use more recycled content in their products. This will create the right incentives to increase the overall proportion of products (subject to the legislation) that are reused, recycled or benefit from material recovery at the end of their useful lives.

b) FNCR to be raised by modulated fees and Deposit fees. The deposit fee would be levied on obligated producers who place recyclable products on the market. The deposit fee will be redeemable, but whether it is redeemed in full or in part will depend on the production of evidence of recycling. If implemented, the deposit fee will work in addition to a modulated fee system, as it would not be reasonable to levy a deposit fee on a product that cannot be recycled, and hence the fee would not be redeemable – instead a modulated fee should be levied on non-recyclable products.

Deposits will be refundable on the production of evidence of recycling obtained from those carrying out recycling in the UK (reprocessors) or those exporting waste for recycling (exporters). A producer will not have to recycle their actual products/materials but will provide evidence that an equivalent amount of the same product type/material has been recycled. Any money that is not returned to producers through partial redemption of the deposit will be used to contribute towards full net costs.

Defra is requesting a power to levy a deposit fee periodically from obligated producers under an EPR scheme, and set deposit levels periodically for each type of recyclable product/format/material as required. Unredeemed deposits will be used to meet the FNCR commitments. This Deposit Fee system would be used to reward producers who design and make products/packaging that are easier to recycle – this
is because there will be more evidence of such products/packaging being recycled for producers to buy for the purposes of redeeming their deposit.

Where products/packaging are not recyclable, a modulated fee would be charged, instead of a redeemable deposit. This would incentivise product design change in order to avoid unredeemable fees.

Producers should be responsible for funding the collection, transport, sorting, treatment and disposal of their products once they become waste. Additionally, producers should be responsible for funding consumer communication campaigns and the clean-up costs of littered and fly-tipped items. For packaging, local authorities currently fund the majority of these activities for managing packaging arising in the household waste stream. Under the ‘polluter pays’ principle (in an extended producer responsibility system) those costs would be borne by the producers.

EPR provides a powerful tool to ensure the financial contributions paid by producers better reflect the end-of-life management costs of their products. On a product by product basis it can be used to impose higher costs on products with a higher environmental impact. This would incentivise change to incorporate environmental costs as a factor of production. The current regulations provide no real incentive for producers to design products that are easier to recycle or repair. Choices at the design stage play a key role in how easy products are to recycle or repair, and therefore, the cost of managing them at end of life.

We propose modulating producer fees and/or implementing a deposit fee system, to incentivise better product design. The criteria for modulating fees would need to be specific to different waste streams (e.g. WEEE may need different criteria to packaging). However, we would consider recyclability, reparability, durability, recycled content and resource efficiency to be potential criteria.

FNCR will support the Government’s aim for zero avoidable plastic waste and doubling resource efficiency by 2050 and work in tandem with the HM Treasury’s proposed plastic packaging tax.

Policy options considered, including alternatives to regulation

There are no realistic non-regulatory alternatives that would achieve the aims of full net cost recovery. Standard economic theory implies that it would not be rational for one producer to voluntarily cover the full costs of their product/packaging going through the waste system unless their competitors were also voluntarily paying. Thus, this market failure of coordination can only be corrected through a regulatory approach, and a number of producer responsibility schemes already exist in
regulation. This policy requires producers to operate on a level playing field, therefore regulations are required to ensure that all obligated stakeholders comply.

**Option 1: Do nothing**

There are existing producer responsibility regulations in place, deriving from EU requirements. The ‘do nothing’ option would be to maintain these regulations in their current state.

Current producer responsibility schemes have been designed to meet existing EU recycling targets for packaging, waste electrical and electronic equipment (WEEE), end of life vehicles and batteries. However, the current regulations need reforming to meet government commitments for higher recycling rates and to drive the use of more recyclable and resource efficient products.

The current producer responsibility regulations provide no incentive for producers to design products that are easier to recycle or repair. Choices at the design stage play a key role in how easy products are to recycle or repair, and therefore, the cost of managing them at end of life. The current regulations do not require producers to pay FNCR.

**Option 2: Introduce full net cost recovery under Extended Producer Responsibility schemes**

We want to see producers taking greater stewardship of the increasingly limited resources used in the manufacture of their products, from the design phase through to managing those products at end of life. A key principle of EPR is that producers cover the net cost (taking account of revenue from the sale of materials for recycling) of managing their products at end-of-life.

In adopting the ‘polluter pays’ principle in full, producers should be responsible for funding the collection, transport, sorting, treatment and disposal of their products at waste stage. Additionally, producers should be responsible for funding consumer communication campaigns and the clean-up costs of littered and fly-tipped items. For packaging waste, local authorities currently fund the majority of these activities for managing packaging arising in the household waste stream. Under the ‘polluter pays’ principle in an extended producer responsibility system those costs would be met by the producers.

EPR provides a powerful tool to ensure the financial contributions paid by producers better reflect the end-of-life management costs of their products. On a product by product basis it can also be used to impose higher costs on products with a higher environmental impact. We propose introducing:

- Modulated producer fees to incentivise better product design. For example, producers pay more if their product cannot be recycled, is difficult to recycle, or contains less recycled material – and less if their product is easy to recycle.
b. A Deposit Fee System. A deposit fee would be levied on a product/material that is recyclable – it would be redeemable upon the producer providing evidence that they had paid the net cost associated with managing an equal amount of product/material being recycled. The deposit fee system would be designed to work in tandem with the modulated fee system.

The fees would either be paid to a government established scheme administrator or to a scheme administrator independent of government. In the latter case, the scheme administrator would need to operate to standards required by government.29

With regards to a modulated fee system - we require a power for the Secretary of State and devolved ministers to modulate producer fees periodically according to the following criteria:

a. Product design – better design could extend the lifetime of a product by making it more repairable, reusable, upgradeable or durable.

b. Choice of materials – for example, use of materials that can be recycled easily and that use greater recycled content.

c. Production processes – this relates to the environmental impacts and resource efficiency of the production process. For example, a process that uses a lot of energy or a process that uses fewer materials.

With regards to a deposit fee system - we require the powers for the Secretary of State and devolved ministers to:

a. Levy a deposit fee, periodically, from obligated producers in an EPR Scheme who have placed on the market/handled products that are on the “approved list”; to retain this money for a period of time; and to return the deposit, or part of it, only upon the submission by the producer of evidence that an equivalent tonnage of the same material/product has been recycled to a standard or criteria as defined for that EPR scheme.

b. Set/adjust the deposit fee level periodically for each product type/material/format that is on the “approved list”.

The definition of full net cost recovery should cover30:

a. The cost of collecting and transporting of waste captured under an EPR scheme

b. The sorting and treatment of waste captured under an EPR scheme (where required) for recycling

c. Disposing of waste captured under an EPR scheme in the residual waste stream

29 See EPR Scheme Administrator for more details.
30 The full net costs are not meant to cover all costs within an EPR system. As an example, if a scheme administrator is part of an EPR system, then the administrative costs of this body would be covered by a separate scheme administrator fee.
d. Providing information to consumers and business on recycling waste captured under an EPR scheme

e. Clean up costs of littered and fly-tipped products captured under an EPR scheme

f. The collection, collation and reporting of relevant waste management data (including litter and fly-tipping) of waste captured under an EPR scheme.

Option 2 is the preferred option.

Expected level of business and wider impacts

This document presents the rationale for acquiring the powers for the Secretary of State and devolved ministers to charge businesses for the FNCR of their products when they become waste under an EPR scheme.

Through the Environment Bill, we are seeking to acquire powers for the Secretary of State and devolved ministers which will then be applied into specific measures for individual products through secondary legislation. These will be accompanied by relevant Impact Assessments. For this reason the acquisition of power will not impose any direct impacts on businesses.

Our consultation on reforming the packaging producer responsibility system and its associated impact assessment provides our early estimates of the respective size of the FNCR to packaging producers. It also shows the implications to small and micro businesses. We summarise the potential impacts of applying the powers via secondary legislation here for information only. Under the FNCR of packaging costs, producers would be faced with costs ranging from £0.9-£1.2 billion per year or, once discounted, £8-11bn over a ten year period. Please note that these costs represent just a partial assessment of the impact of reforming the packaging EPR system.

Brief Assessment of Distributional Impacts

Within sectors, FNCR will make producers using hard-to-recycle or less resource-efficient materials less competitive relative to producers that place products on the market that meet good eco-design principles. This is what modulated fees and deposit fees are designed to achieve. For example, FNCR and modulated/deposit fees could deliver a shift to more recyclable plastic packaging. Our early assessment estimates that around 88 thousand tonnes of difficult to recycle polystyrene and PVC plastic packaging could shift to fully recyclable plastic packaging.

31 ‘Reforming the packaging producer responsibility system in the United Kingdom’ impact assessment, Scenario 1, under household packaging and whole municipal sector costs. Figures use 2017 prices and, when discounted, 2023 Present Value as in the EPR impact assessment.

32 ‘Reforming the packaging producer responsibility system in the United Kingdom’ impact assessment, Scenario 1
**Brief Assessment of Small Business Impacts**

The key issue that directly affects Small and Micro sized enterprises (SMEs) is the *de minimis* threshold. This is a threshold that was created to protect small businesses from the burden of complying with current producer responsibility regulations. The current threshold varies by product type. The packaging threshold for example exempts businesses that handle less than 50 tonnes of packaging and has a turnover of less than £2m a year. If the *de minimis* threshold were to be lowered or removed, then more SMEs would face costs as a result of producer responsibility regulation.

If the *de minimis* threshold remains unchanged, SMEs may still be impacted by the measure. This is a result of producers elsewhere in the supply chain having to pay more as a result of FNCR, these costs may be passed along the chain to SMEs. We anticipate however that these costs would then be passed on by SMEs to the final customer. We don’t expect SMEs to be affected if they are a supplier to an obligated producer.

In terms of deposit fees, SMEs may not have the cash-flow capability to part with a deposit fee for a given period of time, and thus it is important that the costs to SMEs are proportionate if a Deposit Fee system is written into secondary legislation.

Detailed assessment of SMEs impacts will be presented in product-specific Impact Assessments.

**Brief Assessment of Wider Impacts**

Implementing FNCR will discourage the production of difficult to recycle or less resource efficient products. As a result it can reduce the amount of carbon emissions associated with products made of primary raw materials, reduce disposing of products in residual waste and can reduce the disamenity impacts from littering. For instance, the EPR packaging reform’s early estimates indicate 88 thousand tonnes of plastic packaging shifted from residual waste to recycling, resulting in ~1.4Mt CO₂e GHG emissions savings in 2023-2032. There will be a positive social impact through correcting the market from producing negative externalities, meaning that the full societal cost of production is reflected in the private costs of manufacturing and selling products.

The exact impacts can only be monetised once a clear mechanism of FNCR is proposed and will be product specific. For example, the forthcoming packaging reform consultation impact assessment provides estimates of the costs and benefits associated with shifting the FNCR on packaging producers and the impact of modulated fees on the recyclability of plastic packaging. However, as with batteries, WEEE and ELVs the exact monetised impacts of FNCR are yet to be derived.
The product-specific IAs will aim to assess the societal costs and benefits for each product under which producers are requirement to meet the FNCR.

The proposed measure of acquiring relevant powers would only be relevant to government policy making and the implementation of environmental legislation by Government and its public delivery bodies. The measure would allow for primary enabling powers, which would then be applied to the relevant secondary legislation for individual producer responsibility regimes (e.g. packaging, WEEE).

Therefore, the measure in itself it is not envisaged as having any direct impact on businesses or community or voluntary sector groups. Direct impacts may occur in the future due to application of the powers arising from this intervention but they will not appear immediately. When changes to the producer responsibility regulations are assessed as a result of this intervention they will be subject to a consultation and full impact assessment. Thus, it is a low-cost regulation below the de minimis threshold of +/- £5m EANCB (equalised annualised net cost to business) allowing it to qualify for the fast track process.
Annex 15: Statement of impacts – Improved enforcement against littering and related offences

Background

This proposal covers two related powers concerning litter. The purpose is to improve enforcement against littering. Both powers aim to achieve the policy aims set out in the Litter Strategy for England (2017) and overall strategic aims of the Welsh Government to apply best practice in education, enforcement and infrastructure to deliver a substantial reduction in litter and littering behaviour.

Figures from the National Crime Survey for England and Wales consistently showing that around 30% of people perceive “litter and rubbish lying around” to be a problem in their area.33 Due to high levels of contamination, if litter is collected it generally ends up in landfill or incineration rather than being recycled, which represents a waste of resources. If it is not collected, litter creates a negative impact on public spaces, including an unsightly and unhygienic social cost, and potential impacts to the local economy such as reducing house prices34. It can also enter the water system and cause a serious problem as marine pollution, for example by harming marine wildlife through ingestion, entanglement and/or chemical contamination from eating those materials35. These negative environmental externalities are generally not taken into account by those dropping the litter. By making it easier to hold litter authorities to account for clearing up litter on their land, and by improving litter enforcement activities, these four related powers aim to reduce litter and littering behaviour in order to reduce these associated negative externalities.

The policy issue and rationale for Government intervention

Improved enforcement against littering and related offences

In accordance with the aims of the English litter strategy and overall strategic aims of the Welsh Government, we want to support councils in implementing a proportionate and responsible approach to enforcement against littering, so that it operates as an effective deterrent and retains the support of the wider public.

This involves two related powers:

1. Power for the Secretary of State/ Welsh Ministers to prescribe conditions to be satisfied by any person before they may be authorised by a litter authority to carry out these enforcement functions.
2. Power for the Secretary of State/ Welsh Ministers to issue statutory guidance on the use of litter authorities enforcement powers, to which litter authorities must have regard when exercising their powers;

**Power 1:** There are currently no standardised conditions, in terms of their skills, quality or professionalism of their activities, that must be met by a person before that person may be authorised by any litter authority to issue fixed penalty notices for littering and related offences. This allows for variation between officers and litter authorities, and contributes to the mistrust and lack of public confidence described above.

As above, improving consistency between enforcement officers would help to improve public confidence, and achieve the overall aims of reducing litter and the associated negative externalities. Prescribing the conditions to be met would also act as a further safeguard against inappropriate or disproportionate activity. There is therefore rationale for government to intervene to provide this on a national scale.

**Power 2:** Many local authorities employ private sector enforcement contractors to carry out litter enforcement activities, and the contracts sometimes provide for the contractors to be paid per penalty issued, which can create a perverse incentive for officers to issue litter penalties, or to pursue ‘easy targets’ such as smokers at the expense of enforcement against other types of littering. These enforcement activities are perceived by some sections of the public as a means for local authorities to raise revenue by penalising and fining citizens, with anecdotal evidence of fixed penalty notices issued for trivial offences.

Where litter enforcement is viewed as illegitimate or disproportionate, this undermines public confidence and there is a failure in the ability for enforcement to achieve the aims of reducing litter and reinforcing social pressure against the littering behaviour. There is therefore rationale to strengthen the current non-statutory government guidance on the use of litter authorities’ powers, in order to provide clarity and to help to improve public confidence in enforcement activity.

**Policy objectives and intended effects**

The objectives the two powers are:

- To increase public confidence that litter enforcement is carried out in a fair and consistent manner, and ensure that citizens and enforcing authorities are clear on the expected use of these powers;
To enhance safeguards against inappropriate or disproportionate enforcement activity.

Policy options considered, including alternatives to regulation

This document presents the rationale for acquiring powers in order to both implement an administrative procedure to hold litter authorities to account in accordance with their statutory duties; and to improve the exercise of enforcement functions against littering and related offences. The options considered are therefore whether to acquire the powers in measures 1 and 2, or to not to do so. These options are set out for each power below.

The common aim of the two changes is to improve the exercise of enforcement against littering and related offences in order to correct the negative externalities associated with litter outlined above. Other options looking to correct these issues have been considered, but rejected on the grounds that they would not meet all of the policy objectives described above.

**Power 1** extends existing powers to enable the SoS/ WMs to prescribe conditions to be satisfied by a person (relating to the skills, quality and/or professionalism of their activities) before being authorised by any litter authority to issue fixed penalties for littering and related offences. This will require further consultation and secondary legislation to implement, however could involve, for example, the requirement to become a member of a professional trade association, and/or to obtain some industry charter-mark, and/or complete or attain a particular professional qualification. At present, the SoS/ WMs may only prescribe conditions to be met before a person may be authorised by a parish or community council to issue fixed penalty notices. The implementation of this power would act as a further safeguard against inappropriate or disproportionate activity, and meet the aim set out in the Litter Strategy for England that proportionate enforcement should be used in conjunction with education. This also supports the Welsh Government’s aim of ensuring that any enforcement regime is accompanied by appropriate public engagement, awareness raising and wider education programmes. It is believed such an approach will help ensure a positive response from citizens and result in a sustainable reduction in offending behaviour.

**Do nothing.** Under a ‘do nothing’ scenario, there would continue to be no standardised conditions that must be met by a person before being authorised to carry out enforcement against littering, either in terms of their skills, quality or professionalism of their activities. Although industry bodies may choose to establish industry charter-marks or professional codes (and there is anecdotal evidence that some are already doing so), these may not apply consistently across the industry or achieve the objective of increased public confidence. In addition, the Government
would not have any specific power to recognise or actively endorse particular codes/marks. Therefore, the preferred option is to acquire the power.

**Power 2** puts the existing power for the SoS and WMs to issue guidance on the use of litter authorities’ enforcement powers on a statutory basis, and creates an explicit requirement for litter authorities to have regard to it in the exercise of these functions. Putting the guidance on a statutory basis creates an explicit legal obligation on litter authorities to have regard to it in carrying out their enforcement functions. It would provide clarity to both citizens and litter authorities about the expected use of these powers, as well as promoting greater consistency between local authorities, and improving public confidence and understanding of appropriate enforcement activity.

**Do nothing.** Under a ‘do nothing’ scenario, existing government guidance would remain in place, which litter authorities must still “have regard to” as a matter of public law. However, citizens wishing to challenge instances where litter authorities do not follow the government guidance would continue to face a weak legal position. Alternative options such as explicitly banning specific approaches or types of contract have been considered but rejected, as this would be easier to side step with the creation of a slightly different contract. Therefore, the preferred option is to acquire the power.

**Expected level of business and wider impacts**

The key wider impacts of all of these powers upon implementation would be a cleaner environment, and the reduced negative social and environmental externalities associated with litter, in comparison to the baseline do-nothing scenarios.

The acquisition of **power 1** in primarily legislation will not impact on business. When this power is implemented in secondary legislation in the future, litter authorities will be responsible for ensuring that any contractors or in-house staff meet the conditions prescribed. This would have a knock-on impact for the contracted private enforcement companies and their employees, who would have to comply with the conditions and may have to meet the associated costs (for example, compliance with an industry charter-mark). These costs will depend on the conditions prescribed.

It has not been possible to quantify these costs at this time due to the wide variety of options that the prescribed conditions may take and the need for consultation to decide on this. For example, options might range from required membership of a professional body, to complying with an industry charter mark. The specifics of any impacts (on litter authorities and private enforcement companies) will be quantified and detailed in impact assessments accompanying the necessary secondary legislation.
Power 2 is not expected to have any direct impact on businesses, but will have wider impacts on litter authorities and the environment, assessed below. This power will not require further secondary legislation to implement, however will require the SoS and WMs to consult on the proposed guidance before it may be issued.

There would not be any direct impact on businesses because all of the bodies which have enforcement powers are public bodies (predominantly local authorities, plus the Broads Authority in England), and only these litter authorities will be required to “have regard” to the issued statutory guidance. There may be a knock-on effect for businesses (in terms of private enforcement companies) by affecting the contract under which they operate, however businesses won’t be bound by the guidance directly. Litter authorities will be impacted by the requirement to “have regard” to guidance, however as authorities are already expected to have regard to the existing non-statutory guidance, this impact is expected to be fairly minimal. It is estimated that the only additional cost will be a familiarisation cost for an employee in each local authority to read and familiarise themselves with the guidance. England have recently consulted on and re-issued guidance on the use of enforcement powers, so the additional cost of putting this on a statutory basis is expected to be negligible. In Wales, the guidance is likely to be updated at the same time, so a one-off familiarisation cost is estimated. The time cost of an employee in each of the Welsh local authorities reading through the new guidance once (estimated to be an additional 17 pages, based on the new English guidance), is estimated at a total of £470 across all 22 Local Authorities in Wales. The existence of such statutory guidance will make it easier for concerned citizens to hold them to account for not complying with it, however, the guidance will be consulted on before being decided on and implemented, so it has not been possible to quantify this impact at this time.

The acquisition of these powers has no direct impact on businesses, including distributional impacts or any disproportionate burdens on small businesses.
Annex 16: Statement of impacts – Power to set a deposit of named products as part of a Deposit Return Scheme (DRS)

Background

A Deposit Return Scheme (DRS) is a form of extended producer responsibility (EPR). The UK Government has committed through its Clean Growth Strategy to explore how we can better incentivise producers to manage resources more efficiently through producer responsibility schemes, and has ambitious aims of achieving zero avoidable waste by 2050, eliminating avoidable plastic waste by the end of 2042. Moreover, the 25 Year Environment plan commits to reforming the producer responsibility system (including the Packaging Waste Regulations).

As part of the Litter Strategy for England 2017, the UK Government established an expert group – The Voluntary and Economic Incentives Working Group - to look at different incentives to improve recycling and reuse of packaging, and to reduce the incidence of commonly littered items. In particular, the Working Group considered the advantages and disadvantages of different types of deposit and reward and return schemes for drinks containers. Following a call for evidence, the Working Group recommended that Government further investigates the potential for using a well-designed DRS alongside a reformed packaging waste producer responsibility system. In light of this, the Government confirmed that it would introduce a DRS for drinks containers in England, aimed at boosting recycling rates and reducing littering, subject to consultation. An initial consultation ran from February to May 2019 and a consultation impact assessment on DRS was published alongside it.36

The Welsh Government’s waste strategy Towards Zero Waste establishes EPR as a key principle for Wales. A recent report published by the Welsh Government ‘Options for Extended Producer Responsibility in Wales’ recommended an EPR approach for packaging, including DRS for drinks containers. In the light of this the Welsh Government committed to consulting on whether a DRS for drinks containers should be introduced in Wales.

The principle of a DRS could be introduced for any named product as a way to reduce litter and/or increase recycling.

36 The consultation and respective consultation impact assessment can be found on the Defra website: https://consult.defra.gov.uk/environment/introducing-a-deposit-return-scheme/
The policy issue and rationale for Government intervention

There are significant and ongoing negative externalities arising from the inappropriate disposal of products, often due to the fact that consumers do not value on them once used (for example, packaging once empty) or are unable to find an appropriate or convenient route of disposal (such as a recycling bin whilst away from home). Products that could have been recycled are therefore disposed of them via black-bin waste, or the general litter bin or littering. Material being littered creates a negative impact on public spaces, including an unhygienic and unsightly disamenity effect, the potential to negatively impact the local economy (for example, due to supressing property prices), and a significant burden on Local Authorities to clear. Collected litter often ends up in landfill or incineration rather than recycling due to high levels of contamination, and if it is not collected, litter can enter the water system and cause a serious problem as marine pollution. It is estimated that 80% of man-made debris in the marine environment originated on land before being thrown, blown or washed into rivers, canals and the sea37.

In addition, recycling material reduces greenhouse gas emissions. This is due to both a reduction in the amount of waste going to landfill or energy from waste plants, and the avoidance of virgin materials to create new products. Increasing recycling and encouraging the use of recyclable and recycled materials in production helps to move towards a circular economy, keeping resources in use for as long as possible and extracting the maximum value from them.

A deposit return scheme (DRS) imposes a surcharge on a product when it is purchased, which is then rebated when it is returned after use. The availability of a rebate places a monetary value to the consumer on the post-use product. This can be set to reflect the true social and environmental costs of disposal and will encourage consumers to return the product. Successful return ensures the product can be recycled into secondary raw materials.

A DRS is in accordance with the ‘polluter pays’ principle, as the costs of are to be part-funded by the producers of the material in scope. This forms part of Extended Producer Responsibility (EPR), requiring that producers placing products on the UK market pay towards the recycling and safe disposal of those products when discarded by the final user.

The deposit system has an advantage over a traditional tax because it incentivises disposal behaviour change, rather than focusing on consumption choices. This corrects the market failures associated with litter and recycling, and generates significant social and environmental benefits. The principle of a DRS could be introduced for any named product as a way to reduce litter and/or increase recycling,

such as batteries, electrical goods or furniture. It is proposed to first apply this to drinks containers, with the potential to extend to other materials in the future.

This enabling legislation will include the powers to appoint both a scheme administrator and a scheme regulator for any deposit return scheme that is set up. In practice, these functions may be achieved by the same body, however this is not specified at this stage of legislation.

A scheme administrator must be able to monitor and oversee a DRS, including functions such as reporting on return rates achieved, overseeing communications campaigns and labelling requirements, and levying fees from obligated producers.

A scheme regulator must be able to use the necessary tools to monitor compliance and undertake regulatory activities. This will ensure that compliance is achieved, and will correct market failures such as free riding, whereby companies that are obligated under DRS regulations are able to avoid full compliance without the risk of retribution.

**Policy objectives and intended effects**

The purpose of this legislation is have the ability to introduce a scheme with the following objectives:

- Drive a reduction in litter and its associated environmental and disamenity costs;
- Increase the recycling rates of the material in scope, especially those disposed of 'on-the-go';
- Provide a higher quality of material for recycling;
- Generate greater domestic reprocessing capacity through providing a stable and high-quality supply of recyclable waste materials.

Deposit return schemes have been introduced in many places internationally, which provides evidence of the success it is possible to achieve against these objectives. For example, Germany, Norway and the Netherlands operate deposit return schemes for drinks containers, and achieve some of the highest reported rates of plastic drinks bottles collection/recycling in Europe at 98%, 95% and 95% respectively.

The application of these powers, once obtained, is not novel as voluntary deposit return schemes have operated in the UK in the past, and operate successfully around the world. However, a mandatory scheme will have an impact on businesses, and a change in behaviour required by consumers, which may be contentious. A comprehensive impact assessment has been prepared and consulted on in order to fully assess the costs and benefits to stakeholders and society as a whole of implementing a DRS for drinks containers, and it will be developed further for the implementation of these powers in secondary legislation.
Policy options considered, including alternatives to regulation

This Statement of Impacts presents the rationale for acquiring powers to set a deposit on named products as part of a DRS, and the options considered are therefore whether to do so or not. There is a rationale for Government to acquire the powers to act in this space in order to correct the market failures and achieve the policy objectives outlined above. The existing powers available to the Secretary of State and Welsh Ministers under the Environment Act 1995 (93-95) do not go far enough to allow the creation of a bespoke DRS. For example, lacking the ability to mandate all parts of the supply chain to participate in the scheme, to set/change the level of a consumer-facing deposit, to delegate power to a scheme administrator, or to delegate a scheme regulator. These measures are essential to creating a successful DRS, rather than a partial DRS limited in order to fit the existing system.

Non-regulatory options such as relying on voluntary deposit return schemes have been considered, but would be unlikely to engage the whole sector and to achieve the step-change in behaviour required to meet these policy objectives. A successful national scheme will require regulation and a mandate for all parts of the supply chain (retailers, distributor, and consumers) to join. In addition, the significant societal benefits such as a reduction in greenhouse gas emissions from increased recycling, reduced disamenity from litter and possible reduced financial burdens to local authorities of clearing litter are unlikely to attract the full engagement of the private sector to invest.

Therefore, the preferred option is to acquire the powers.

Regulatory options of how to implement a DRS for drinks containers, and the full costs and benefits of doing so, are considered in a separate Impact Assessment which has been consulted on and will be developed further for secondary legislation.

Expected level of business and wider impacts

This intervention relates only to the acquisition of powers by Government, and therefore creates no direct impacts on business. Direct impacts from the implementation of these powers may include:

Distributional impacts

- DRS-scope producers would be required to pay a fee to contribute towards to the costs of running a DRS. This would be proportionate to the amount of material they place on the market.
- Non-DRS-scope producers are expected to be required to contribute to the cost of packaging waste under existing PRN scheme or the new proposed
packaging producer reform. There may be a distributional impact between sectors if one fee is higher.

**Small business impacts**

- Small businesses would be expected to host manual collection points rather than Return Vending Machines.
- Retailers regardless of their size will be fully compensated for labour, time and space costs of collecting DRS-products, and therefore the collection of containers would be a net neutral endeavour for small and micro business.
- Steps will also be taken to consider *de minimis* exemption options in terms of small businesses are required to accept returns and reimburse deposits.

**Social impacts**

- Social impacts of a DRS are likely to include a reduction in the disamenity value of litter (i.e. the benefits to be gained from living in an area with less litter, such as mental health benefits, a reduction in costs to the local economy), and an increased consumer awareness, responsibility and participation in recycling

**Environmental impacts**

- Environmental impacts of a DRS are likely to include a reduction in greenhouse gas emissions (due to an increased amount of material being recycled), and a reduction in litter causing damage to the environment, in particular to the marine environment

**Financial impacts**

- A system will require a significant initial investment to set up, and then incur on-going running costs, including the likely costs of Reverse Vending Machines and reimbursing retailers for hosting manual take-back points
- It is proposed
- The organisation managing the DRS will gain revenue from the sale of collected material to be recycled (proposed to go towards the costs of the system)
- Local authorities may lose revenue from the sale of material that would have been recycled via kerbside collection without a DRS
- Local authorities may benefit due to reduced litter clean-up costs, and lower collection costs to deal with less material
- It is proposed that Local Authorities will be compensated for packaging collection costs under extended producer responsibility reform

This measure is only relevant to government policy making and the implementation of environmental legislation. As the proposed measure refers only to enabling powers, this is a low-cost regulation below the de-minimum threshold of +/-£5m EANCB.
Annex 17: Statement of impacts – Eco-Design: Mandatory material efficiency standards

Background

In the 25 Year Environment Plan the UK Government outlines the steps that will be taken by the Government to achieve its ambition of leaving the environment in a better state in which it found it. This includes a series of objectives on resources – to double resource productivity and achieve zero waste by 2050. The Resources and Waste Strategy published in December 2018, sets out the measures that will be pursued to achieve these objectives.

In its waste strategy, Towards Zero Waste, and associated sector plans the Welsh Government outlines the steps it will take to become a zero-waste, one-planet resource-use nation by 2050.

The Scottish Government is committed to developing Scotland’s circular economy, as set out in our strategy ‘Making Things Last’. Taking a more circular approach to the use and reuse of materials and circular business models can help protect the environment, and deliver social and economic benefits to our communities. The Scottish Government hope any UK wide legislation would contribute towards this aim.

One of the key ways in which we intend to achieve these goals is through supporting eco-design of products to ensure resource efficiency. The policy measures we propose to do are eco-design product standards to drive a shift in the market towards durable, repairable and recyclable products.

Mandatory product standards are set at an EU level under the Eco-design Directive for energy-using products. They relate to energy efficiency and, more recently on resource efficiency as well. Resource efficiency requirements relate to durability, repairability and recycling of materials. Standards have been agreed for 12 product groups between September 2018 and January 2019. Negotiations to date have led to inclusion of requirements, for example, to ensure that products are designed for disassembly and that spare parts are made available to facilitate repair.

As we have now left the EU, in the Resource and Waste Strategy, we have committed to match or, where economically practicable, exceed the ambition of the EU’s eco-design standards. We propose to legislate to apply these principles of eco-design to cover additional resource intensive product groups, for example such as textiles and furniture.
The policy issue and rationale for Government intervention

There are significant and ongoing negative externalities arising from early and inappropriate disposal of products as they are not designed with longevity in mind. Consumers do not have affordable and readily available options to extend the lifetime of their products for example through re-use schemes, repair and remanufacture. Products are also often not designed to be recyclable.

The associated negative environmental and economic costs from poor product design include (i) resource depletion due to the demand it places on virgin raw materials during production rather than use of recycled/secondary materials, also a failure to reuse or recycle products like clothing can mean unnecessary water consumption. (ii) environmental pollution associated with unnecessary waste disposal as products are less likely to be repaired and/or recycled, hence waste is either sent to landfill where it pollutes land and generates greenhouse gases (GHGs) or sent to incineration where it emits fossil fuel based carbon dioxide; and (iii) increased GHGs emissions and water usage: even if materials from products are recycled rather than sent to landfill, this can mean substantial GHG emissions.

The result is that increasingly large volumes of avoidable waste (which could still retain some economic value and product life) end up in landfill, are littered or incinerated. For example, WRAP (2017) study shows the significant environmental impact associated with clothing life-cycle with estimated global footprint of UK consumption of clothing to be 23 Mt CO₂e, 7,060 million m³ of water and 1.7 million tonnes of waste in 201638.

Demand for more efficient, high quality products remains prominent amongst consumers. A recent Green Alliance report states that two thirds of people are frustrated by products that do not last; three quarters believe the government should ensure businesses sell recyclable and repairable products; 81 per cent believe businesses should be required to provide repair, maintenance or disposal support for their products39.

Evidence suggests that 80% of the damage done to the environment from waste products can be avoided if better decisions – about their design, the choice of materials and chemicals used, and how they will be distributed and sold to consumers – are made at the production stage40.

38 WRAP (2017), Valuing our Clothes: the cost of UK fashion
39 Green Alliance (2018), By Popular Demand, what people want from a resource efficient economy
40 WRAP (2013), Embedding environmental sustainability in product design.
Evaluation of the current eco-design product requirements (energy related products only) indicate a yearly average saving to the average EU household of €332 in 2016. This is equivalent to 11% savings on the annualised cost of each appliances’ lifetime relative to not having eco-design standards in place. Primary energy consumption savings by regulated products in 2015 were estimated at 797 TWh per year. The EU GHG emission savings as a result of Eco-design and Eco-labelling directives are estimated at 126 Mt CO\(_2\)e per year by 2020. Department for Business, Energy and Industrial Strategy (BEIS) estimates these to be 8 Mt CO\(_2\)e per year for the UK.

There are potentially environmental gains from applying these to non-energy related product groups, for example textiles and furniture. Clothing has the fourth largest environmental impact after housing, transport and food. The carbon footprint of UK clothing (including global emissions) stood at 26.2Mt in 2016 which is around 3% of the total consumption related CO\(_2\) emissions. Additionally, 20% of industrial water pollution comes as a result of treatment and dying of textiles.

The Commission identified in their Eco-design Working Plan 2016-2019 that Eco-design regulations have the potential to have significant environmental benefits beyond energy efficiency savings and expressed an increasing need to improve resource efficiency through product design, which can have significant impacts across the product life cycle e.g. in making a product more durable, easier to repair, reuse or recycle.

Economically, consumers can and often bear the costs of replacing damaged products rather than repairing them. However, the cost of repair is not the main barrier discouraging consumers from repairing products. Information failure (e.g. missing labels indicating whether the product can be repaired or not) and customer perception (e.g. time spent on finding repair services) are seen as key barriers to repair. Providing repair manuals, better information about repair services, and improving product design (e.g. modulated products) should help consumers to repair products.

Government intervention is required to correct for these market failures and ensure best practice amongst manufacturers, in terms of product design, is applied across the UK. It would further boost growth of the UK secondary raw materials markets, as recyclability will be promoted, and the repair and remanufacturing industry.

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41 ECOFYS (2016), Benefits of Eco-design for EU households
42 European Parliamentary research service (2017), European Implementation Assessment
43 VHK on behalf of the European Commission (2017), Eco-design Impact Accounting; Overview Report
44 WRAP (2017), From Valuing Our Clothes – the Cost of UK Fashion.
Policy objectives and intended effects

The measure aims to grant government powers to set product standards related to resource efficiency for non-energy related products and thus remove the least resource efficient products from the market. The intended effects are:

- To prevent waste, through innovation in more durable, repairable, recyclable and upgradable products, thus benefiting consumers.
- Higher level of environmental protection by reducing environmental pressures on non-energy products. For instance, better management of material scarcity, lower carbon emissions and energy usage, and reduced water usage lowering demand for natural resources manufacturing by extending products’ lifetime.
- It may also promote the effective management of hazardous materials at end of life, thereby improving safety and product quality.

This policy can benefit the UK repair industry by increasing the reparability of products and thus increasing the demand for repair services. The reuse and repair industries are labour intensive and could generate both low and high skilled jobs within the UK labour market\(^4^8\).

Policy options considered, including alternatives to regulation.

There are currently no alternatives to regulation considered. For businesses, a range of voluntary initiatives have been in operation, but there have been no drivers for the sector to actively improve product design, without rationalisation of services. Government powers are essential to introduce a uniform design scheme that can ensure consistent product design across UK manufacturers.

Option 1: Business as usual/ baseline (do nothing).

This is the current position and does not allow the Secretary of State to extend the current Eco-design directive to non-energy products. The eco-design standards will remain relevant to energy-intensive products only, thus denying the opportunity to capitalise on the potential environmental benefits associated with extending these standards to non-energy products.

Option 2: Acquire powers to extend the current eco-design material standard requirements to non-energy products.

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\(^{48}\) The European Commission (2015), *Closing the loop - An EU action plan for the Circular Economy.*
This allows the Secretary of State to (i) have powers to set product standards as to resource efficiency of non-energy related products (ii) have powers to restrict what is placed on the market to ensure it complies with those product standards. These requirements will be enforced by a market surveillance authority, appointed by the Secretary of State (“SoS”).

At this stage this option offers no direct impacts to businesses as it only deals with acquiring powers and is therefore only relevant to Government. However, we should expect to see direct impacts on businesses and consumers at a later stage once powers have been acquired and the measure has been enforced. These impacts will be quantified at a later stage in a detailed impact assessment, under secondary legislation, as Government seeks to apply primary legislative powers.

Option 2 is the preferred option because it provides the legislative power to improve product design, addressing negative externalities and improving sustainability of consumption choices. The costs and benefits to groups such as consumers and businesses will be different across different products and will be covered in specific impact assessments associated with future secondary legislation.

Option 3: guidance-based approach:

Consideration was made to whether non-legislated guidance may be a viable alternative in order to achieve the same policy outcomes. It was deemed an unsuitable alternative for achieving the objectives of the policy, as guidance may be ignored by manufacturers. This is a key concern, as it is the government’s intention, by setting these minimum standards, to create a level playing field for all manufacturers, which will result in the gradual removal of the least resource efficient products from the market.

Expected level of business and wider impacts

As Secretary of State (SoS) is only acquiring relevant powers at this stage, the measure is not envisaged as having any direct impacts on businesses, the community or voluntary sector groups. Hence, there will be no direct impacts that may lead to disproportionate burdens on small businesses.

If implemented via secondary legislation, we expect the policy to impact a number of stakeholder’s including government bodies, consumers and producers. These will be fully assessed and considered separately. A summary of potential impacts is provided below.

The measure will be relevant to government policy making and the implementation of environmental legislation by government and its public delivery bodies, for example developing standards and appointing a market surveillance authority. Currently, the
Office for Product Safety and Standards (OPSS) provide market surveillance for the eco-design for the Energy Related Products Regulations 2010.

As discussed in detail below, amending the way manufacturers design their products may result in an increase in short-run costs which may be passed on to consumers. However, once bought, consumer costs of replacing the product may be lowered through increased repairability and longer products’ lifetimes.

Since the products are meant to be designed in a way that ensures durability and repairability, consumers should benefit from lower overall costs as well as products retaining their value. They may opt to keep their products for longer or repair these products rather than purchase new ones. They may also sell them on the second-hand market.

For consumers, the upfront price of products might increase in the short-run. However, once bought and kept for a longer time period, the net cost of maintaining the product relative to repurchasing it could be lower through increased repairability. The overall long-run impact on consumers would depend on two factors:

1. Manufacturers pricing mechanism – how much higher their products will cost. This is likely to be reduced to only marginal cost increase in competitive markets.
2. Disposable income of different consumers – how much money consumers have available to pay the higher prices of more resource efficient products.

In the short run, amending the way manufacturers design their products may result in an increase in costs which may be passed on to consumers. However, once purchased, their costs of replacing the product may be lowered through increased repairability and longer products’ lifetimes.

This may mean that revenues from repeat purchase of products could fall as the longevity of products increases. This could erode, or further erode (if costs have not been 100% passed on in the short term) manufacturers profits in the long term. However, manufacturers could try and offset this profit loss by supplying repair parts for consumer products and further business model changes in order to adapt to longer lifecycle of products. Previous studies indicate that design for better repair and resource recovery could result in an economic opportunity for new industries focused on product repair and remanufacturing49.

Furthermore, we would expect to see reductions in waste arisings and natural resource use due to increased products lifespan. This could result in reduced GHGs and wider environmental benefits associated with reduced primary material extraction:

49 Eunomia for SUEZ (2016), A Resourceful Future – Expanding UK Economy
• For example, OECD (2018, forthcoming)\textsuperscript{50} and Van der Voet et al. (2018)\textsuperscript{51} show that use of secondary materials in production yields lower negative environmental impacts (water, land or air pollution) than primary material production.\textsuperscript{52}

• CIE-MAP and Green Alliance (2018) showed that increased reuse of textiles and carpets, and one year increase in clothing lifespan would result in UK GHGs emissions savings of up to 1.8 MtCO\textsubscript{2}e and 2.2 MtCO\textsubscript{2}e, respectively, between 2023 and 2032\textsuperscript{53}. The report further suggests that an increase in the lifespan of clothing and textiles up to 9 months has the potential to reduce resource consumption by around 33%.

There may be some distributional impacts with smaller businesses experiencing higher costs from the use of these powers. There may also be impacts on region specific industries. As part of the full impact assessment, impacts on small businesses will be fully accounted for in a comprehensive small and micro business assessment and will be consulted on. Any impacts on region specific industries will also be considered and consulted on.

At this stage, the proposed measure is a low-cost regulation below the \textit{de minimis} threshold of +/- £5m Equivalent Annual Net Direct Cost to Business (EANDCB) allowing it to qualify for the fast track process.

\textbf{Justice impacts}

Mandating minimum eco-design standards for products will require corresponding powers of enforcement to ensure that manufacturers and producers comply with their obligations associated with product-specific secondary legislation. Although powers to create civil and criminal sanctions will be sought to be acquired in the Environment Bill, these will not be established and/or enforced until the introduction of secondary legislation. There will be no immediate impact on the justice system upon the acquisition of these powers. Ahead of the introduction of any secondary legislation, pursuant to the aims of this policy, a full Justice Impact Test will be submitted in order to quantify the potential impact on the justice system.


\textsuperscript{53} Green Alliance and CIE-MAP (2018) \textit{Less in More Out}.
Annex 18: Statement of impacts – Powers to mandate consumer information and ecolabelling

Background

The 25 Year Environment Plan outlines the steps that will be taken by the Government to achieve its ambition of leaving the environment in a better state in which it found it. This includes a series of objectives on resources – to double resource productivity by 2050 and to achieve zero waste by 2050. The Resources and Waste Strategy published in December 2018, sets out the measures that will be pursued to achieve those objectives.

In its waste strategy, Towards Zero Waste, and associated sector plans the Welsh Government outlines the steps it will take to become a zero waste, one planet resource use nation by 2050.

The Scottish Government are committed to developing Scotland’s circular economy, as set out in our strategy ‘Making Things Last’. Taking a more circular approach to the use and reuse of materials and circular business models can help protect the environment, and deliver social and economic benefits to our communities. The Scottish Government hope any UK wide legislation would contribute towards this aim.

One of the key ways in which we intend to achieve these goals is through mandatory consumer information/labelling which would incentivise a shift in producers and consumers’ behaviour towards more sustainable production and behaviour to drive a shift in the market towards durable, reparable and recyclable products. Labelling can also provide important information on how to dispose of packaging and products more appropriately once a consumer has finished using them.

In light of the problem of plastic waste pollution, Secretary of State (SoS) made a commitment in the 25 YEP to make it easier for individuals to know which products should be recycled and which should not as part of a four-point plan to tackle plastic waste.

We have committed to consulting on ways of reforming the current packaging producer responsibility system and potentially introducing a Deposit Return Scheme subject to consultation. In both these instances, clear labelling will be required to ensure the policy proposals can be delivered effectively. The Scottish Government also intends to introduce a deposit return system, which may result in specific labelling to identify packaging obligated in the Scottish system. Any packaging requirements introduced by Defra should take this into account. The Scottish
Government is open to working with Defra to achieve compatible systems which may offer efficiencies.

**The policy issue and rationale for Government intervention**

Currently a producer or manufacturer who takes steps to ensure that their product is designed, or produced to be resource efficient is not authoritatively able to communicate this and distinguish itself from other products in a way that for example organic products or sustainable timber can do.

Providing transparency of information on positive resource efficient choices can help those consumers or organisations who want to make environmentally friendly choices do so. This is particularly powerful in commercial procurement, which can demand more resource efficient products and give a competitive advantage to manufacturers who do the right thing.

Consumer information and product labelling can also help consumers and organisations correctly look after their products and dispose of them at end of life. For example products carrying information as to the materials contained in them e.g. critical raw materials, enable recyclers to buy the right products and extract high value materials.

For packaging and products there is currently inconsistent and ambiguous labelling which means that consumers and businesses risk making suboptimal decisions. Such decisions cause market inefficiencies and generate negative externalities across the entire product value chain. For example, with the inappropriate disposal of products when consumers are unsure of what products can be recycled, and where the recycling sector are unable to process potentially valuable secondary material, due to missing information on chemical additives and potentially hazardous content in waste streams.

Ecolabels can be effective ways to promote resource efficiency through providing information that enables consumers and businesses alike to make more resource efficient and sustainable decisions about purchasing, use and disposal of products. They can be used to bridge the information gap and enable consumers and businesses make well informed choices.

Labels can also play a role in setting thresholds for commercial and public procurement, thereby shifting a large proportion of the market. Ecolabels which

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certify that products exhibit certain characteristics in terms of environmental impact have been widely used under sustainable procurement⁵⁵.

Government intervention is therefore required to address the lack of clear labelling of products and packaging to correct this market failure of insufficient information. Current powers do not allow mandating consumer information and labelling schemes intended to encourage consumer choice across a number of products. This policy measure would allow to introduce a set of new labels that should facilitate the complex set of push and pull factors affecting consumer and business behaviour.

Policy objectives and intended effects

Our proposal is to require consumer information be provided to:

- Support the purchase of products that have been designed, produced and packaged to minimise waste for example by being more repairable, having longer warranties, produced with recycled material, or remanufactured. These may be binary schemes or rating schemes, depending on what is most appropriate for the individual product group;
- give consumers necessary information on how best to maintain their products, or how to fix them when they break, or how to properly dispose of them;
- Help the recycling industry identify those products which contain valuable materials and extract the most valuable materials and dispose of them correctly.

In some cases, information will also be supported by labels. The labelling schemes would target the areas that are strategically important for us to deliver on the commitments announced in our Resources and Waste Strategy and associated policy consultations. This includes labelling schemes indicating the packaging recyclability or the level of recycled content in a product/packaging linked to Government’s packaging producer responsibility reform and plastic packaging tax consultations; necessary labelling potentially required under a proposed Deposit Return Scheme (DRS).

We will also begin to develop a multi-factor rating labelling scheme that relates to a number of resource efficiency characteristics of a product. For example for fashion, this would include water usage in production as well as durability and recyclability. Through developing a score, we would enable products to obtain a rating similar to under the current A-G energy labelling scheme.

Labels would be used for a targeted range of products and tailored to individual characteristics. Thus, certain labels would relate to packaging under DRS only, recyclability label would target mainly packaging. With some product groups, we may

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⁵⁵ The UN Environment Programme (2017) Global Review of Sustainable Public Procurement
begin with standards for labelling schemes and then move on to develop mandatory standards to remove the worst from the market.

On the production side, labelling schemes could enforce information provision by producers on the carbon lifecycle impacts, resource intensity or the amount of recycled material content used in their products. Under the packaging extended producer responsibility, the requested powers could be used to mandate packaging producers to provide information to make it easier for people to know how to recycle and dispose of their packaging.

Ecolabels on products could have a positive impact on consumer purchasing choices, by providing information that allows consumers to opt for more sustainable alternative products and extending their lifetime. Such ecolabels could be used to provide consumers with information on product durability, reparability, and recyclability. Durability labelling containing the expected lifespan to consumers can possibly induce a more resource efficient and sustainable choice.

Government mandated ecolabels schemes would also provide customers with a trusted system for assessing and substantiating product claims that consumers cannot verify themselves for, for example, private labels that make self-declared, potentially false or misleading environmental claims using ubiquitous symbols and terms (e.g., “compostable”, “biodegradable”, products containing with x % recycled content) 56. Government mandated labels could also be an effective way to encourage confidence in the consumers about the quality of repaired, remanufactured, secondary products and used goods.

Ecolabels could also provide valuable information in downstream value chains, for waste collection, sorting and recycling that could improve end of life treatments of products. The appropriate labelling would help consumers identify packaging that may be collected via specialist routes such as Deposit Return Schemes (DRS). Labels indicating the chemical composition of plastics would allow recyclers to adequately treat this waste stream and significantly increase the value of recovered plastic waste through improved recycling.

Policy options considered, including alternatives to regulation

Option 1. The ‘do nothing’ option
Under this option, existing powers remain unchanged and regulatory capability restricted to that which these powers allow.

The UK currently operates the EU Ecolabel (No 66/2010) scheme, which is a voluntary label used to show that a product or service meets a specific Europe-wide

environmental standard. Now we have left the EU the UK will no longer be able to authorise businesses to be part of this scheme. The UK will no longer be able to influence the criteria products must meet in order to affix this label.

The Environment Act 1995 Producer Responsibility section 93-95 Section 93:8 may provide the Secretary of State powers to allow for a recyclable/not recyclable labelling scheme as part of a producer responsibility obligation, a labelling scheme being one of the measures a producer can take to secure the attainment of a target. However this is not sufficient as it does not provide Secretary of State with clear powers to make a labelling scheme mandatory, and does not provide Secretary of State with powers to mandate the necessary labelling/markings required for a DRS scheme.

Option 2. New powers to mandate consumer information including labelling
This is the preferred option. This option provides the policy framework and powers to drive the production and consumption of more resource efficient products through mandatory provision of consumer information via eco-labelling powers. We envisage these powers to be applied across a number of policy areas, such as but not limited to:

Packaging Extended Producer Responsibility (EPR): The measure would mandate producers to provide information to make it easier for consumers to know how to recycle and dispose of their packaging. A mandatory UK-wide labelling scheme would provide clear information to help consumers identify what packaging to recycle. For example, producers could be required to label their packaging as ‘Recyclable’ or ‘Not Recyclable’. Bespoke labelling could also be used to inform consumers if packaging items are subject to take-back or store-based collections.

Deposit Return Scheme (DRS): As part of a reformed packaging producer responsibility system, Defra wants to introduce a DRS for drinks containers in England. To support this scheme, labelling will need to be mandated to facilitate the deposit return mechanism (for example a bar code). The appropriate labelling would help consumers identify packaging that may be collected via specialist routes such as a DRS.

Key Resource efficiency factors:
• Rating schemes taking on board single or multiple factors i.e. longevity, repairability and recyclability which provide different ratings – similar to current energy labelling but for resource efficiency factors such as reparability.

• Mandatory consumer information relating to repair, disposal or raw material content.

This measure would link to provision on the Minimum Material Efficiency Requirements measure to expand the principles of eco-design to non-energy
products. For more information on eco-design product standards, refer to the eco-design statement of impact.
Without mandatory labelling, the above policies cannot be effectively mandated or facilitated.

**Alternatives to Regulation**
The voluntary packaging labelling schemes are clear alternatives to regulation. However, they can cause consumer confusion. For example, some packaging products display the producer responsibility “Green Dot” symbol, which confirms they have paid their obligations to this scheme. This is not a measure of recyclability, but some consumers confuse with being a recycling symbol\(^\text{57}\). According to research carried out by the UK by consumer group *Which?* consumers find the wide array of symbols on household packaging confusing\(^\text{58}\). Mandating a single label would ensure this labelling scheme can be applied consistently thereby building consumer recognition and reducing confusion.

**Expected level of business and wider impacts**

Acquiring these powers will not have any immediate business impacts. The exact impacts as a result of introducing secondary legislation are unknown at the moment so that we are unable to quantify any business and wider impacts.

*Business Impacts*

When these powers are exercised we could expect there will be a cost associated with any changes for businesses as a result of secondary legislation being implemented. This could include transition production costs of having to provide mandatory labelling or changing existing labels, and familiarisation cost associated with staff training and time needed to understand the new policy. However as these costs will be borne by all those selling in the UK market there will be no disadvantage to UK business.

With respect to packaging, whist there might be initial costs associated with amending packaging labelling, extended producer responsibility costs might be reduced if it results in increased recycling activity and reduced end of life costs.

As obtaining these powers in primary legislation has no direct costs to businesses, this policy option sits well below the EANDCB £5 million threshold. Should powers obtained in primary legislation be acted upon, the full impact of these will be detailed in an impact assessment accompanying the relevant secondary legislation

\(^{57}\) Lost in translation - What does the Green Dot symbol really represent?
**Consumer impacts**

With improved product information via labelling, consumers would be able to make more informed purchasing decisions, which could increase demand for more resource efficient products in the long-term.

There is evidence that ecolabels can be effective in influencing consumer’s behaviour. For example, a rapid evidence assessment done by Cardiff University showed that for appliances and laptops there is high confidence that the EU Energy Label positively influences the purchase, choice, or intentions towards, more energy efficient appliances. An EU Energy Label with additional carbon footprint information led to a willingness-to-pay (WTP) increase of 37% for a television. Likewise, for laptops, a laptop with an energy-efficient label was preferred to a laptop with no label and had a WTP of 13.9-18.2%. There is medium confidence that compared to no label, ecolabels have a positive influence on WTP for textiles; that recycled and reclaimed material labels positively relate to clothing purchase intentions; and that lifespan labels positively influence choice of clothing\(^\text{59}\).

Improved end of life labelling could also reduce consumers’ confusion and could improve their recycling habits, meaning that less waste ends up in litter and residual waste and more is recycled. Government mandated labels could also be an effective way to improve consumer confidence in the quality of repaired and remanufactured goods. In long-term, it could lead to a possible increase in the demand for secondary products and used goods.

**Environmental impacts**

Shifting consumer purchases towards more sustainable products could reduce and close resource loops by reducing raw material extraction, increasing reuse, recycling and minimising waste output.

With improved environmental awareness and assumed consumer behaviour change, we would expect improved end-of-life treatment and increased material recycling, as products would be more likely disposed of in a more sustainable manner. Better recycling habits mean that fewer recyclable materials would end up in litter and residual waste, resulting in a reduced environmental and disamenity impacts.

**Justice impacts**

Mandating consumer information and/or labelling will require powers of enforcement to ensure that manufacturers and producers comply with their obligations under these schemes. Although powers to create civil and criminal sanctions will be sought

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\(^\text{59}\) Cardiff University, Ballarat Consulting and Sea Green Tree for WRAP (forthcoming), Environmentally Sustainable Product Purchase Decisions: Expert Interviews and a Rapid Evidence Assessment.
to be acquired in the Environment Bill, these will not be established and/or enforced until the introduction of secondary legislation. There will therefore be no immediate impact on the justice system upon the acquisition of these powers. Ahead of the introduction of any secondary legislation, pursuant to the aims of this policy, a full Justice Impact Test will be submitted in order to quantify the potential impact on the justice system.
Annex 19: Statement of impacts – Extended Producer Responsibility – Scheme Administrator

Background

The Clean Growth Strategy\textsuperscript{60} makes a commitment to explore how we can better incentivise producers to manage resources more efficiently through producer responsibility schemes. The 25 Year Environment Plan\textsuperscript{61} goes further and commits to reform the producer responsibility system (including the Packaging Waste Regulations). These commitments are taken forward in the new Resources & Waste Strategy where Extended Producer Responsibility (EPR) is presented as a flagship policy measure.


Although this is a devolved policy area, Defra has responsibility for the four existing UK Producer Responsibility (PR) regimes – Packaging Waste, Batteries, Waste Electrical & Electronic Equipment (WEEE) and End-of-Life vehicles (ELVs).

These regimes are derived from EU Directives, transposed into domestic legislation, but under different primary legislation (the Environment Act 1995 and the European Communities Act 1972). They require that an element of financial responsibility is placed on producers for the collection, recycling and waste management of their products and packaging at end of life (i.e. when discarded by the final user).

We are now seeking measures to place more responsibility on producers for the environmental impact of the products they place on the market. EPR is the principle in which financial (and sometimes physical) responsibility is placed on producers to cover the full costs of managing their products once they reach end-of-life. Often there are incentives for producers to design their products with a more sustainable use of materials, and to make it easier for them to be reused, or dismantled and recycled at the end of their life.

\textsuperscript{60} HMG’s \textit{blueprint for Britain’s low carbon future}.
\textsuperscript{61} HMG’s \textit{Plan to improve the Environment} within a generation.
Reform of the packaging waste producer responsibility is the immediate priority. Consultation on packaging producer responsibility reform has closed recently. Following packaging, we will review our other producer responsibility systems, starting with a consultation on the WEEE and batteries regimes. We will then look at other product types and waste streams where EPR offers the best way to ensure desired policy outcomes. The Resources and Waste Strategy commits to considering EPR for up to five additional waste streams by end of 2025.

We need EPR measures included in the Bill in order to update existing producer responsibility regimes and expand EPR measures to other products/waste streams. This will also allow us to reform the packaging system in line with Ministerial priorities and commitments made by the government.

The particular measure here is to make provision such that an EPR scheme administrator may be appointed and established for each product type or waste stream where EPR is most effective. We believe that without this provision, our ability to carry out the commitments and aims mentioned above would be severely curtailed.

**The policy issue and rationale for Government intervention**

The Environment Act 1995, in section 93 on producer responsibility, allows the Secretary of State and devolved ministers to make regulations to impose producer responsibility obligations for the purpose of promoting or securing an increase in the re-use, recovery or recycling of products or materials. This power may only be exercised after consultation with representative interested bodies or persons.

The Environment Act 1995, in section 94 on producer responsibility, states that any producer responsibility regulations made under section 93, may make provision for or with respect to the registration of persons who are subject to a producer responsibility obligation, as well as the approval, or withdrawal of approval, of exemption schemes by the Secretary of State or devolved ministers. However, it does not make provision through producer responsibility regulations to recover from producers the full costs of managing their products at end of life and to establish scheme administrators, with the required functions that we have listed in section 4. For example, under the Environment Act 1995, it would not be possible to establish, through secondary legislation, an extended producer responsibility system with an administrator that could raise and redistribute fees.

We are seeking measures so that the Secretary of State or devolved ministers may designate or establish, by secondary legislation, a scheme administrator to oversee and/or run an EPR scheme. The Bill should allow the governance arrangements of any scheme administrator to be decided through secondary legislation, and should allow the scheme administrator to be a private or public organisation. The Bill will
also list the functions and duties that may be conferred on a scheme administrator through secondary legislation (although this list will not be prescriptive).

We believe that if this measure is not included in the Bill, then we would be severely limited in our options for implementing EPR. We believe that it may make it more difficult to meet our obligations under the Circular Economy Package (CEP), if we were required to implement EPR without any sort of scheme administrator. Article 8a of the CEP and the revised Waste Framework Directive imposes general minimum requirements for EPR schemes. These include requirements on establishing a reporting system, gathering data on products, producers, collection and waste material flows, modulated fees, monitoring and enforcement, etc. Now we have left the EU, without a scheme administrator, achieving even the minimum legal requirements would be made significantly more difficult. Government may have to assume many of the scheme administrator functions, which would run contrary to our principles for EPR regarding transparency and independence. There would not be a legal basis on which a private organisation, could raise fees to meet EPR full cost recovery and other related obligations, nor could they redistribute these fees to local authorities and other organisations. Therefore, there would be little flexibility in our approach to and scope for implementing EPR for different products. For example, the models for EPR suggested in the recently closed consultation on packaging reform would be impeded without the powers to establish a scheme administrator.

Not having the powers to establish a scheme administrator may cause significant additional cost to Defra and the devolved governments to implement certain EPR principles. For example, there would be significant extra resource pressure, which would have to be met through Departmental budget. The costs of procuring and maintaining the relevant IT systems, services and databases for the necessary reporting and monitoring of obligated producers would also result in substantial cost. Moreover, not having the powers to establish a scheme administrator would limit the opportunities and approaches to implementing EPR for different waste streams/products in the future.

Government intervention though the proposed measure in the Environment Bill is needed so that a scheme administrator can be established to deliver the functions and obligations of an EPR system either in full or in part. By enabling the EPR system to function successfully, the scheme administrator will support the aims of the EPR system which is to correct market failures, specifically:

- **Polluter pays principle**: products’ costs of recycling or disposal are often covered by local taxpayers and only to a certain degree by producers, contradicting the polluter pays principle under which the full net cost of end-of-life treatment are covered by relevant producers. This is a market failure as products’ full lifetime costs are not fully reflect in the market prices and thus not taken into account in producers’ and consumers’ decision making.
• **Negative environmental externalities** (e.g. greenhouse gases emissions) associated with products’ end-of-life environmental burden, which are not being taken into account when they are manufactured and placed on market.

• **Lack of information** resulting in consumers not being aware of the environmental costs associated with products they buy and lack options of more environmentally friendly disposal of their products once they become waste.

**Policy objectives and intended effects**

Defra and devolved ministers want to introduce through the Environment Bill:

i. The power to designate by statutory instrument a scheme administrator for any EPR scheme. This type of administrative body is referred to as a 'scheme administrator';

ii. the functions and duties of a scheme administrator, to run an EPR scheme according to product-specific needs;

iii. the power to decide, through secondary legislation, whether the scheme administrator for an EPR scheme is designated as a private organisation or a public organisation;

iv. The power to decide, through secondary legislation where required, the governance arrangements of a scheme administrator.

The intended effects are to allow the secondary legislation to determine what the scheme administrator looks like, and its specific functions. The primary legislation is intended to allow for different EPR schemes to operate with different scheme administrators, depending on the product-specific needs, and the outcomes of future consultations.

**Policy options considered, including alternatives to regulation**

**Option 1 – Do nothing (don’t include scheme administrator measure in Bill)**

With this option, as currently, there would be no provision for the Secretary of State or devolved ministers to establish a scheme administrator. This would mean that several functions would either have to be performed by Defra or devolved governments, or most likely, it would not be possible for these functions to be carried out. By necessity, this would likely mean that any reformed or future EPR would have to look similar to the current producer responsibility systems. This goes against government ambitions and commitments for reform, and runs contrary to the Government’s suggested models for EPR in the packaging reform consultation.
For example, without any scheme administrator there would likely be:

- No central registry
- No central data gathering, reporting, monitoring
- An inability to manage redistribution of funds to LAs to ensure fair funding
- No independent oversight of labelling requirements
- No central communications or awareness campaigns, no oversight of campaigns independently carried out by producers
- Inability to distribute funds for litter campaigns and litter clean-up
- Reduced transparency in the system.
- No central investment into R&D, reprocessing capacity, etc.

This would also eliminate the option to implement certain ‘models’ of EPR. For example, it would be impossible to reform or introduce EPR schemes with a ‘single producer responsibility organisation (PRO)’ model.

**Option 2 (preferred) – Setting up powers that allow the Secretary of State and devolved ministers to establish scheme administrators as necessary for new and reformed EPR schemes.**

This would allow Government to reform or introduce EPR in a way that, according to the different needs of each waste product type, would best achieve the social, economic and environmental outcomes that we seek.

For example, it may be decided that the best way to deliver reform to the packaging system would be to have a producer-led private organisation that oversees the EPR system, and is responsible for fair and transparent registration, monitoring, guidance, communications etc., but does not directly get involved in levying and redistributing funds.

However, for another waste product in the future, it may be decided that the best way to achieve certain social, economic and environmental outcomes would be to establish a single scheme administrator that also manages the compliance of producers as a single PRO. This may look like the French ECO TLC scheme administrator for textiles, in which case, it would be responsible for levying and redistributing fees, overseeing communications campaigns, modulating fees, and investing in R&D.

It may be that one EPR scheme administrator will need to be run as a private organisation, while another may need to be a public body. The details of each scheme administrator would therefore be decided through the relevant secondary legislation.
The total possible functions that may be designated, through secondary legislation, to a scheme administrator should include:

i. To monitor and oversee the EPR scheme, including necessary reporting obligations (e.g. reporting recycling rates)

ii. To register producers, including possible publication of all those registered

iii. To review the compliance of producers against their obligations, including measurement against waste treatment targets

iv. To oversee an ‘approved list’ of materials

v. To oversee and publish the full net costs to be recovered, and the differential expected in fee rates through modulation

vi. To oversee communications campaigns

vii. To oversee labelling requirements

viii. To have the ability to levy fees from obligated producers. The fee would cover the costs of running the scheme administrator as well as wider costs related with R&D and data requirements etc.

ix. The ability to ensure obligated producers meet full net cost recovery (FNCR) which may include the scheme administrator charging the FNCR producer fee62.

x. The ability to redistribute producer fees raised to local authorities and others as appropriate who may have incurred costs in recycling and disposing of relevant products/materials and to establish the basis on which these fees are paid and any conditions that may apply.63

xi. The ability to purchase evidence from accredited reprocessors

xii. The ability to invest in reprocessing capacity, collection services and R&D

xiii. The ability to manage and oversee the distribution of funds for awareness-raising measures and litter-related activities

xiv. And any other administrative functions necessary to run an EPR scheme.

The Bill should allow the governance arrangements of a scheme administrator to be decided in secondary legislation. There are various examples of scheme administrators abroad, or other administrative bodies in the UK (not related to producer responsibility) with different governance arrangements. We might adopt

63 The distribution of fees to local government may need to take account of relevant DA policy priorities and requirements.
several different approaches, depending on how an EPR scheme is established. For example:

a. *Nedvang* acts as a scheme administrator for packaging EPR in the Netherlands. It was formed by industry and was not mandated by legislation. Its board consists of industry representatives.

b. In the UK, *Ofgem* (the Office of the Gas and Electricity Markets) is a public body which administers and oversees the electricity and natural gas markets in Great Britain. It has a board which is made up of independent experts.

c. In the UK, the Agriculture and Horticulture Development Board (AHDB) is a non-departmental public body and statutory levy board which is funded by an industry levy, but largely operates independently of industry and government. The AHDB board is comprised of independent experts and minister-appointed industry representatives.

d. The scheme administrator may operate with several committees sitting below a main, minister-appointed board. This is the case with *Seafish* in England (an executive non-departmental public body), and with the EPR scheme administrator *CITEO* in France.

**Option 3 – Prescriptive Bill measure – setting up powers that only allow the Secretary of State and devolved ministers to establish a particular type of scheme administrator**

This would allow scheme administrators to be established to oversee an EPR scheme, and the nature of the administrator, alongside its duties and functions, to be laid out in the primary legislation, without regard to specific needs for different waste product types.

This would mean that the Bill would have to specify all the details of an administrator, including whether it should be a private or public organisation, the governance arrangements, accounting, as well as the functions, duties and remit.

This would eliminate the potential for flexibility in introducing future EPR schemes, as they would all likely have to follow the model set out in primary legislation. This is not ideal, since different industries, markets and product types will require different approaches in order to address the relevant social, economic and environmental issues.

The prescriptive model for a scheme administrator may look like any of the following:

i. **Private company, as listed under the Companies Act 2006.**
   a. Formed by industry, e.g. *Flood Re*
   b. No Government oversight
   c. Duties and functions:
      i. Registering producers – charging for registration
ii. Data gathering and reporting. Monitoring and oversight of system.

iii. Fee setting and modulated fees

iv. Levying funds from producers

v. Redistributing funds to LAs and Waste Management Companies

vi. Other administrative functions

ii. Same as above, but not required to levy and redistribute funds from producers.

iii. Private limited company wholly owned by Defra and/or the devolved governments.
   a. Formed by Government, e.g. Low Carbon Contracts Company
   b. Board made up of industry representatives and independent experts, with some representation or oversight from Government (e.g. minister-appointed chair).
   c. Admin costs covered by levying producers. Money flowing through system is held in Government bank accounts.
   d. Duties and functions are same as the first suggested model above.

iv. An executive non-departmental public body (NDPB) formed by Government (e.g. ADHB)
   a. Could be either relatively independent from Government policy or with extensive oversight from Defra and the devolved governments.
   b. Administrative costs would still be funded by producers.
   c. Same functions and duties as the first suggested model above.

**Expected level of business and wider impacts**

The impacts on business will depend on the nature of the scheme administrator that is designed and options chosen. Acquiring powers in primary legislation will not have any direct impacts on businesses at present. Should the powers obtained be acted upon in secondary legislation, this may lead to direct business impacts. For example, our initial estimates for a reformed EPR system for packaging indicate that operational costs will increase by £2.9m per year, or once discounted, £25m over the period of 2023-2032 compared to current operational costs for the producer responsibility system\(^\text{64}\). These costs are based on comparing the current producer compliance costs to the compliance costs in European EPR packaging schemes and will only be completely understood once the EPR packaging scheme is fully defined.

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\(^\text{64}\) See the Impact Assessment titled ‘Reforming the packaging producer responsibility system in Great Britain’ for further detail.
If secondary legislation requires participation of small businesses, this could then result in reporting and compliance costs specific to each producer responsibility scheme. These would be estimated in detail in specific impact assessments.

Under Options 2 and 3, and once these powers are applied, these costs would be covered by businesses and would cover a number of supporting activities under the EPR packaging system, such as staff, rent and maintenance costs.

**Wider Impacts**

Acquiring these powers will not have any immediate wider impacts.

Should the powers obtained be acted upon we expect that the scheme administrator would help to deliver the following non-monetised benefits:

- Single point of information reporting and data registration, improving data quality for relevant products and packaging materials covered under extended producer responsibility.
- Improved enforcement for the regulator tackling online retailers and free-riders or any other producer responsibility leakages.
- Efficiency gains in terms of levying and redistribution of funds, including the full net cost recovery funds.
- Independent review of producers' performance, fair fees and necessary funding for well-functioning EPR schemes.

We expect these benefits to be of higher magnitude under Option 2 than under Option 3.

Setting up a new scheme administrator would result in potential burden to Government (e.g. core Defra and devolved governments) and industry in terms of establishing the scheme.

**Rationale for not producing an impact assessment**

The measure of acquiring relevant powers would only be relevant to government policy making and the implementation of environmental legislation by Government and its public delivery bodies. Therefore it is not envisaged as having any direct impact on businesses or community or voluntary sector groups. Direct impacts may occur in the future due to the powers arising from this intervention but they will not appear immediately. Therefore the proposed measure is a low-cost regulation below the *de minimis* threshold of +/- £5m EANCB allowing it to qualify for the fast track process.
Annex 20: Statement of impacts – Powers to reduce business food waste

Background

Food waste is a costly issue, financially as well as environmentally. The UK currently produces 10 million tonnes of food waste every year meaning that one third of all food that is produced is thrown away\(^{65}\). Of this waste 70% has been identified as ‘edible’\(^{66}\) and an estimated 190,000 tonnes as suitable for redistribution indicating a large quantity of food is thrown away unnecessarily.\(^{67}\) Food wasted in the UK is valued at £20 billion every year. The detrimental impacts of food waste for the environment are significant. Food waste in landfill gradually decomposes anaerobically, due to the lack of oxygen in tightly packed piles of waste. This takes place over a long time period producing methane, a potent greenhouse gas (GHG), and leachate, a toxic substance that can cause damage to water quality and soil. Methane as a greenhouse gas has an environmental impact over 25 times that of CO\(_2\)\(^{68}\), when this is combined with GHG emissions that could have been avoided in the production of food that is subsequently thrown away, the environmental impact of UK food waste is estimated at 25 million tonnes of CO2e every year\(^{69}\).

Food waste in the UK has reduced by 19% between 2007 and 2015\(^{70}\). However there is a role for Government to intervene to ensure the continued reduction of food waste and prevent the negative externalities and lost economic value associated with it. Historically the approach to tackling business food waste in the UK has been largely voluntary, with action being taken through agreements such as the Courtauld Commitments. While these agreements have encouraged action on resource efficiency, results such as the figures for Courtauld 3 published in 2017 were disappointing showing no reduction in food waste between 2012 and 2015. The most recent in this series of voluntary agreements is Courtauld 2025, a ten-year project with signatories from across the food industry with the aim to reduce per capita food and drink waste in the UK by 20% by 2025.\(^{71}\) While this still represents progress, at present voluntary agreements are not delivering the large scale change required to enable the UK to achieve its targets on food waste reduction. There is therefore concern that the voluntary approach alone will not be sufficient to address the pressing and environmentally damaging issue of food waste.

To allow government to act on this issue government is seeking powers through the Environment Bill which will enable producer responsibility obligations to be applied to

\(^{65}\) Courtauld Commitment 2025 food waste baseline report for 2015, WRAP
\(^{66}\) Courtauld Commitment 2025 food waste baseline report for 2015, WRAP
\(^{68}\) IPCC http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml#1
\(^{70}\) Estimates of Food Surplus and Waste Arisings in the UK, WRAP 2017
\(^{71}\) http://www.wrap.org.uk/sites/files/wrap/Courtauld_Commitment_3_final_report_0.pdf
action at all levels of the waste hierarchy including prevention and redistribution. These powers could be used to introduce food waste prevention/reduction targets for businesses as well as an obligation to increase redistribution of surplus. This will help to ensure that where negative externalities of food waste exist, both from unnecessary production as well as its presence in landfill, the burden of these costs falls on the producer.

**The policy issue and rationale for Government intervention**

The cost of negative externalities that arise as a result of food waste are not sufficiently factored into business decisions. The polluter pays principle specifies that the cost of negative environmental externalities should be borne by the producer of the externality. On the issue of food waste, negative externalities arise from emissions from the unnecessary production of food that is consequently thrown away as well as from the presence of food waste in landfill where methane and toxic leachate are produced. In line with the polluter pays principle food, businesses should take greater responsibility for the products they place on the market by reducing waste and redistributing surplus where possible.

We intend to encourage food businesses’ action on food waste by using existing powers to introduce annual and transparent mandatory reporting of food surplus and waste through the Pollution, Prevention and Control Act 1999. Extending existing producer responsibility obligation powers to waste prevention and redistribution and acquiring powers to impose mandatory targets and obligation to redistribute surplus will further incentivise businesses to take action to reduce their food waste, and is a necessary measure to demonstrate the government’s commitment to act on food waste. We will engage with stakeholders and consult on both mandating food waste targets and increasing obligations to redistribute surplus. We will only act upon these powers if insufficient progress is made through the current voluntary approach to reducing food waste. This will allow sufficient opportunity for the voluntary approach to produce results before resorting to regulation.

While the current approach to tackling food waste for businesses is predominantly voluntary, the Waste Hierarchy, which set out steps for dealing with waste ranked according to their environmental impact, is enshrined into UK law through the Waste (England and Wales) Regulations 2011, the Waste Regulations (Northern Ireland) 2011, and the Waste (Scotland) Regulations 2012. The Waste Hierarchy ranks waste management options by environmental impact where redistribution of surplus food is the preferred option to alternative disposal methods. Businesses are expected to take all such measures as are reasonable to deal with their waste in line with this hierarchy, therefore food surplus food should be redistributed where possible as a method of waste prevention. Acquiring powers to introduce

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72 Guidance on applying the Waste Hierarchy, Defra 2011
73 Guidance on applying the Waste Hierarchy, Defra 2011
obligations to increase surplus will strengthen and help to enforce the waste hierarchy.

**Rationale for acquiring powers to set targets food waste reduction targets**

The introduction of mandatory targets for food business will help to ensure businesses are contributing to the progress towards targets committed to by the government nationwide. These targets will be set in line with UN Sustainable Development Goal 12.3 to reduce global food waste by 50% per capita by 2030 (compared to a 2007 baseline) at the retail and consumer level. Through the Clean Growth Strategy (October 2017) and the 25 Year Environment Plan (January 2018) the UK government has committed to reduce per capita food waste in England by 20% by 2025, the aim of leading voluntary agreement for action on food waste the Courtauld Commitment. Welsh Government has committed to consulting on a target to reduce food waste in Wales by 50% against a 2007 baseline. Scottish Government has set waste prevention targets and food waste has been identified as a priority. Ambitious targets such as these will require industry wide effort to ensure they are met. Through mandatory target setting for food businesses of a suitable size businesses will be required to actively work to reduce the food waste they produce. Through the setting of these targets businesses that continue to make insufficient progress to reduce food waste can be identified and potentially targeted by further food waste reduction action. Where targets are clearly not met this will increase businesses accountability for their actions or lack thereof.

**Rationale for acquiring powers to set food surplus redistribution obligations**

Currently the approach to tackling food waste in the UK is largely voluntary, however there is concern over whether this approach will be sufficient to address the pressing and environmentally damaging issue of food waste. While food surplus redistribution has increased by 50% from 2015 to 2017, the potential for greater progress is apparent. WRAP advice has identified 190,000 redistributable tonnes of surplus each year available for redistribution, compared to the current level of 43,000. By imposing an obligation to redistribute surplus on businesses of an appropriate size this will ensure where it is viable, that surplus is redistributed to more efficient activities and does not end up as waste in landfill or other routes further down the Waste Hierarchy.

**Policy objectives and intended effects**

Obtaining powers to allow action on food waste is necessary in order to work towards achieving global as well as national targets committed to by government. This includes a commitment to reduce per capita food waste in England by 20% by

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74 ‘businesses of a suitable size’ is likely to refer to ‘large’ food businesses, businesses with 250+ employees, however the exact scope of these obligations will be determined in the secondary legislation accompanying these powers


2025 as part of the Courtauld Commitment. This was committed to in the Clean Growth Strategy, published October 2017, as well as the 25 Year Environmental Plan published January 2018 and Resources and Waste Strategy published in December 2018. Welsh Government has committed to consulting on a target to reduce food waste in Wales by 50% against a 2007 baseline. The Scottish Government has committed to reduce food waste by 33% by 2025, against a 2013 baseline and has recently published its Food Waste Reduction Action Plan\textsuperscript{77} to outline the actions Scotland will take to meet this. Northern Ireland has introduced legislation requiring all food businesses and all households to separately collect food waste. The UK has also fully committed to UN Sustainable Development Goal 12.3 of reducing per capita food waste by 50% by 2030 at the retail and consumer level, as well as for England a target of zero biodegradable waste to landfill by 2030. The Welsh and Scottish Governments have set a target for to reduce landfill to <5% by 2025. The intended effect of this proposal is to ensure government has the necessary powers to apply the policy measures required to work towards these ambitious targets.

While obtaining these powers will not directly impact stakeholders, the publishing of the details of this document as part of the Environment Bill is likely to attract significant stakeholder attention. This is due to the fact that the obligations enabled by the powers may restrict stakeholder activity and require changes in practice for a number of businesses. We will be engaging with stakeholders to further develop the proposals; novel and contentious elements will be considered fully, utilising stakeholder feedback in the impact assessment accompanying the relevant secondary legislation.

\textbf{Food waste reduction targets}

The intended effects of obtaining powers to impose mandatory targets for larger UK food businesses is to ensure that if the current voluntary approach delivers insufficient progress, necessary regulatory powers are in place to ensure government is able to act without delay on food waste. Furthermore, by obtaining these powers government will send out a strong signal to food businesses of the intention to regulate should progress be lacking. This will help to incentivise involvement and progress in food waste reduction action. Similarly where progress to increase redistribution of surplus food is slow, powers will be in place to impose an obligation to redistribute surplus. Further work will be undertaken to understand how to set and enforce targets to ensure they are most effective.

\textbf{Redistribution obligation}

The obligation to redistribute would apply only to businesses of an appropriate size\textsuperscript{78} and where it is viable for businesses to do so. Whether redistribution is ‘viable’ will be determined by factors such as location of the businesses, where businesses are too remote for surplus to be reasonably accessible as well as whether the product of the business is demanded by redistribution organisations. This specification will ensure that redistribution organisations receive only surplus they are able to use and prevents them from being burdened with unwanted and unsuitable food.

**Policy options considered, including alternatives to regulation**

This document presents the rationale for government to acquire powers to introduce mandatory food waste targets and increase obligations to redistribute surplus food. Therefore, the policy options considered are whether to acquire these powers or continue without. The preferred option is to acquire the powers.

1. **Do nothing**

Without acquiring further powers action to reduce food waste will be limited to progress that can be made through the voluntary approach. Historically the approach to tackling business food waste in the UK has been largely voluntary, with action being taken through agreements such as the Courtauld Commitments. While these agreements have encouraged action on resource efficiency, results such as the figures for Courtauld 3 published in 2017 were disappointing showing no reduction in food waste between 2012 and 2015. The most recent in this series of voluntary agreements is Courtauld 2025, a ten-year project with signatories from across the food industry with the aim to reduce per capita food and drink waste in the UK by 20% by 2025.\textsuperscript{79} While this still represents progress, at present voluntary agreements are not delivering the large scale change required to enable the UK to achieve its targets on food waste reduction. There is therefore concern that the voluntary approach alone will not be sufficient to address the pressing and environmentally damaging issue of food waste. Further regulatory action will be subject to that which is enabled by existing powers.

2. **New powers for the Secretary of State and Scottish and Welsh Ministers and the Department for Agriculture, Environment and Rural Affairs in Northern Ireland to mandate on food waste targets and an obligation to redistribute surplus**

This option provides for regulatory action to be taken as necessary should progress from current food waste reduction policy be insufficient to meet targets committed to in the Resources and Waste Strategy for England, the Scottish Food Waste

\textsuperscript{78} ‘businesses of a suitable size’ is likely to refer to ‘large’ food businesses, businesses with 250+ employees, however the exact scope of these obligations will be determined in the secondary legislation accompanying these powers

Reduction Action Plan, the Wales resource efficiency strategy and Northern Ireland’s forthcoming revised waste management strategy. This will enable policy to go beyond proposed action to introduce mandatory reporting of food waste and give greater opportunity for objectives set out by government to be met.

As we are seeking powers for policy measures that have not yet been defined specific regulatory options will be considered in detail in a separate impact assessment that will be consulted on, at this stage the scope of policy and its application will be decided.

**Expected level of business and wider impacts**

As obtaining these powers in primary legislation has no direct costs to businesses this policy option sits well below the +/- £5 million EANDCB de minimis threshold. Should powers obtained in primary legislation be acted upon the full impacts of these will be detailed in an impact assessment accompanying the relevant secondary legislation.

When applied, these powers are likely to result in action from businesses to reduce food waste. These actions, such as measuring food waste, can carry costs. However, there is evidence to suggest that action to reduce food waste can generate significant cost savings to businesses, estimating an average cost saving of around 26%. This was achieved through participation in a four-week food waste reduction project leading to an average annual weight reduction of 1.64 tonnes and estimated annual cost savings of £6,063 per business.80 This estimate is the result of a small-scale reduction project with in which 76 SME businesses took part from the Hospitality and Food Services Sector only, therefore these estimates are not robust and would produce spurious results if scaled up to the food industry as whole. This data has significant limitations due to the small sample and type of food businesses covered in the study and therefore cannot taken as an accurate representation of expected cost savings that can be achieved through the application of secondary legislation relating to these powers. These estimates should only be taken as an indication that potential cost savings may be made from action on food waste reduction, actual changes in costs may vary significantly. Potential costs savings that can be made from reducing food waste may vary from business to business due to a number of factors, including scope to reduce waste, value of food products and local/regional waste management costs.

Currently data on the expected costs for business is insufficient to provide an accurate picture of impacts on businesses of secondary legislation relating to the powers detailed in this document. Further information on potential costs savings will be obtained through consultation and this will help to better inform the impacts of the secondary legislation accompanying these powers. It is clear that the voluntary

approach is not currently encouraging businesses to maximise these savings, possibly due to the initial costs businesses face in changing the way they do business as well as possible information or organisational barriers. The consultation will investigate the barriers businesses face in reducing food waste.

Imposing an obligation to redistribute on food businesses is likely to lead to greater redistribution of surplus, diverting edible food from less environmentally friendly disposal routes such as anaerobic digestion or other routes further down the waste hierarchy. Increased redistribution may mean greater availability of food surplus for redistribution organisations and charities, allowing greater expansion of services to those who need it. Qualitative social benefits such as improved performance in education and better mental and physical health are among those recognised by redistribution organisations as a result of improved and increased services in local communities.  

While increasing redistribution of surplus is beneficial to society the primary objective of secondary legislation acting on these powers is to reduce food waste. By demonstrating willingness to act on this issue we hope to encourage positive change in consumer behaviour, for example by influencing employee attitudes, which may contribute to a reduction in consumer food waste. In 2015 UK household waste had reduced by around 18% compared to 2007, a decrease of 5 million tonnes and the equivalent of £3.4 billion less of food being wasted. Therefore should the secondary legislation acting on these powers help to reduce food waste at the consumer level, there is potential for cost savings for consumers and households to be made.

The environmental impact of UK food waste is estimated at 25 million tonnes of CO₂ equivalent emissions every year. The carbon savings associated with the 5 million tonne reduction between 2007 and 2015 in food that could have been eaten amount to around 5 million tonnes of CO₂e emissions, equal to taking 2.2 million cars off the road for a year. In addition to this, production of food that is later wasted puts unnecessary pressure on natural resources such as water. The water footprint of avoidable household food waste in 2011 was estimated at around 5,368 million cubic metres per year, through action on food waste prevention this excessive use of water could be reduced. While expected impacts cannot be quantified at this point these figures demonstrate the potential environmental benefits of reducing food waste that may arise as a result of secondary legislation acting on these powers.

81 More than meals: Making a difference with FareShare food, NatCen 2016
82 Food Surplus and Waste in the UK – Key Facts, WRAP
83 Excluding 'inedible parts'
85 Food Surplus and Waste in the UK – Key Facts, WRAP
86 The Water and Carbon Footprint of Household Food and Drink Waste in the UK, WRAP 2011
Annex 21: Statement of impacts – Consistent municipal waste collections

Background

Waste generation, be it from households or businesses, has associated negative environmental externalities as it can emit greenhouse gases when sent to treatment such as incineration or landfill. When waste cannot be prevented, recycling can minimise the environmental costs of products/materials being disposed of. It also generates economic value by providing secondary materials for manufacturing. Secondary materials also deliver environmental benefits because they are a more sustainable alternative to virgin materials.

At the household level, current measures and requirements for the collection of recyclable materials, such as landfill tax or dry recycling separation, are proving insufficient to increase recycling beyond the current level of 45% (England 2017). This is also failing to reduce the amount of residual waste produced. Recycling rates have stalled over the last five years. The graph below shows by how much recycling has increased and waste to landfill has reduced. Government intervention is therefore needed to require a consistent range of waste materials to be collected from households.

Figure 1: Local authority waste management destinations

Source: Local authority collected waste management - annual results

87 The landfill tax was introduced in 1996. Since January 2015 there has been a requirement for local authorities to collect two types of dry recycling separately from other types of waste.
88 Residual waste is waste that has not been prevented, re-used or recycled. It is usually collected from households or businesses in a black bag or a wheelie bin, and is then sent for treatment to ultimately end up at an energy recovery plant or landfill. The waste composition of residual waste will determine how environmentally damaging it will be when it is sent for treatment.
89 Local authority collected waste management - annual results
On business waste collections, these are usually paid for on a per-lift or number of bin basis rather than by weight. As most businesses require a residual waste collection for mixed, non-recyclable waste, this means adding recycling bins can add costs to business unless they substitute residual waste bins. This issue is likely to be most felt by small and micro sized businesses, who will unlikely have more than one residual waste bin. Government intervention is necessary to ensure waste management for businesses is conducive for recycling.

This Statement of Impacts covers the rationale for Government to obtain additional powers on waste collections.

The policy issue and rationale for Government intervention

Current arrangements ensure that every Local Authority ("LA") collects some recyclables from households. However, these arrangements do not require LAs to collect the same range of materials. We are also aware of some councils that are considering removing services such as food waste collection or plastics collection. This means householders do not often know what they can recycle or can be confused about what they can and can't recycle. If all LAs collected a similar or consistent set of materials for recycling, this would help to reduce householder confusion and also mean that producers could clearly label packaging to indicate if it was collected for recycling or not.

Similarly, for businesses and public bodies, recycling levels are low, and there are no clear requirements for businesses to segregate the waste for recycling or to make arrangements for recycling collections. Defra estimates that around 40% of NHM waste is currently recycled and this figure could potentially increase to 80%-90%. There is therefore a significant environmental benefit to be obtained by increasing the level of recycling from businesses and public bodies.

The measures proposed would ensure that all businesses and public bodies would have a duty to separate materials for recycling and to make arrangements for their collection.

Around half of LAs collect food waste, with 35% of total LAs collecting it separately. Collecting food waste separately is an important element of recycling because it ensures that this material is recycled through anaerobic digestion or composting, where energy is also recovered, and is not sent to landfill where it emits methane. In addition separate collection of food waste also reduces risks of contamination for dry recyclables. Wider uptake of separate food waste collection will increase recycling

90 Based on WRAP’s expert advice and survey work
91 WRAP LA portal
and help to reduce the amount of waste going to landfill, thereby reducing costs of treatment and delivering environmental benefits.

**Barriers and market failures**

*Behavioural barriers*

Overall, the case for investing in better recycling infrastructure is undermined if recycling is of poor quality and the savings potential from higher recycling is uncertain. Upfront costs are high and future savings rely on assumptions of higher recycling rates and secondary material prices. Business waste services represent a small cost for most operators which means few incentives to improve even though changes could lead to savings over time. In addition current waste service arrangements in the commercial sector do not drive economies of scale or incentivise recycling over residual waste.

*Household waste*

Local Authorities provide collections of recyclates based on their own decisions. Whilst this helps to account for local circumstances, evidence shows that this can create confusion to householders over the type of materials collected and the way they should be presented for the collection\(^\text{92}\). Requiring a certain set of materials to be collected consistently across England would improve householders’ understanding and participation in the use of the collection systems, while still allow for different collection systems to be used in different areas, taking into account different LA circumstances.

*Business waste*

Current collection requirements allow businesses not to separate waste for recycling if it is not economically viable for them. The main behavioural and cost barriers to changing their collection systems are particularly relevant to small and micro businesses. These are understood as the following: waste and recycling is low on business agenda, there is lack of clarity of responsibilities between businesses and waste management companies and possible split incentives\(^\text{93}\); there is little knowledge of how through re-configuring their collection provisions the overall waste management costs can be reduced; possible space issues especially for micro businesses; high turnover of staff etc.\(^\text{94}\) But this is something we want to do. Our 2019 consultation asked for views on how we can do this.

Businesses typically pay for the collection and subsequent processing of material in their waste and recycling collection containers on a regular schedule under contract. Recycling collection charges per ‘bin’ are lower than for residual bins due to the

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\(^{93}\) For example, charging on a per lift basis regardless of whether the bins are full or not can possibly make the use of recycling services more expensive, if simply added next to the refuse waste collections.

\(^{94}\) WRAP review of studies of SMEs barriers to higher recycling
value of the material or their lower processing costs compared to refuse. However, diverting some recyclable waste from the refuse bin may still mean that a refuse container is required despite it becoming less full. The need for a range of recyclable containers to collect the extra material streams will increase cost to businesses unless all of the waste from the refuse bin can be removed and that service suspended or reduced in frequency.

Environmental externalities

Households and businesses are not fully accounting for the environmental impacts of the resources they use and waste they generate when making decisions on recycling and waste disposal. Despite incentives being aligned to the waste hierarchy, with landfill being subject to landfill tax as it is the worst option environmentally for most materials, there is still a significant amount of waste that ends up in landfill and incineration. In fact, the total amount of residual waste (sent to landfill or incineration) generated by local authorities has remained stable over recent years. These environmental impacts range from the impact on natural resource depletion, greenhouse gas emissions, and wider ecosystem impacts associated with the production of raw materials when compared to the use of secondary, recycled, materials. This should also reflect the environmental impacts of waste management activities when comparing recycling to refuse waste treatment options (energy from waste incineration or landfilling). Generally, recycling activities are less carbon intensive compared to the refuse waste treatment options and help avoid suboptimal extraction of virgin materials. Further, there are known long-term environmental issues and high management costs associated with landfill aftercare treatments.

System-wide failures

Suboptimal levels of recycling have wider, system-wide implications. First, recycling activities are generally less capital- and infrastructure-intensive when compared to residual waste treatment. As recognised by National Infrastructure Commission, the higher recycling performance generally leads to lower pressures on residual waste infrastructure.

A fragmented approach to recycling currently undermines the development of viable and resilient secondary markets for materials and goods. The contamination of materials for recycling was identified as one of the key barriers in relation to plastics, paper and cardboard, metals and glass in a recent WRAP research. There is particular concern about the impact of co-mingled kerbside collections of dry recyclates on paper quality, the ability to colour separate glass and more generally challenges for all materials around the recycling infrastructure in the UK and how this

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96 National Infrastructure Commission, 2018, National Infrastructure Assessment.

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can create wider issues further down the supply chain. The different preferences at LAs collection side (a complex variation of collection systems with materials often collected co-mingled) and the NHM side (low recycling levels and material separation) against supply chain preference (calls for separating glass and paper and other fibres) shows that there are split incentives between those presenting and collecting materials at one side and preferences down the supply chain.

Finally, secondary material markets have recently experienced a turbulent situation with regards to export markets. Whilst the reasons for this are wide-ranging, a failure in improved quantity and mainly quality of presented recyclates may have contributed to England’s high dependence on export markets rather than strengthening domestic reprocessing capabilities and use of secondary materials in domestic production. 98

Government intervention is therefore needed to require a consistent range of waste materials to be collected from households and businesses in order to overcome these barriers, and address the market failures arising from failing to improve recycling collections. A consistent set of materials will help overcome behavioural barriers by in making it easier for households to recycle and collecting more of their materials, and by requiring businesses to separate materials for recycling. This will increase recycling and reduce the negative environmental externalities from lower recycling. More and better quality recycling will also benefit reprocessors and manufacturers by providing a more reliable and higher quality material stream, addressing system-wide failures.

**Derogations and Technically Economically and Environmentally Practicable (TEEP) clauses** 99

There may be instances where collecting the full range of specified waste materials for recycling separately is not TEEP because of, for example, high costs of running the service compared to comingling materials. Costs of collection are not solely down to local authority and business choices/practices. For example, WRAP (2015) found that as much as 29% of the variation across local authority recycling rates (which influence costs) could be explained by contextual variables such as their rural

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99 Technically practicable’ means that the separate collection may be implemented through a system which has been technically developed and proven to function in practice. ‘Environmentally practicable’ should be understood such that the added value of ecological benefits justify possible negative environmental effects of the separate collection (e. g. additional emissions from transport). ‘Economically practicable’ refers to a separate collection which does not cause excessive costs in comparison with the treatment of a non-separated waste stream, considering the added value of recovery and recycling and the principle of proportionality.
nature or deprivation levels, whereas up to 65% of the variation could be explained by LA controlled variables such as waste collection system types and frequency.\textsuperscript{100}

In addition, about 20% of the UK population live in flats, and it is generally accepted that yields from flats are about half of that of houses with a kerbside collection\textsuperscript{101}. In some areas this proportion is much higher. WRAP (2018) identified challenges include higher levels of transience and deprivation, limited access to recycling services and space for storage of recycling, both inside and outside the properties.\textsuperscript{102} WRAP ran pilot projects to increase recycling in urban areas across the country. This included providing single-sacks, internal caddies for recycling and targeted communications.\textsuperscript{103} The projects did not yield statistically significant changes in recycling levels. Even though significant increases in recycling were not seen, there have been some reported changes in residents’ behaviour which, over time, could lead to measurable increases in recycling collected.

Statutory guidance would set out the details on materials to be collected and frequency of their collection. It would provide further detail on how to carry out these collections to a good standard so that there was reasonably material capture. However, these examples highlight the complexity of this area and the need for flexibility when designing policy interventions.

Government will also provide statutory guidance to waste collectors including local authorities to improve the application of TEEP. This is to make sure that derogations through TEEP principles are applied appropriately. Regarding business waste, Government is seeking powers to impose a duty on collectors of business waste to provide the EA on request a copy of a TEEP assessment produced where it is not necessary to collect waste separately to achieve relevant quality levels and it is not technically, environmentally or economically practicable. Failure to provide a TEEP assessment or provide one that does not meet the statutory guidance could result in the EA issuing a compliance notice to waste collectors. Not complying with this could result in a criminal offence.

**Policy objectives and intended effects**

The measure we analyse is to require consistent municipal waste collection in primary legislation. Whilst the duties will arise from the primary legislation. Their implementation and therefore impacts on business will be subject to exemptions that will be set out in secondary legislation. Therefore at the point of implementation we can expect direct impacts to business and society more widely, the specifics of these will be detailed in full impact assessments accompanying the necessary secondary

\textsuperscript{100} WRAP (2015) Analysis of recycling performance and waste arisings in the UK 2012/13
\textsuperscript{101} WRAP (2016) Increasing recycling in urban areas
\textsuperscript{102} WRAP (2016) Increasing recycling in urban areas
\textsuperscript{103} WRAP (2018) Increasing Recycling in Urban Areas
legislation. Nevertheless, we provide here a brief assessment of what we expect those impacts to look like.

By introducing these measures we would ensure all local authorities in England collect a consistent, minimum core set of dry and organic materials. This would increase the amount of recycling materials collected. This measure together with clearer labelling of recyclable packaging (also part of the Environment Bill), would also reduce confusion among households over what can and can’t be recycled. This would help to reduce contamination of non-recyclable items with recycled materials, providing a higher quality recyclates for reprocessors and secondary materials markets.

We will also require all businesses and public sector organisations generating household-similar waste to segregate this into a core set of dry materials and where required food waste. Greater consistency in the range of materials presented will enable increased economies of scale in service provision (e.g. reducing the costs of food waste collections) and reduced charges to businesses. The increased quantity and quality of materials will ensure more viable and resilient secondary markets. These measures would impose some additional costs on businesses but there would be scope to reduce these costs by measures to share collection services across businesses or districts. Wrap has done some research into ‘business improvement districts’ where, essentially, one waste operator is contracted to collect the waste from all businesses in a ‘district’. We also consulted on whether certain categories of business should be exempt such as micro-firms. As well as reducing costs for individual businesses there are other benefits such as fewer bin lorries going along the streets every day. These will be considered in a separate impact assessment associated with secondary legislation to use the powers.

We want to ensure householders have a regular access to collection services to remove “smelly” food waste especially and this is why the Environment Bill proposes that food waste should be collected at least weekly. This will ensure that all local authorities provide a minimum weekly service for food waste, and thus directly address local residents’ concerns about the harm to local amenity and public health from this rubbish not being collected frequently.

Overall, the requirements on LAs and businesses will increase the quality and quantity of recycling and reduce carbon emissions.

When applying the duties we will issue statutory guidance to ensure minimum standards are achieved in the design and delivery of these new collections including the application of TEEP in order to achieve high levels of performance. The standards will also ensure consumers have access to frequent quality services which enable high levels of satisfaction and participation.

This policy will dovetail with reforms to packaging Extended Producer Responsibility (EPR) and the potential introduction of a Deposit Return Scheme (DRS), all of which are included in the Environment Bill.
Policy options considered, including alternatives to regulation

This document presents the rationale for mandating what materials must be collected in municipal waste collections. Options considered are therefore whether to introduce the duties and acquire relevant powers or not do so. There is a rationale for Government to require duties in this space, as explained in the previous section. The preferred option is to introduce these duties and associated powers, given existing duties and powers have not been sufficient to increase both the quantity and quality of recycling (as explained in the background section). Further options on how to apply the powers will be subsequently developed and consulted on in 2020.

A non-regulatory option has not been considered in this assessment. This is because voluntary approaches have already been tried and shown not been effective in increasing the recycling rate nor to provide consistent collections of materials throughout England. For example, only 35% of local authorities choose to collect food waste separately\(^{104}\), with the upfront cost of doing so being a barrier. In addition, in the derogations rationale section above this document explains how, for example, voluntary interventions to increase recycling in urban areas have not been successful at increasing recycling, whereas policy levers such as landfill tax and requiring local authorities to collect recycling are widely recognised as having increased recycling.

Expected level of business and wider impacts

Direct impacts from these measures are covered in an impact assessment that has been consulted upon. The measures are expected to result in net savings to municipal businesses from improved waste collection practices. There may be some distributional impacts with smaller businesses experiencing costs from the implementation of these powers. Impacts on small businesses will be fully accounted for in a comprehensive small and microbusiness assessment, part of a wider impact assessment, and will be consulted on in 2020.

The implementation of this primary measure on LAs and businesses will be subject to secondary legislation concerning detailed provisions on materials to be collected and exemptions for certain categories of firms as necessary (e.g. firms that do not produce sufficient quantities of recyclate to justify collection) This will increase the quality and quantity of recycling, stimulating secondary materials markets and reduce greenhouse gas emissions. The measure would only be relevant to government policy making and the implementation of environmental legislation by government and its public delivery bodies. Therefore it is not envisaged as having any direct impact on businesses or community or voluntary sector groups. Direct

\(^{104}\) WRAP LA portal
impacts may occur in the future due to the powers arising from this intervention, and these will be fully assessed and considered separately. Therefore the proposed measure is a low-cost regulation below the *de minims* threshold of +/- £5m Equivalised Annual Net Direct Cost to Business (EANDCB) allowing it to qualify for the fast track process.

While acquiring the measures is an intervention below the +/-£5m EANDCB threshold, its application will likely have an impact to business above that. Below we detail the summary of costs/benefits presented in the 2019 consultation impact assessment. These will depend on how the measures will be applied and will be revised as that is developed and reflected in a revised impact assessment.

**Table 1: Summary of costs/benefits from the consultation stage impact assessment (2019)**

<table>
<thead>
<tr>
<th>Change over 2023-2035 (discounted, against baseline)</th>
<th>Option 1M</th>
<th>Option 2M</th>
<th>Option 3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs (+) savings (-)</td>
<td>HH: current systems</td>
<td>HH: two-stream</td>
<td>HH: multi-stream</td>
</tr>
<tr>
<td></td>
<td>NHM: DMR + separate glass</td>
<td>NHM: DMR + separate food waste</td>
<td>NHM: DMR + separate food waste + separate glass</td>
</tr>
<tr>
<td>Municipal recycling rate achieved</td>
<td>57% (56% HH, 58% NHM)</td>
<td>62% (56% HH, 70% NHM)</td>
<td>64% (55.5% HH, 74% NHM)</td>
</tr>
<tr>
<td>Additional LAs net waste management costs(+)/savings(-) from changes in dry recycling, food waste and free garden waste collections for all HHs</td>
<td>£667m: £373m transition costs, -£872m savings on ongoing costs, and £1,166m lost income from garden waste charging</td>
<td>£1,008m: £858m transition costs, -£1,016m savings on ongoing costs, and £1,166m lost income from garden waste charging</td>
<td>-£679m: £590m transition costs, -£2,435m savings on ongoing costs, and £1,166m lost income from garden waste charging</td>
</tr>
<tr>
<td>Savings to households from removed garden waste charging</td>
<td>-£1,166m</td>
<td>-£1,166m</td>
<td>-£1,166m</td>
</tr>
<tr>
<td>Net waste management costs (+)/savings(-) to NHM businesses under increased recycling collections</td>
<td>-£2,040m</td>
<td>-£1,211m</td>
<td>-£1,206m</td>
</tr>
<tr>
<td>Policy costs to apply best practices in recycling collections</td>
<td>£278m</td>
<td>£278m</td>
<td>£278m</td>
</tr>
<tr>
<td>Reduction in government landfill tax receipts</td>
<td>£3,055m</td>
<td>£3,230m</td>
<td>£3,205m</td>
</tr>
</tbody>
</table>

This table is taken from the Consistent Municipal Recycling Collections in England impact assessment which uses a 2018 price base and a 2023 present value base. These are not the same base years as the Environment Bill Impact Assessment.
(benefits to municipal sector included in LA and NHM rows)

| GHGs emissions savings (UK only, traded and non-traded) | £1,591m | £1,720m | £1,773m |
Annex 22: Statement of impacts – Extended charge for single-use plastic items

Background

Single-use plastic items are by their very nature, are intended for one time usage, after which they are either recycled or disposed of despite the energy and resources used to produce them in the first place. These include plastic shopping bags, take-out food and beverage containers, plastic straws, plastic utensils and cups, coffee and fountain drink cups, plastic drink lids, coffee stirrers, coffee stoppers, and polystyrene foam cups and containers.

Our Resources and Waste Strategy aims to encourage consumers to purchase sustainably, and to reduce usage of products that can generate avoidable waste as one of the key principles. Towards Zero Waste, the waste strategy for Wales, identifies the importance of designing for multiple reuse. The 5p charge on single-use carrier bags (SUCBs) was an important first step to achieving this goal. While the policy measure has proven successful in reducing the consumption of SUCBs, other single-use plastic items, which generate high levels of waste and pollution, remain excluded from any charging regime.

Recent measures announced in the 2018 Budget highlight the Government’s commitment to taking action on the problem of single-use plastics waste including single-use plastics, plastic packaging and disposable cups, as part of the Government’s wider strategy to address plastics waste. Government’s ambition is not limited to reducing plastic waste, but extends to include other single-use plastic items for which readily available and affordable alternatives already exists.

The Welsh and UK Governments have already taken consumption reduction measures using current powers in the Climate Change Act 2008 to place a charge on single-use plastic carrier bags supplied to customers. In addition to this, Government has proposed bans on some single-use items where readily available and affordable reusable alternatives exists in the market. The ban will include plastic cotton buds, straws and drink stirrers106.

Our Resources and Waste Strategy sets out these ambitions in more detail including how the UK Government intends to achieve:

- Zero avoidable waste by 2050 (Clean Growth Strategy);
- Maximise the value we extract from our resources; and

Minimise the negative impacts associated with their production, use and disposal.

Towards Zero Waste and the accompanying sector plans set out the Welsh Government’s priority outcomes for:

- A sustainable environment, where the impact of waste in Wales is reduced to be within our environmental limits by 2050 – a ‘one planet’ level;
- A prosperous society, with a sustainable, resource efficient economy
- A fair and just society, in which all citizens contribute to the well-being of Wales through actions on waste prevention, reuse and recycling

The policy issue and rationale for Government intervention

As many of these plastic items are provided to the consumer free of charge, with the price included in the price of other products, consumers are not incentivised to limit their consumption to more sustainable levels. Without further intervention, consumption levels could remain the same or increase over time. The latter effect was seen in the case of single-use plastic bags before the charge was introduced in 2015. The success of the carrier bag charge demonstrates the difference even a relatively small economic incentive can make.

Current powers in the Climate Change Act 2008 allows government to require sellers of carrier bags to place a charge on the bags supplied to customers. The Legislation allows for ministers by regulation to determine what type of bag is captured by the requirement to apply a charge. Without the powers to extend the power to require levies to be set on other single-use plastic items such as those described above, they are likely to continue to be produced, used and discarded in large numbers. The negative impacts of these goods are evident in high volumes of avoidable waste, littering and pollution.

Policy objectives and intended effects

The policy measure seeks to acquire the power to extend the current charging requirement to other products. This would allow government the flexibility to add products to a list of single-use plastic items on which retailers can impose a charge and incentivise reduction in their usage.

The measure seeks to extend powers beyond those in Section 77 of the Climate Change Act 2008 in order to add additional products to a list of single-use plastic

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107 This was the case with single-use plastic carrier bags. Before the 5p charge was introduced carrier bag usage increased steadily by 5% per year, WRAP Carrier Bag Data 2015
items where a separate charge could be imposed. Extending existing powers would allow the application of a requirement to place a charge on a “product-by-product” basis and could be used to impose greater costs on products with higher environmental impacts. This could drive consumers to make more environmentally informed choices and, in turn, demand more sustainable products.

For example, an estimated 2.5bn disposable coffee cups are used in the UK each year, creating approximately 25,000 tonnes of waste. Cardiff University Research on incentivising reduced use of disposable coffee cups tested a range of measures that could encourage the use of re-usable coffee cups\textsuperscript{108}. The study found that use of disposable coffee cups could be reduced by 50–300 million annually by imposing a 25p charge on single-use coffee cups.

Findings also confirmed that a charge on disposable cups increased the use of re-usable coffee cups by 3.4%, environmental messaging in cafes increased the use of re-usable coffee cups by 2.3%, the availability of re-usable cups led to an increase of 2.5%, and the distribution of free re-usable cups led to a further increase of 4.3%. The study concluded that through clear messaging, the provision of reusable alternatives, and financial incentives, the use of reusable coffee cups can be increased by (on average) 2.3 to 12.5%.

In 2013 Starbucks launched a £1 reusable cup in the U.K. and customers save 25p each time they use a reusable tumbler. In July 2018, Starbucks ran a trial across 35 stores in Britain charging 5p paper cup to encourage customers to bring in a reusable cup.

The Starbucks trial results showed a 126% increase in the use of reusable cups in participating stores, measured by the number of customers redeeming the reusable 25p cup discount. Research findings also showed the percentage of customers bringing in their own cup or tumbler increased in the trial stores from 2.2% before the trial to 5.8% during the trial.

These results show that applying a charge for specific single-use plastic items can be a powerful tool to incentivise reduced use of the affected product as well as increased usage of readily available alternatives. The current 5p charge for SUCBs led to 86% reduction in SUCBs usage over the period of 2015-2018.

**Policy options considered, including alternatives to regulation**

**Option 1 - Do nothing Option**

\textsuperscript{108} \url{https://www.cardiff.ac.uk/news/view/687689-curbing-coffee-cup-usage}
This option provides for existing powers to regulate charging for single-use plastic items to remain unchanged and regulatory capability to be restricted to charging for single-use carrier bags only. This means that single-use plastic items continues to be produced, used and discarded, generating negative externalities, leading to large volumes of avoidable waste going to landfill, ending up in litter and causing pollution on land and in the marine environment.

**Option 2 – Extended a charge for single-use plastic items**

Under this option, government would be granted new powers to extend the charging requirement to products beyond those in Section 77 of the Climate Change Act 2008. This would allow the Welsh and UK Government to add products to a list of single-use plastic items for which a separate charge is applied.

In doing so the governments seek to mitigate the negative externalities associated with the production, usage and disposal of most single-use plastic items. At the same time the charge is expected to act as an incentive to encourage consumers to change their behaviour, to purchase sustainably and to reduce consumption of environmentally harmful products.

**Alternatives to regulation**

Alternatives to regulation, such as voluntary charging schemes have proved to be less effective in reducing the usage of single-use plastic items. Previous experience with WRAP’s voluntary agreements with large retailers charging for SUCB has shown that while the charge was effective in reducing SUCB usage, the voluntary approach did not lead to a consistent policy of charging across the sector. A statutory charging regime has shown to be a far more effective tool.

One issue with voluntary charging is its effect on competition and consumer behaviour. For example retailers who voluntarily charge for single-use plastic items could risk losing customers to those retailers who continue to provide these plastic items for free. Such approaches provide little incentives for consumers not to choose single-use plastic items. In order to provide a consistent approach, and a level playing field for all participants, mandatory charging is required.

**Expected level of business and wider impacts**

At the point of acquiring these powers via primary legislation, there will be business or wider impacts. Should these powers be obtained and then implemented in future, the implementation may lead to direct impacts to business and to society more widely. The exact impacts of charging would be estimated in associated impact assessments supporting the secondary legislation.

*Business impacts*
Acquiring these powers will not have any immediate business impacts. The exact impacts as a result of introducing secondary legislation are unknown at the moment and will be item-dependent so that we are unable to quantify any exact monetary costs to businesses at present.

If a charge is introduced, we would expected reduced demand for the given single-use item, thus reducing resource costs to businesses offering the single-use products for free. These are likely to be direct business savings, as seen under the introduction of 5p charge for single-use carrier bags. Reduced demand for single-use plastic items should equally mean reduced supply of these products, therefore possibly reduced revenue to businesses selling these products. Further, supply is likely react to the new demand from consumers, offering alternatives that are now in higher demand (i.e. single-use alternatives), thus generating new revenue opportunities to businesses.

The overall impact on businesses is impossible to predict without detailed market analysis but it is likely to result in resource savings (+) to those businesses currently offering single-use plastic items for free, loss in revenue to those businesses manufacturing affected single-use plastic items (-) and possible revenue increase to those businesses offering alternatives to single-use plastic items that would be in higher demand (+).

Based on previous experience of the 5p charge for single-use carrier bags (SUCBs), we would expect there will be cost associated with any changes for businesses as a result of the charge such as administrative costs of rearranging checkout systems and reprogramming tills, time needed for staff to read and familiarise themselves with the new policy along with other additional running costs arising from purchase, transport and storage of alternatives to single use plastic items. Possible wider impacts such as consumer and environmental impacts are detailed below.

**Consumer impacts**

If the secondary legislation introduces new charge for single-use plastic items, consumers may be faced with higher costs when buying the relevant items. The exact impact of single-use levies are unknown at the moment and will be item-dependent.

While the reduction in SUPB as a result of the 5p charge has been the result of mostly retailer led reduction measures such as phasing out 5p bags completely and offering reusable ones instead. Studies on consumer behaviour post charge has seen some positive “policy spill over effects such as positive consumer attitude of acceptance of charging for other single-use items”.

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It could be the case that consumers buy less of the product due to a higher price, and that charging would act as an incentive to consumers to reduce usage of single-use plastic items and consider replacing such items with reusable alternatives instead. As long as reusable alternatives are available and price competitive, we expect this leading to reduced use of single-use plastic items and shifting to more reusable alternatives in the long run.

*Environmental impacts*

The environmental pressures on climate change, land and in the marine environment associated with production, use and disposal of single-use plastic items, could be reduced as long as there are clear alternatives that are more sustainable and affordable to consumers.

Overall, the 5p charge led to reduced climate change, water and land impacts of single-use plastic bags. According to the Centre for Environment, Fisheries and Aquaculture Science CEFAS, there has been a 50% reduction in marine pollution as a direct result of the 5p charge\(^\text{110}\).

As a result of the charge we might see waste associated with single-use products reduced, resulting in positive environmental impacts as well possible reductions in waste management costs for local authorities. This could also mean that less non-recyclable/hard to recycle materials would end up in litter and waste. In line with the impacts of the 5p charge on the SUCBs usage, we expect that a successful charge could lead to:

- fewer single-use plastic items ending up as litter, which could translate into reductions in local authorities waste management costs;
- reductions in GHGs emissions associated with the production, usage and disposal of single-use plastic items;
- environmental benefits such the reduced disamenity impact of litter and;
- reduction in the pollution on land and in the marine environment caused by single-use plastic items.

**Rationale for not producing an impact assessment**

As obtaining these powers in primary legislation has no direct costs to businesses this policy option sits well below the EANDCB £5 million threshold. Should powers obtained in primary legislation be acted upon, the full impacts of these will be detailed in an impact assessment accompanying the relevant secondary legislation.

\(^{110}\) The Centre for Environment, Fisheries and Aquaculture Science Cefas
Annex 23: Statement of impacts – Amendments to the Clean Air Act

Background

Air pollution is a major public health risk ranking alongside cancer, heart disease and obesity, and poses the single greatest environmental risk to human health. There is strong evidence that both short-term and long-term exposure to PM$_{2.5}$ are linked with a range of negative health outcomes including shortening the lives of susceptible individuals through cardiovascular disease, stroke, cancers, respiratory and other diseases$^{111}$.

The UK has ambitious legally-binding targets$^{112}$ in place to reduce emissions of five damaging air pollutants, including fine particulate matter (PM$_{2.5}$), by 2020 and 2030; aiming to cut early deaths from air pollution by half. The Government's Clean Air Strategy$^{113}$ (published in January 2019) committed to progressively cut public exposure to particulate matter pollution as suggested by the World Health Organization. According to 2016 NAEI projections, the government is set to miss its legally binding targets for PM$_{2.5}$ for 2030 by 31 kilo tonnes if no further action is taken. It is therefore imperative that government takes action to reduce emissions.

Domestic burning of solid fuels is the single largest source of harmful PM$_{2.5}$ emissions in the UK, accounting for 38%$^{114}$ of the total emissions in 2016. This compares with industrial processes and road transport which account for 11% and 12% PM$_{2.5}$ emissions respectively. The growth in domestic burning has been partly driven by an increase in restoration of open fires and installations of wood-burning stoves$^{115}$. Stoves are now an additional form of heating for many households; for a minority they may be the sole heat source. This has inevitably resulted in a significant increase in the amount of wood burned domestically.


$^{114}$ 38% is based upon the calculations in the National Atmospheric Emissions Inventory for 2017, which is the most recent year available. This data is uncertain given the difficulties in accurately estimating the extent and nature of domestic burning, however it is the best available evidence and is informed by a wide range of data sources, including data from BEIS and the stove and wood fuel industries. Of the 38% approximately 34% is domestic wood. http://naei.beis.gov.uk/data/

$^{115}$ The Stove Industry Alliance have informed us that stove sales increased from around 130,000 in 2004 to 180,000 in 2014, whilst this doesn’t capture the entire market it does capture a sense of the scale of the increase. This has plateaued at 2014 but remains in the order of 100,000s.
Air pollution is a negative externality that results in costs to people who are external to the transaction. In burning solid fuels, the biggest source of PM$_{2.5}$ emissions, individuals do not take into account the wider health impacts. The wider health impacts are also not reflected in the price of solid fuels, as such the consumption of these fuels is above the socially optimal level.

The policy issue and rationale for government intervention

The Clean Air Act 1993 (CAA) is the UK’s main legislative framework for the control of pollution from domestic solid fuel burning. Part 3 of the Act allows Local Authorities (LAs) to designate Smoke Control Areas (SCAs), where it is an offence to emit smoke from a chimney of a building (including domestic, residential and industrial premises) or chimney serving a furnace of any fixed boiler or industrial plant unless using an authorised fuel or an exempt appliance (statutory defences). Authorised fuels and exempt appliances are assessed as operating smokelessly and thus approved for use in a Smoke Control Area by the Secretary of State and published in a list. It is also an offence to sell an unauthorised solid fuel for delivery to a building in an SCA and to buy unauthorised fuels in an SCA unless they are for use in an exempt appliance. LAs are responsible for enforcing the legislation and have advised that SCAs can be difficult to enforce and that awareness of, and compliance with, the legislation is low. Measurement and modelling data support this conclusion, with evidence that illegal burning is taking place. The government is taking action through the Environment Bill to make the existing legislation more effective to protect the public from the damage caused by exposure to PM$_{2.5}$ and to help meet its emission reduction commitment.

Policy objectives and intended effects

The overarching policy objective is to deliver health benefits by tackling domestic combustion of solid fuels, the most significant source of PM$_{2.5}$. This is in line with working towards meeting the UK’s legally-binding targets for 2020 and 2030 for emission reductions, as well as the ambition set out in the Clean Air Strategy to reduce people’s exposure to PM$_{2.5}$ concentrations. Reducing public exposure to this pollutant will deliver significant public health benefits. Public Health England estimates$^{116}$ that over 18 years, a reduction of PM$_{2.5}$ concentrations by 1 microgram per metre cubed of air across England would prevent 50,900 cases of coronary heart disease, 16,500 strokes, 9,300 cases of asthma and 4,200 cases of lung cancer. The proposed changes will indirectly contribute to reductions in PM$_{2.5}$ concentrations across many parts of England, and so will help to prevent a significant number of adverse health outcomes.

The proposed changes (outlined in Option 1 below) are intended to make the legislation a more effective tool for tackling domestic burning by making it easier to enforce; raising awareness of the legislation and increasing compliance; ensuring consumers and business are aware of the location of SCAs; providing an alternative enforcement route through the EPA under nuisance legislation; and allowing LAs to bring inland waterway vessels within scope of their SCA (subject to local consultation) in areas of high pollution in order to reduce emissions of PM$_{2.5}$ and deliver the Government’s commitment to progressively cut public exposure to harmful fine PM$_{2.5}$. These changes will be supported by a communications campaign targeted at domestic burners, to improve awareness of the environmental and public health impacts of burning and relevant smoke control legislation.

**Policy options considered, including alternatives to regulation**

**Option 0: Do nothing approach**

Under this option, no changes are made to the CAA.

**Option 1 (preferred option): Changes to the Clean Air Act**

This is the preferred option. Under this option, changes are made to the CAA and the EPA to make them more effective and proportionate means of tackling domestic burning in Smoke Control Areas in order to help meet our legally-binding emission targets and deliver our commitment to progressively cut public exposure to harmful fine particulate matter (PM$_{2.5}$). LAs will be given powers to go further in their area by including smoke emissions from the chimney of moored inland waterway vessels (subject to local consultation), if they feel there is a significant air pollution problem from domestic burning, or where local democratic processes move in this direction.

The proposed measures include:

**Changing the offence of emitting smoke from a chimney of a building or chimney serving a furnace of a fixed boiler or industrial plant so it is no longer a criminal offence but subject to a civil penalty (fine) and removing the statutory defences (i.e. the use of an exempt appliance or an authorised fuel) which are preventing LAs from tackling domestic burning.**

In an SCA it is an offence to emit smoke from the chimney of a building (or chimney serving a furnace of a boiler or plant) unless using an authorised fuel or exempt appliance and is subject to a penalty up to £1000. If smoke is emitted, the relevant LA can prosecute the offender in the Magistrates’ Court. However LAs have advised that this process is overly burdensome and expensive, and it is challenging to gather sufficient evidence, particularly due to the statutory defences.
The Act provides defences, including the use of an exempt appliance or an authorised fuel. These defences make enforcement for local authorities extremely difficult. To secure a conviction a local authority has to demonstrate beyond reasonable doubt that the offence has been committed. LAs do not have the power to enter a private dwelling where smoke has been seen emitted from the chimney and as such getting sufficient evidence is very difficult. In particular disproving that the appliance used was not exempt, or that the fuel was of a non-authorised type. This leaves authorities in a difficult position, as they have indicated that they are unwilling to risk the cost of proceedings when the likelihood of securing a conviction is remote. This has led to very low levels of enforcement, with resulting impacts upon health caused by poor air quality attributable to domestic burning.

To enable more effective and proportionate enforcement action we propose changing the offence of emitting smoke from a chimney of a building (or chimney serving a furnace of a fixed boiler or industrial plant) so it is no longer a criminal offence but subject to a civil penalty (fine) up to £300 and removing the statutory defences (i.e. the use of an exempt appliance or an authorised fuel) which are preventing LAs from tackling domestic burning.

Enforcement would be advice-led, focussed on helping individuals to prevent smoke emissions and aiming to deliver better outcomes for those who suffer as a result of a neighbour’s smoke. To help raise awareness and shift behaviour, statutory guidance will require LAs to issue a warning notice with advice on how to comply (e.g. how to burn correctly, maintain their appliance) and information on the impacts of poor burning practice in the first instance. In most cases, it is anticipated that the provision of advice will lead to compliance and LAs will not follow it up with a financial penalty. This will prevent disproportionate action being taken against those who are acting in good faith, but might not be following good practice. However if smoke is subsequently emitted from the same premises, LAs will have the power to issue the occupier with a fine. There would be provisions for allowing for representations to be made by the recipient and an appeals process (to be set out in primary legislation) to dispute the civil penalty.

Expanding the system of statutory nuisance within the EPA 1990 to include smoke from private dwellings in Smoke Control Areas, which is currently exempt. This would enable LAs to take stronger action against persistent offenders if the emissions of smoke are prejudicial to health or causing a nuisance.

The Environmental Protection Act 1990 (EPA) provides for an offence of statutory nuisance, including smoke emitted from a premises, provided it is prejudicial to health or a nuisance. The EPA currently exempts smoke emitted from a chimney of a private dwelling within SCAs, so as to avoid bringing the same activity within scope of two criminal regimes. However in light of the proposal outlined above to change to a civil regime, we propose extending the system of statutory nuisance to include
smoke in SCAs. This means that someone who repeatedly emits smoke and endangers human health can be pursued under this regime. Breaching a local authority abatement notice issued under this regime is a criminal offence, which means that local authorities will be better equipped to act against emissions of smoke.

**Strengthening the existing penalty for the offence of selling controlled (currently known as ‘unauthorised’) solid fuel for delivery to a property within a Smoke Control Area, and placing a new duty on retailers of controlled fuels to notify customers of the offence of buying controlled fuel for use in an SCA.**

The CAA provides for an offence of dealings in unauthorised fuel, whereby it is illegal to sell unauthorised fuel for delivery, or delivery on one’s behalf, to a property within an SCA. In the draft clauses the term ‘unauthorised’ fuel is now ‘controlled’ fuel. There is evidence that, whilst this provision is observed by traditional coal merchants it is not widely observed in the case of newer sellers and internet sales, where deliveries of controlled fuel into SCAs does occur. The penalty for the offence is a fine up to level 3 on the standard scale (currently £1,000). It is proposed that the limit on the fine is removed, and the appropriate level of penalty be decided by the court.

It is an offence to purchase controlled fuel unless it is for use in an appliance on the Secretary of State’s list, or in another lawful way (for example, outside the SCA or outdoors). This legislation was designed in the 1950s when most fuel was delivered by coal merchants, restricting what fuels could be delivered to addresses within SCAs. While this worked well at the time, the domestic fuel landscape has changed since then and today a large proportion of fuel is purchased through shops, making it difficult to enforce SCAs as the retailer does not know where the fuel will be burned and therefore whether it is being legally acquired. Furthermore, as awareness of smoke control legislation is low and there is no onus on retailers for in-person sales to be aware of or highlight the legislation it is likely that customers are unwittingly committing an offence.

To ensure people are aware of the offence to buy controlled fuel (unless for use as outlined above) we propose placing a new duty on retailers in England to inform customers of the legislation. If a retailer does not fulfil this duty they will be committing a criminal offence, the penalty of which will be determined by the Court (i.e. unlimited as with the offence for delivery of fuels).

**Give LAs the power to bring inland waterway vessels (including canal boats and commercial boats) into scope of Smoke Control Areas (subject to local consultation)**

The provisions of SCAs do not currently apply to vessels on inland waterways. A number of LAs have called for measures to bring emissions from inland waterway vessels (canal boats in particular) into scope of SCAs, particularly in densely
populated urban areas where there is a large number of people who live on boats burning solid fuel for heating, adding to the already high levels of PM$_{2.5}$. We propose giving LAs the power to apply SCA restrictions to vessels on inland waterways when they are moored (i.e. tied or otherwise secured to any land, pontoon or other floating structure secured to land). The definition of “inland waterways” is that set out in section 44(4) of the CAA$^{117}$. Any LA wishing to use this power to bring canal boats with the scope of an SCA must first consult locally on it.

LAs are required to reimburse owners of certain buildings who need to carry out works to enable them to comply with SCA restrictions. They are currently only required to reimburse up to 70% of the cost incurred. An LA will be required to reimburse (up to 70% of the cost incurred) the owners or occupiers of vessels (of any age) for carrying out reasonable works required to avoid contravention of the order if it can be shown that:

a. the vessel has no other source of heating or cooking beyond the appliance that can no longer be used without contravention of the impending prohibition;

b. the owner or occupier has a right to moor the vessel at a single mooring place within that area for at least the qualifying period (i.e. from the day on which the smoke control order was made and ending 6 months after the order comes into operation – usually 12 months in total);

c. the owner or occupier does not have access to a mains electricity or gas supply at the mooring place (i.e. the ability to hook-up to mains electricity, or local gas provision);

d. the owner or occupier gained permission from the relevant Local Authority to carry out the appropriate adaptions and the works were completed before the coming into operation of the order.

Any costs to be reimbursed are to be paid in six monthly instalments following completion of the works. Should the owner or occupier of the vessel cease to have the right to moor at the single mooring place, no further payments would be owed by the LA.

*Creating a new duty for LAs to notify Defra when declaring or re-declaring a Smoke Control Area*

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At present, it can be difficult to determine if a property is in an SCA without contacting the relevant local authority or visiting numerous websites. We want to improve this by creating an online search tool to enable consumers and businesses to quickly identify addresses within Smoke Control Areas.

To ensure this tool is kept up to date with the latest SCA information we propose including a duty on local authorities to inform Defra when declaring or re-declaring an SCA.

**Expected Level of business and wider impacts**

**Option 0 – Do nothing approach**

There are no costs to businesses or households under the do nothing option as no changes are made to the current CAA.

**Option 1 – Changes to the Clean Air Act and the Environmental Protection Act**

*Changing the offence of emitting smoke from a chimney of a building or chimney serving a furnace of a fixed boiler or industrial plant so it is no longer a criminal offence but subject to a civil penalty (fine) and removing the statutory defences (i.e. the use of an exempt appliance or an authorised fuel) which are preventing LAs from tackling domestic burning.*

*Expanding the system of statutory nuisance within the EPA 1990 to include smoke from private dwellings in Smoke Control Areas, which is currently exempt. This would enable LAs to take stronger action against persistent offenders if the emissions of smoke are prejudicial to health or causing a nuisance.*

Both the provision of advice and civil penalties under the CAA and extension of nuisance provisions under the EPA constitute a potential additional burden for LAs that have an SCA. We estimate the proposed changes would result in approximately 25% more work for an enforcement officer in those LAs with SCAs. Taking the average wage of an enforcement officer119, £33,362, and adding 26% in on-costs120 we estimate an increase in demand on enforcement officers’ time of 25%, would cost an LA £10,500 per annum on average, resulting in a total cost of £2,086,000121 for

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118 Defra assumption, although based on Local Authority survey responses this is expected to be a high estimate. Further supporting evidence from consultation is necessary.

119 The assumption here is that each LA with an SCA has one equivalent FTE working on smoke control related issues, however engagement with local authorities indicates that, on average, it may be lower than this.

120 On costs include contributions that an employer makes that are not included in the wage, such as pension and national insurance contributions. The data used to calculate the figure quoted can be found here: https://www.unison.org.uk/get-help/knowledge/pensions/local-government-pension-scheme/#heading-5, https://www.gov.uk/national-insurance-rates-letters

121 All numbers presented are in 2018 prices, and the price year may change in the future for consistency across the bill.
the 198 LAs with SCAs. Enforcement officers already spend some time investigating complaints, however the current structure of legislation does not facilitate effective enforcement. Therefore some officer time budgeted for in this analysis is already spent on dealing with complaints arising from these issues. Currently LAs very rarely take defendants to court due to the burdensome procedure and challenges raised around the defences. The proposed change would make it more effective for LAs to enforce regulation.

There will be no cost to businesses (such as pubs and hotels) who are already burning using appropriate fuels (e.g. smokeless solid fuel) or appliances (e.g. stoves approved for use in an SCA) as they should not be producing smoke from their chimneys. Businesses that are emitting smoke from their chimneys by burning controlled solid fuels (currently known as unauthorised fuels) in non-exempt appliances (e.g. an open fireplace) are already committing an offence under current legislation, and as such these proposed changes do not represent an increase in costs for those businesses.

**Strengthening the existing penalty for the offence of selling controlled (currently known as ‘unauthorised’) fuel for delivery to a property within a Smoke Control Area, and placing a new duty on retailers of controlled fuels to notify customers of the offence of buying controlled fuel for use in an SCA.**

Selling controlled fuel for delivery (including online sales) to a property within an SCA is already an offence and the proposed measure removes the limit on the fine (to be determined by the court). We do not expect the proposed change to result in any additional costs to businesses and households, as it would only increase costs for those who are already committing an offence.

The introduction of a duty on retailers to notify customers of the offence to buy controlled fuels at the point of sale will result in a new burden of enforcement on LAs. LAs with an SCA will need to check that retailers are fulfilling their duty to notify customers that wish to purchase controlled fuels. The cost of regulating these retailers would be £486.00 per LA, assuming an environmental officer spends 3 days a year checking a random selection of fuel retailers in their control area. This would amount to a total cost of £95,900 for all LAs across the country. At the higher end, spending 6 days a year results in a total cost of up to £192,000 for all LAs. At present government is consulting on proposals to phase out the most polluting fuels used for domestic combustion. It is expected that there will be synergies between the enforcement approaches used. As a final decision has not been taken on the fuels legislation, these enforcement costs are still accounted for in this RTA, however should that legislation go ahead it is expected that these costs will be covered under the Impact Assessment for the fuels legislation.

This duty to notify is not expected to have a significant impact on business. This burden will fall on retailers of controlled solid fuels familiarising themselves with this new legislation as well as installing a sign in-store or online. To ensure retailers are
abiding by the new legislation they will need to familiarise themselves (and their employees) with the changes. We expect the magnitude of this impact to be very small, since it will at most require relevant retailers to inform employees of their duty to notify at point of sale, and display a sign on their website or in store.

**Give LAs the power to bring inland waterway vessels (including canal boats and commercial boats) into scope of SCAs.**

We expect this change would result in an increase of an enforcement officers’ time of 20%, in addition to that which is estimated above, resulting in a new cost burden of £8,428 per annum for one LA, and £733,259 for the entire country.\(^{122}\) This is assuming that every LA that this could apply to uses this optional power, so this figure represents an absolute top end.

We have no nationwide data on the number of vessels that would be impacted. However, we have tried to estimate the number of vessels impacted and the cost to LAs using a survey by the Canal and River Trust which established the number of boats seen on canals in London over 1 year (2015-2016).\(^ {123}\) We identified those vessels which are registered to a permanent mooring. We estimate through extrapolating the cost of reimbursement for all LAs in England that have an SCA and a canal that crosses into the boundary of an SCA, we have estimated the cost to an LA of £54,000 in reimbursement costs assuming an average stove price of £550.\(^{124}\) This would result in a total cost of £4.7 million for all LAs within scope across the country (assuming all relevant LAs adopt this optional power). This would be a transfer from LAs to vessel owners. Using the same assumptions of maximum uptake the estimated total cost for the country would be up to £2 million. We engaged with a selection of LAs with SCAs, and less than 50% said they would consider using this optional power, meaning that in reality we expect this figure would be lower.\(^ {125}\) This is a one-off cost that will likely be spread over a number of years if and when LAs chose to use this optional power.

This change is estimated to have no significant impact on boats that operate as a business (cafes, shops, canal boat rentals etc.) as the number of businesses using solid fuel for heating and cooking is expected to be very low. Further to this those that do fit the criteria will be reimbursed 70% of the cost of the changes required to bring the vessel into compliance. Where there are businesses that need to adapt but do not meet the reimbursement criteria, they will need to cover the costs themselves, but we think this will affect a small number of businesses.

**Creating a new duty for LAs to notify Defra when declaring or re-declaring a Smoke Control Area**

\(^{122}\) Number of LAs with a SCA and a canal that cross into the boundary of their SCA (87)

\(^{123}\) This might be an unrepresentative source, but given the lack of data, it is the only source available.

\(^{124}\) Local government reimburses 70% (£385) of the cost

\(^{125}\) Although since we do not know the level of expected uptake we have assumed the maximum scenario for this RTA.
This proposed measure is expected to have a negligible impact on LAs. The duty will involve the LA simply notifying Defra when declaring a new SCA, which would constitute sending an email or letter of notification and map with the boundary of the SCA.

There will be non-monetised benefits gained from the changes outlined in this section via a reduction in PM$_{2.5}$ concentrations. We cannot quantify these currently as they will vary between LAs and depends on how impactful the proposals will be at reducing domestic burning in SCAs. Improvements in air quality can lead to better economic outcomes, with respect to improvements in people’s health and fewer losses in productivity that arise from morbidity issues created by air pollution. This loss is reflected in the damage costs$^{126}$ produced by Defra, which are used to appraise air quality policies. The damage cost value for PM$_{2.5}$ (national average) is £105,836 per tonne.

\[\text{126 The damage costs updated by Defra in 2019, are a set of impact values, defined per tonne of emission by pollutant. These values estimate the societal costs associated with a marginal change in pollutant emissions.}\]
Annex 24: Statement of impacts – Clean Air Act Changes [Wales]

Background

The Clean Air Act (CAA) was introduced in 1956 after a Government report into the great smog of 1952 which was caused by the widespread burning of coal and was blamed for the premature deaths of hundreds of people in the UK.

The Act aims to control emissions of dark smoke, grit, dust and fumes from industrial premises and furnaces and to give Local Authorities power to designate and control Smoke Control Areas.

Within a Smoke Control Area it is an offence to emit smoke from any chimney of a building (including domestic, residential and industrial premises) unless using a fuel or appliance approved for use in a Smoke Control Area.

In Wales exempted appliances and authorised fuels are currently listed in two Statutory Instruments, which are each intended to be updated yearly.

Manufacturers obtain a listing in the regulations by paying a fee to submit their products for testing by technical advisors (under contract with the UK Government on behalf of Wales, Scotland and England) who subsequently make recommendations for inclusion in the Welsh legislation.

The policy issue and rationale for Government intervention

Since the introduction of Smoke Control Areas, there has been a significant increase in the number of manufacturers and suppliers seeking exemption for wood-burning appliances. This is believed to have been influenced by a number of factors including rising gas prices, recent pressure from UK Governments to increase the uptake of sustainable fuels and a rise in the popularity and use of domestic solid fuel burning for comfort and appearance as opposed to being a sole means of domestic heating.

Feedback from industry indicated that although the cost of assessment by technical advisors is not considered a significant burden, the delay between testing the new product and obtaining a listing in one of the annual (often 18-24 months) Statutory Instruments presented a problem in terms of getting a product to market and recouping development costs.

As such, the proposed intervention i.e. adoption of published lists for approved fuels and exempt appliances would be more beneficial to businesses as it allows these
problems to be addressed therefore resulting in reduced burdens for businesses. The new system will also benefit consumers by allowing new technologies to be brought to market more rapidly as the lists are updated on a monthly basis.

Adoption of published lists will also significantly reduce the cost for Government in publishing Statutory Instruments which currently requires policy officials and Government lawyer time at each update.

**Policy objectives and intended effects**

The current arrangements for obtaining an exemption have two significant disadvantages:

A. Manufacturers and suppliers have to wait for the next set of regulations or order before they can market their fuel or fireplace for use in a Smoke Control Area. In some cases this wait has been in excess of 12 months. This also postpones the marketing of new technologies which can benefit consumers and society generally.

B. Producing updated regulations and an order with a list of every approved fireplace and fuel is costly and time consuming for Government, most notably requiring a significant and un-proportionate amount of lawyer time to draft and check.

The intention is to amend Sections 20 and 21 of the Clean Air Act 1993 to enable the Welsh Ministers to publish a list of authorised fuels and exempted fireplaces in Wales without the requirement for Statutory Instruments.

No change is currently planned to the criteria and standards currently applied.

The UK Government (by way of section 15 of the Deregulation Act 2015), Scottish Government (by way of section 50 of the Regulatory Reform (Scotland) Act 2014) and Northern Ireland Executive (by way of section 15 of the Environmental Better Regulation Act (Northern Ireland) 2016) have already moved to adoption of published lists in some form.

**Policy options considered, including alternatives to regulation**

**Option 0 – Do nothing**

Businesses would continue having to wait for Statutory Instruments before they can market their appliances for use in a designated Smoke Control Area in Wales. This is an unnecessary burden for them and also limits consumer choice. Production of the Statutory Instruments would continue to be burdensome for Government and there
would still be the risk of human error where recommendations in the SI might be overlooked, resulting in an appliance having to wait an even longer amount of time before receiving exemption.

**Option 1 (the preferred option) - Remove the requirement for approved fuels and exempted fireplaces to be listed in SIs and amend the CAA to give Welsh Ministers power to publish the list of products administratively**

This is the preferred option as it reduces burdens for both industry and Government and benefits consumers. Manufacturers would still be required to demonstrate that their products met emissions standards, thereby safeguarding air quality. Amending the Clean Air Act to permit the Welsh Minister to publish a list of authorised/exempted products in Wales as required will provide a quicker route to market and reduce burdens on industry which are currently created by extensive lead-in times between product testing and exemption. It will also provide social benefits by allowing the new technologies to be placed more rapidly on the market. Government also stands to benefit from the new system by negating the requirement for updated SIs every 12 months.

**Expected level of business and wider impacts**

**Option 0 – Do nothing**

**Costs**

Government resource and administrative costs arising from the annual production of SIs.

There is an ongoing cost associated with the administration and legal input for producing the SIs. This varies dependant on the number of fuels and appliances but is assumed to cost something in the region of £10k (with translation) for both sets of SIs.

**Impacts**

The consumer and industry benefits missed by manufacturers not being able to market their appliances in between SI commencement dates. Interest accrued by delay in recouping product development costs.

**Option 1 (the preferred option) - Remove the requirement for approved fuels and exempted fireplaces to be listed in SIs and amend the CAA to give Welsh Ministers power to publish the list of products administratively**

**Costs**

No change in cost to manufacturers of having their appliances tested and assessed by technical advisors. Additionally, policy officials have liaised with officials in the UK Government so as to investigate the potential of using the existing robust web-based
list detailing products which can be used in Smoke Control Areas in England and Scotland.

Initial estimates from the contractor that manages the current list on behalf of England, Scotland and Northern Ireland suggest that setup costs associated with including Wales in this list would be less than £5k (this includes translation). This includes custom building a new dataset in Welsh to create a mirror set of data that replicates the data currently contained within the Clean Air Act database and utilising this data to translate into Welsh. This would create separate sets of data (one for Wales in the Welsh language and another for England, Scotland and Northern Ireland).

An alternative option is to procure a separate online list specifically for Wales at a higher cost (current estimates suggests between £50k and £60k) on the basis that the required translation would be more accurate.

Further work is required to fully assess the merits of each online publication option, however, the approach agreed will prioritise the accuracy of translation above cost.

**Impacts**

The key monetised benefits of this option are the social benefits of allowing new products to market sooner. This is expected to benefit consumers of these technologies which range from small wood burning stoves/boilers to larger installations and pizza ovens. Allowing these products to the market is expected to provide social benefits through two potential pathways:

- Increased efficiency – these may occur through either a reduction in the purchase price or a fall in the operating costs.

- Changes in characteristics – new products may provide a different service that may be more highly valued by consumers. For example redesign of appliances may make them more aesthetically pleasing to customers.

Businesses in Wales will also benefit from the new process by reducing the delay between obtaining a recommendation from the existing contracted technical experts and inclusion of the products in twelve-monthly Orders and Regulations. It has not been possible, however, to monetise this benefit.
Annex 25: Statement of impacts – Amendments to Environment Act

Background

Local authorities have a central role to play in achieving improvements in air quality. They have been the main agent for cleaning up local air since before the first Clean Air Act of 1956. Their local knowledge and interaction with the communities that they serve mean that they are better placed to know the issues on the ground in detail and the solutions that may be necessary or appropriate to the locality.

The Environment Act 1995, Part IV, sets out the Local Air Quality Management (LAQM) framework. Through the LAQM system, local authorities are required to assess air quality in their area and designate Air Quality Management Areas (AQMAs) if improvements are necessary. Where an AQMA is designated, local authorities are required to produce an air quality action plan describing the pollution reduction measures they will put in place.

The Government is committed to challenging national air quality targets to reduce emissions of key air pollutants by 2020 and 2030. These targets were made legally binding in February 2018. To achieve these targets, action will be needed at both the national and local level. The government has set out which measures it plans to implement to improve air quality at a national level in the published Clean Air Strategy and National Air Pollution Control Programme which we consulted on. Changes to the responsibilities of local government with respect to air quality are set out in this statement of impacts.

The policy issue and rationale for Government intervention

Air pollution is a negative externality: it results in costs to people who are external to the transaction. Without government intervention, households and businesses have insufficient incentive to minimise their activities which result in air pollution or to invest in less polluting fuels/technologies. Long-term exposure to pollution can result in significant health impacts including increased risk of morbidity arising from a wide range of cardiorespiratory health conditions, as well as environmental impacts and reductions in productivity. The government is obligated under the National Emissions Ceiling Directive (NECD) to reduce emissions of some of the most harmful pollutants, relative to their levels in 2005. Local authorities have a central role to play in ensuring air quality standards and objectives are met in their local area. The proposed revisions to the current Local Air Quality Management (LAQM) framework, will strengthen the capacity and effectiveness of local authorities to take action to improve air quality.
There are a number of areas where the current LAQM framework could be improved in order to enable and drive more effective action to tackle air pollution at a local level. Local government structures have evolved in recent decades and vary across the country. Most public health and transport decisions are currently made at the upper tier of local government structures or at a regional level, as are strategic decisions on investment, growth, job creation and home building. However, within the LAQM framework, responsibility for assessing and implementing local air quality plans sits at the district level in two-tier authorities, because the framework was designed with a view to addressing local pollution hotspots e.g. exceedances of air quality limits at the individual road or junction level.

Evidence that we have suggests that the declaration of an Air Quality Management Area (AQMA) and the preparation of an Air Quality Plan often does not lead to sufficient action being taken to address the problem. There are 610 AQMAs in England and some were declared as long ago as 2001. Fewer than 200 AQMAs have been revoked, which means Air Quality Objectives have been met in these areas. This would suggest that for the majority of AQMAs problems once identified are not being resolved. Once an AQMA is declared, the framework requires only that a plan is prepared in pursuit of the achievement of Air Quality Objectives with no clear legal obligation to implement the measures set out in the plan. Furthermore, the framework does not recognise that the duty to tackle air quality in local government (lower tier) is not always aligned with the relevant lever – transport planning for example sits at upper tier. It does not at present effectively encourage local authorities to work collaboratively across departmental or structural boundaries, or take an approach that considers all emission sources and pollutants when tackling local air quality. Air pollution is transboundary in nature, with emissions from sources in one local authority contributing to exceedances of Air Quality Objectives in another. A broader and more strategic approach is required to meet our local Air Quality Objectives.

**Policy objectives and intended effects**

The proposed changes have four key aims:

To deliver a more strategic, collaborative approach to tackling air pollution at a local level.
To clarify the need for action, and that key responsibilities lie at local level.
To ensure transparency regarding local air quality.
To update legislation to reflect current local government structures.

The proposed changes will ensure local authorities receive support from neighbouring authorities and relevant public authorities to deliver compliance with local air quality limits and objectives. The duties on neighbouring authorities require them to:
a. Actively support district councils to carry out their functions. This includes providing details on planned actions that could impact air quality and proposing actions they could take using powers and levers available to them.

b. Provide the relevant neighbouring authorities with proposals for particular measures it will take to contribute to the achievement and maintenance of Air Quality Objectives, including a date by which each measure will be carried out.

c. Deliver the actions they are responsible for as set out in the action plans, to the timescales defined.

Policy options considered, including alternatives to regulation

Option 0: Do nothing approach

Under this option, there are no changes made to the current LAQM framework.

Option 1 (preferred option): Revisions to the current LAQM framework

Changes are made to the LAQM framework to support local government in taking effective action to deliver local air quality regulation more effectively. The proposed changes will be implemented alongside changes to the Clean Air Act.

The objectives outlined above will in part be achieved by strengthening the duties of cooperation on all tiers of local government, neighbouring authorities and relevant public authorities in achieving local Air Quality Objectives. We propose that the key functions (relating to the assessment of local air quality, designation of an AQMA and preparation of a plan) remain at the district council level by default, but that there is a stronger duty for action placed on upper-tier authorities, neighbouring authorities and other public authorities, so that responsibility and accountability are shared.

In addition to their current requirements to assess local air quality, designate an AQMA and draft a local air quality action plan, our proposals will require district councils to:

Implement the actions they are responsible for as set out in the plan, to the timescales defined in the plan.

Review and revise their plans as needed when there are changes in the local area that will significantly affect local air quality.

In the existing framework, upper-tier authorities have a duty to support district councils to carry out their functions by providing details on planned action at county level that could impact air quality (e.g. transport plans) and proposing actions they
could take using powers and levers available to them. The proposed changes will require upper-tier authorities to:

Provide the lower-tier authority with proposals for particular measures it will take to contribute to the achievement and maintenance of Air Quality Objectives, including a date by which each measure will be carried out.

Deliver the actions they are responsible for as set out in the action plans, to the timescales defined.

Provide assistance to the district council to coordinate action across neighbouring local authorities and with other public bodies.

Given the transboundary nature of air pollution, emissions from sources in one local authority can contribute to exceedances of Air Quality Objectives in another. We propose to place a new duty on local authorities to work collaboratively with neighbouring authorities with the objective of creating a cooperative framework that would enable authorities to tackle pollution emanating from sources outside of the local authority’s area.

To further strengthen this collaborative framework, and ensure local authorities receive support to deliver their Air Quality Objectives, we are broadening the LAQM framework to include relevant public authorities (authorities that have a public function in relation to England), placing a duty on these authorities to cooperate with local authorities preparing action plans and to deliver actions they commit to within those plans. Our proposal is to give SoS power to designate, subject to consultation, such authorities as are appropriate, through subsequent secondary legislation.

Increased transparency with respect to local air quality (objective c) will be sought through a new duty on the Secretary of State to:

- Make a statement to Parliament on progress towards securing air quality standards and objectives across the country.
- Publish an update in the annual 25 Year Environment Plan report, and

A duty on MCAs (Mayoral combined authorities) to cooperate with local authorities will be introduced to bring legislation in line with current local government structures (objective d).

In addition to the above objectives we will introduce a duty on the SoS to revise and publish the Air Quality strategy within twelve months of commencement of the LAQM measures in the Bill, and subsequently to review and publish revisions to the strategy at least once every five years.

Expected level of business and wider impacts
The proposed changes in the LAQM will not result in any immediate direct additional costs to businesses.

There will be new burdens to district councils arising from the administrative and collaborative work they have to undertake as a result the proposed changes to the LAQM framework. The stronger requirement to take action may result in additional costs to some local authorities. The magnitude of these costs will depend on whether the local authorities are in exceedance of their Air Quality objectives and whether they are already implementing actions set out in their current AQAPs to meet their objectives. Based on discussions with a representative sample of local authority air quality officers, we estimate the proposed changes will result in approximately 16 weeks’ worth of an environment officer’s time for each local authority, at an average cost of £13,000 per local authority or approximately £4.6 million a year for all local authorities.

Table 1: Estimated costs of new burdens on local authorities in current prices

<table>
<thead>
<tr>
<th>Earnings Environmental Officer</th>
<th>£42,100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of total working days in a year</td>
<td>260</td>
</tr>
<tr>
<td>Cost per day</td>
<td>£162.00</td>
</tr>
<tr>
<td>Number of days working on these proposals</td>
<td>80</td>
</tr>
<tr>
<td>Cost per local authority</td>
<td>£13,000</td>
</tr>
<tr>
<td>Cost for all 353 local authorities</td>
<td>£4,580,000</td>
</tr>
</tbody>
</table>

By way of some sensitivity analysis, if the proposed changes result in just 12 weeks’ (60 days) worth of officer time, the measure will result in a total cost to local authorities of £9,720 per LA per year, or £3.4m a year for all 353 local authorities. However, if 20 weeks’ (100 days) worth of officer time is needed, the measure will result in a total cost to local authorities of £16,200 per LA per year, or £5.7m a year for all 353 local authorities.

The proposed changes will also require that district councils/upper tier authorities take action to prevent/ameliorate air quality exceedances. The associated costs will depend on the likelihood of an exceedance in a local authority and the policy options available to them to mitigate the exceedance. As the Air Quality (England) Regulations which specify concentration limits for key pollutants are not being
updated through the Environment Bill the cost implications of these actions are not estimated here. We are undertaking work to assess which local authorities are likely to suffer from exceedances in future (which will depend on any future local Air Quality Objectives) and the available tools for them. These costs will be outlined if/when local Air Quality Objectives are amended, at the secondary legislation stage.

By undertaking these changes there will likely be improvements in air quality at local level in the areas that are in exceedance of current Air Quality Objectives. There will be some improvement in local air quality, however, it is not possible to reasonably quantify the improvement as it is an indirect benefit which arises from increased effectiveness of enforcing local air quality regulation.
Annex 26: Statement of Impacts – For the Secretary of State to set a target in respect of the annual mean level of fine particulate matter (PM$_{2.5}$) in ambient air

**Background**

Many daily activities result in emissions of pollutants such as Nitrogen dioxide, Particulate Matter, Sulphur Dioxide, Volatile Organic Compounds and Ammonia that are harmful to human health and the environment. The UK is legally bound under the National Emissions Ceiling Directive (NECD) to reduce emissions of these five key pollutants by 2030 relative to their 2005 levels but given the impacts of air pollution, in terms of health outcomes, productivity and environmental effects, the Environment Bill looks to set a duty on the Secretary of State to set a target in respect of the annual mean level of PM$_{2.5}$ in ambient air.

Fine particulate Matter (PM$_{2.5}$) is the most harmful pollutant as it enters the bloodstream and has been found in internal organs resulting in long-term damage to human health, as well as increasing morbidity for the most vulnerable people in society, particularly for those with respiratory or cardiovascular problems and is therefore the focus of this measure. All reduction to PM$_{2.5}$ concentrations are beneficial for health as no safe limit of PM$_{2.5}$ has been found.

**The policy issue and rationale for government intervention**

Air pollution is an example of a negative environmental externality. It imposes costs on people who are external to the transaction. Without government intervention, households and businesses have insufficient incentive to take action to reduce pollution, and therefore it remains higher than the socially optimal level. Given the high health costs associated with exposure to PM$_{2.5}$, as well as productivity and environmental impacts, government intervention is required to promote improvements to public health and incentivise the development of cleaner, innovative production and mitigation methods, as well as drive behavioural change. The UK currently meets the European PM$_{2.5}$ limit value of 25 µg/m$^3$ annual mean concentration. The legal limit is due to be reduced to 20 µg/m$^3$ by 2020 under current EU legislation, but again, current UK levels mean that is it likely that we will continue to meet this limit.
Numerous reports in recent years emphasise the negative health impacts of air pollution and in particular particulate matter. Therefore, in addition to the measures being implemented to reduce PM$_{2.5}$ emissions under the 2030 NECD emission reduction commitments, the government will consider policies which reduce PM$_{2.5}$ concentrations further and work towards a more ambitious target. A do nothing approach would result in significant public health costs which would be particularly felt by more vulnerable groups, such as young children, the elderly and those with pre-existing health conditions.

Policy objectives and intended effects

The overarching policy objective of committing to a target is to ensure no one in the UK is exposed to agreed PM$_{2.5}$ concentrations as an annual mean, thereby ensuring related health, productivity and environmental benefits.

Policy options considered, including alternatives to regulation

Option 0: Do nothing approach

Under this option, no further action is taken to reduce concentrations of PM$_{2.5}$ beyond the levels which would be achieved under the implementation of the 2030 NECD commitments.

Option 1 (preferred option): To set a duty on the Secretary of State to set a target in respect of the annual mean level of PM$_{2.5}$ in ambient air. A target, including the guideline level set, and the date by which it is to be achieved, will be set out in secondary legislation, on the basis of independent expert advice.

Option 1 would require government to take further action to ensure that PM$_{2.5}$ concentrations do not exceed a certain threshold as an annual mean. This would be in addition to action taken by the government to reduce emissions of the most harmful pollutants, including PM$_{2.5}$ and emissions of secondary pollutants that form PM$_{2.5}$ in the atmosphere, as legally required under the NECD 2030 emission reduction commitments. Preliminary analysis suggests that London is the area where concentrations of PM$_{2.5}$ are highest and therefore where additional action might be required to curb PM$_{2.5}$ emissions from both the household and business sectors.

Expected level of business and wider impacts

Under the do nothing scenario, there are no costs to business and households as no further actions are taken to lower PM$_{2.5}$ emissions beyond those implemented to achieve the 2030 emission reduction commitments.
There will be costs to business and households if the government is required to meet a more stringent target for annual mean PM$_{2.5}$. Those costs will vary greatly depending on a number of factors such as the annual mean level set as the target, deadline for meeting this target, the measures selected to achieve this target, changes in technology and the impacts on air quality of other government actions e.g. on climate change.

The decision as to when and how to cost effectively achieve the target to be set by the Secretary of State will be based on independent expert advice. This will in turn determine the costs to business and households and at which point in time they are incurred. Initial analysis suggest that those costs are likely to be highest in London where annual mean PM$_{2.5}$ is highest. Any costs to business and households may be tempered by technological innovation, which may be further incentivised by government targets.

The benefits of meeting a more stringent level for annual mean PM$_{2.5}$ are estimated in terms of the avoided costs to society if emissions reductions are achieved. Damage costs are a simple way to value changes in air pollutants, in this case per µg/m$^3$ of PM$_{2.5}$. The cost to society which is avoided is calculated in money terms using a damage cost (cf. Table 1), which predominantly captures the health benefits from reduced emissions or population-weighted concentrations. Total benefits of the intervention are estimated by multiplying the damage costs with the population exposure. Due to the currently undetermined target level and date at which this target is to be met, it is currently not possible to estimate the benefits. Once the target and year has been decided, the benefits can be estimated accordingly. Monetised impacts will be estimated via cost benefit analysis in an impact assessment setting out the proposed target and policies required to deliver it.

Table 1: Range of damage costs associated with population exposure to PM$_{2.5}^{127}$

<table>
<thead>
<tr>
<th>Estimate range</th>
<th>Low</th>
<th>Central</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damage cost (£/µg m$^{-3}$)</td>
<td>10.57</td>
<td>51.07</td>
<td>159.14</td>
</tr>
</tbody>
</table>

127 2019 Damage costs population weighted mean 1µg change per person (£2018)

Background

The proposed power would enable the Government to compel manufacturers of vehicles and Non-Road Mobile Machinery (NRMM) to recall their products for reasons of environmental failure or non-conformity. It would provide a safeguard against such future issues with a vehicle in the case that the manufacturer or economic operator was unwilling to recall vehicles or NRMM under necessary circumstances. This objective cannot be achieved without Government intervention as there is no other mechanism.

The Government will also add provision that may require the manufacturer to achieve a minimum recall level. This will act as a safeguard to ensure that the manufacturer fully complies with the recall provision and that high completion rates are achieved. The level of the minimum rate will be subject to public consultation and set out in secondary regulation.

The policy issue and rationale for Government intervention

In the event of environmental failure or non-conformity in emissions from a vehicle, vehicle manufacturers are responsible for recalling these affected vehicles. There is currently no regulation in place to compel manufacturers to do this. If the manufacturer does not recall, this could result in a situation where operators of these vehicles are unaware of the damage their vehicles are doing to the environment. A vehicle manufacturer may be aware of, and exposed to, the private costs in issuing a vehicle recall, but not of the higher social benefit from improved emissions performance, and may not behave in a socially optimal manner. Government intervention is the preferred method to address this asymmetric information and negative externality.

Policy objectives and intended effects

The policy objective is to enable the Government to take action against non-compliant manufacturers of vehicles and NRMM. This will enable the Government to act to protect UK consumers and the environment.
Policy options considered, including alternatives to regulation

**Do minimum:** This option involves maintaining the existing position that manufacturers are not compelled to recall vehicles due to environmental non-conformity. Therefore the Government can only intervene to require action (such as a recall notice) on issues related to safety. This option means the UK cannot require manufacturers to take action in relation to vehicles or NRMM due to environmental failure or non-conformity, however manufacturers can continue to issue voluntary recalls.

**Option 1: recall provision:** This option introduces legislation which would widen the scope of the Government’s powers in this area to include situations where a vehicle or NRMM has an environmental failure or non-conformity. This would mean the recall powers available to the Government under the General Product Safety Regulations 2005 in relation to safety would also be available for reasons of environmental failure or non-conformity. Although manufacturers usually enact a voluntary recall, this proposal would ensure that the government can take action in circumstances where they do not do this. This option would provide a safeguard and enable the Government to act to protect UK consumers and the environment.

**Option 2 – Recall provision with minimum recall requirement:** In addition to the above option, this would require vehicle manufacturers to take sufficient steps to ensure high completion rates. This option would provide an additional safeguard to ensure compliance and enable the Government to act to protect UK consumers and the environment.

**Expected level of business and wider impacts**

*Direct impacts*

Impacts are only incurred or realised if a manufacturer did not take sufficient action in relation to an identified defect and the Government instead had to require them to do so and provide a recall target. This is because this is the only case in which there would be additional costs to the manufacturers, in having to issue more recalls and conduct more fixes than they would in the counterfactual case. If the power is used, the scale of the costs will depend on the number of vehicles recalled under the required rate. This factor, along with the potentially varied nature of the recalled vehicle issues, make it difficult to quantify these additional costs at this stage.

Under the General Product Safety Regulations 2005, the government can compel vehicle manufacturers to recall vehicles due to safety concerns. However, this power has never been used as, when such safety concerns come to light, the vehicle manufacturers have agreed to voluntarily recall the vehicles.
The equivalent existing power for safety issues acts as an incentive for manufacturers to start a recall voluntarily to avoid being compelled to do so and we would anticipate this would be the same for an environmental recall. We would only expect the government to have to compel vehicle manufacturers to recall vehicles, due to either safety or environmental concerns, under exceptional circumstances. Further, if a vehicle manufacturer does not recall a satisfactory proportion of vehicles and the government intervenes, this may damage the manufacturer's image, which may provide a powerful incentive to conduct recalls effectively. As such, the likelihood of this power being used is judged to be low. If the power is not used, the additional costs and benefits of this policy will be zero.

In the event of the power being used, no costs would be incurred by compliant businesses. Civil penalties will be issued as a last resort, where affected businesses (after a lengthy period) are not making sufficient progress towards meeting a target. Therefore, there is a low risk of these being issued frequently (e.g. less than one per year).

This measure does not create new environmental standards for vehicle manufacturers: it ensures that the government can act to compel vehicle manufacturers to recall non-compliant vehicles. Therefore, there will be minimal familiarisation costs.

Indirect impacts

There may be cost increases arising from vehicle manufacturer responses, as the incentive to reduce costs by fitting so-called ‘defeat-devices’ is reduced, due to the government being able to recall non-compliant vehicles (and penalise the manufacturers in extreme cases). As a result, these cost increases may be observed in the proportion of manufacturers who would do this in the counterfactual. Given the scale of the estimated costs and the discrete nature in which these manufacturers may behave, it is disproportionate to assess this further.

Brief Assessment of Distributional Impacts

As this measure affects vehicle manufacturers and is only exercised in the event of non-compliance, we do not expect any distributional impacts.

Brief Assessment of Small Business Impacts

Given impacts are only realised in the event of non-compliance or where the vehicle manufacturer does not take sufficient action in relation to the identified defect, we do not expect small businesses to be impacted as the likelihood of this power being used has been assessed to be very low.

Brief Assessment of Wider Impacts
The measure will enable the Government to recall environmentally non-compliant vehicles or NRMM. This could have a positive environmental impact through two avenues. First, any vehicle or NRMM which is deemed to be non-compliant can be recalled, which may result in fewer environmentally damaging vehicles in use compared against the counterfactual case. It is difficult to quantify this impact due to the varied nature of potential vehicle issues which may lead to a recall.

Second, the potential for recall provides manufacturers with an incentive to ensure vehicles are compliant and helps to mitigate the risk (against the counterfactual case) of environmental non-conformity, which may have positive impacts. The extent to which depends on the proportion of manufacturers who are induced into acting in a compliant manner, which is difficult to quantify.
Annex 28: Statement of impacts – Increasing the circumstances in which the Environment Agency can vary or revoke an abstraction licence without being liable to pay compensation: environmental damage

Background

The Environment Agency (EA) is the regulator of the abstraction licencing regime, which sets limits and thresholds in abstraction licences to protect other abstractors and the environment. However, many of these licences were granted many years ago. The EA does not have the regulatory powers to amend many of these licences without liability to pay compensation to the licence holder.

The Water Act 2003 (section 27) currently allows the EA to revoke or vary a licence without the payment of compensation, in order to protect the environment from ‘serious damage’. In other words, if the licence is thought to be causing or may cause ‘serious damage’ to the environment, it is allowed to be revoked or amended without paying compensation. The policy issue is that there are a number of licences which are causing long-term damage to the environment but these do not currently meet the threshold of serious damage. Consequently, the EA is liable to pay these licence holders compensation.

The policy issue and rationale for Government intervention

Analysis from the EA in the Abstraction Plan showed that there were around 100 surface water bodies where the pressures of unsustainable abstraction were challenging to address using existing regulatory approaches. To meet 2027 flow objectives the EA would need to revoke or vary up to 1,200 licenses. It can currently only meet this by incurring a significant compensation liability.

The EA does not have a current funded mechanism to revoke these licences, given there is no existing compensation pot to revoke these kind of licences. This means it would need to raise an additional charge on all non-water company licence holders to fund this compensation liability.
As a result, the current system is not following the polluter pays principle. This is the principle that those who produce pollution should bear the costs of managing it to prevent damage to the environment, in this case, unsustainable abstraction, which is a negative externality. Currently, it is other abstractors who would have to pay for producing this negative externality, through an additional charge. Henceforth, it is not the polluter paying for this, but others.

**Policy objectives and intended effects**

The proposed approach is to replace the term ‘serious damage’ in the Water Act 2003, by defining a new criterion for what constitutes environmental damage. This would mean that the EA would not be liable to pay compensation for a variation or revocation of an abstraction licence that is causing, or potentially could cause, either directly or in combination with other licences, environmental damage through unsustainable abstraction. We propose to relate unsustainable abstraction to:


2. Otherwise protect the water environment from damage.

The proposed changes would allow the EA to revoke or vary a number of licences, which are causing, or potentially could cause, either singularly, or in combination with other licences, damage to the environment through unsustainable abstraction, but do not meet the threshold of serious damage at the present time. It would be able to do this without paying compensation. The intended effects of this would be to achieve government objectives set out in the 25 YEP, Defra Abstraction Plan, River Basin Management Plans, ensuring more sustainable abstraction and preventing future unsustainable abstraction, as well as moving the system in line with the polluter pays principle.

The change would be mostly used as a ‘stick’ to encourage licence holders to engage in voluntary solutions to abstraction related pressures. If the clause is enacted, it would not force the EA to change all licences that appear to meet the definition: it would allow the EA to change the licences that it deems to meet the definition.

It should be noted that primary legislation may be controversial, given some stakeholders, such as farmers or landowners who hold unsustainable licences will be...

affected by the change. This may have a negative impact on working relationships with licence holders and a loss of trust, however this will only be with the licence holders partaking in unsustainable abstraction.

Policy options considered, including alternatives to regulation

Option 0 – do nothing

- No change in the ability of the EA to make changes to non-water company abstraction licences where non-serious damage is identified.
- The EA would continue to be liable to pay compensation, and it would need to raise funds from all non-water company licence holders.

No change to the ability of the EA to tackle licences causing damage, and does not follow the polluter pays principle. The system will continue to be inequitable, given that other licence holders will have to pay compensation to licence holders partaking in unsustainable abstractors, if their licences are revoked or amended.

Option 1 – remove compensation for any change made to an abstraction licence

- EA would not have to pay compensation for any change to an abstraction licence.
- Simple, but may unfairly remove rights of some abstractors under some situations.

This would likely have a negative impact upon working relationships between the EA and licence holders, given there is no clear reason for a blanket removal of compensation.

Option 2 (preferred option) – define a new environmental damage term when no compensation payable with definition in primary legislation

- EA would not be eligible to pay compensation for any change to an abstraction licence that is causing, or potentially could cause, either directly or in combination with other licences, environmental damage.
- Environmental damage would be defined in primary legislation.

This is the preferred option, as the definition would be in primary legislation, and we feel it strikes the right balance of having the biggest impact, but also maintaining a good relationship between the EA and licence holders. It follows the polluter pays principle.
Option 3 – define a new environmental damage term when no compensation payable with definition outside primary legislation

- EA would not pay compensation for any change to an abstraction licence that is causing, or could cause, either directly or in combination with other licences, environmental damage.
- Environmental damage would be defined outside primary legislation.

This would move the definition outside of Parliament, and would also imply a further consultation from Defra or the EA, resulting in a longer time frame for the EA to tackle this issue. It follows the polluter pays principle.

Option 4 – define the types of licence variation that would require compensation

- EA would continue to pay compensation for a ‘significant’ change to an abstraction licence that is causing or potentially could cause environmental damage.
- However, it would not pay compensation for a ‘less significant’ change to an abstraction licence that is causing or potentially could cause environmental damage.

This option would add an extra level of complexity into the licence process. The term ‘significant’ would have to be defined, and what is deemed significant for one licence holder, may not be the case for another. This does not follow the polluter pay principle, as non-polluters would have to continue to pay compensation to fix unsustainable abstraction.

Option 5 – make licences (permits) reviewable where environmental damage suspected

- This would give power to the EA to turn a permanent licence (permit) into a reviewable permit under Environment Permitting Regulations (EPR) with no compensation payable, where there is a threat of environmental damage.
- This may mean that volumes are not reduced immediately (if there is no actual damage currently) but there is the potential that licence conditions will be changed at a later point when the EA reviews the Abstraction Licensing Strategy.

This would not be enacted until EPR and arguably has a worse wider impacts than option 2, with the removal of compensation on wider environmental grounds, may cause greater licence holder uncertainty and affect values of businesses.

Option 6 – no compensation for the power supply sector

- This would allow the EA to change any licence held by one of the energy companies regulated by Ofgem, without paying compensation.
The costs to the energy company would be recovered through its customers’ bills, similar to the process used for the water industry where changes to water company abstraction licences are recovered through its customers’ bills.

There is little evidence of the power supply sector causing unsustainable abstraction, meaning this option will have a much smaller benefit than any of the others. This would not be the best use of primary legislation, given it potentially has very small returns.

**Expected level of business and wider impacts**

Primary benefits and costs of the “do something” options (Options 1 to 6) which involve removing compensation for licences causing, or potentially could cause, environmental damage through unsustainable abstraction.

**Business impacts**

The main impact to business will be the forgone compensation, if licences are varied or revoked under the proposed changes. Licence holders are currently advised by the EA that they can claim for compensation under four headings if their licence is revoked. These are: mitigation measures, loss of profit, loss of land value, and asset value losses.

The EA has estimated that there could be up to 1,200 licence holders contributing to unsustainable abstraction, but this does not mean that 1,200 licence holders will have their licences removed and incur these costs. This is because the number is seen as an upper bound. It is expected to reduce following local site based investigations. Where licences are causing an impact the EA would follow the Catchment Based Approach, engaging with local stakeholders to develop voluntary solutions, meaning that only a subset of licences will need to be changed using these proposal to achieve sustainable abstraction. Furthermore, the intended policy’s aim is to act as a ‘stick’ to incentivise licence holders to become more sustainable.

The amount of compensation licence holders have tended to receive in the past, if their licence is varied or revoked, varies massively on a case by case basis. This is because the amount paid can depend on a number of factors such as: type of change, impact of change, impact on business, and if the change will require any mitigation.

Whatever these costs, they would have to be paid for by the other estimated 17,500 non-water company licence holders. This is because the established

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129 The estimate in 2016 was 17,643, however this has been rounded to 17,500 for simplicity - https://www.gov.uk/government/statistical-data-sets/env15-water-abstraction-tables
system involves the EA charging companies for licences, an element of which is used to fund a compensation pot. This current compensation pot is ring fenced to particular licence holders and can only be used for certain programmes such as the Restoring Sustainable Abstraction Programme (RSA). The changes we are proposing would mean the new claimants are not eligible for this existing compensation, resulting in the other non-water company licence holders being charged by the EA to pay for the compensation.

As a result, whatever the compensation costs are that are forgone by the licence holders who have their licences varied or revoked, the same figure would be a cost saving to all the other licence holders. The logic of this is as follows:

- Under the RSA programme\textsuperscript{130}, the average compensation figure paid to a licence holder was £256,000.
- Of all licence holders eligible for compensation, only 30% actually claimed for it.
- Assuming 30% of the 1200 unsustainable licences would have actually claimed for compensation, this leaves 360 licences.
- Total loss to licence holders under proposed changes (assuming £250k average compensation) is £90m.
- We have assumed for this estimation that there are 17,500 other non-water company (non WCo) licence holders who would have to pay for this compensation.

<table>
<thead>
<tr>
<th>Unsustainable licences</th>
<th>360*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average compensation</td>
<td>£0.25m</td>
</tr>
<tr>
<td>Total loss in compensation</td>
<td>360 x £0.25m = £90m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of non WCo licences</th>
<th>17,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average additional charge to cover compensation</td>
<td>£90m/17,500 = £5,143</td>
</tr>
<tr>
<td>Total cost</td>
<td>17,500 x £5,143 = £90m</td>
</tr>
</tbody>
</table>

**Net cost to licence holders**  
£90m - £90m = 0

\textsuperscript{130} We have assumed that the compensation figures and percentage of claimants of the RSA programme will be similar to the one of this proposal. The main difference is that the 1200 licences that could be affected by this proposal were derived from a desktop analysis of compliance with flow standards, whereas the RSA licences were derived from reported environmental issues. Hence, it is likely that there will be a higher number of issues that need resolving through licence change under the RSA programme and therefore a higher number of claimants than for this proposed measure. However, information from the RSA programme has been used for the purposes of this assessment due to lack of other evidence.
will (subject to regulatory decision) be passed on to customers. Benefits under Option 6 will also be smaller, however.

*Distributional and wider impacts*

The measure is not intended to impact any particular sector more than another. However, it is likely to have most impact on the agricultural sector. The agriculture sector (including spray irrigation) accounts for the largest number of licences (64%). Hence, it will be most affected by these proposed changes.

The EA estimates that there may be 1,200 licences that are unsustainable that it cannot address using its existing regulatory tools. 80% of these licences are either for agriculture or spray irrigation purposes. 15% of these licences are for industrial uses.

It has been estimated that the area with the largest affected number of licences will be Essex, Norfolk and Sussex, which account for 18% of the number of estimated unsustainable licenses. The next largest area that will be affected are Shropshire, Herefordshire, Worcestershire and Gloucestershire, along with Solent and South Downs, with both areas individually accounting for 12% of the licences where the EA would look to take action.

There will be a wider benefit to the environment. This is because by varying or revoking licences that are contributing to unsustainable abstraction, there will be an improvement in the flow and ecological support in water bodies. This has been calculated as follows:

- The Environment Agency has used the National Water Environment Benefits Survey (NWEBS)\(^{131}\) data to estimate a central forecast benefit to the environment of £9.1m per year.
- NWEBS is based on a study that assessed the willingness to pay (WTP) values from around 1,500 people for improvements in the water environment with respect to the Water Framework Directive.
- We have estimated the benefits of improving flow in 118\(^{132}\) surface water bodies, where non-water company abstractions are causing environmental damage (which is not ‘serious damage’).
- We have assumed that addressing abstraction and flow issues have improved the water status by one class\(^{133}\).

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132 This the number of water bodies that the EA has estimated to be affected by unsustainable abstraction, undertaken by the estimated 1,200 licence holders.

133 Ecological status in water bodies are expressed in terms of five classes (high, good, moderate, poor or bad). We have estimated that the class is improved from poor or bad to moderate.
• Only 2 components of the 6\textsuperscript{134} for NWEBS have been applied; flow and the benefit this has on fish or invertebrates.
• It has been assumed that the benefits are felt along 50% of the river length, as we do not specifically know where the abstraction points are in each of the water bodies.
• Values are in 2018 prices.
• The values have not been discounted – the £9.1m per year is the benefit you would receive now, if all the licences in the 118 water bodies were varied or revoked today.
• In reality, these licences would be gradually changed over time, with future years being discounted.
• Benefits will be lower under Option 6 as fewer licences are likely to be revoked or altered.

Preferred option

To summarise, even though there remains some uncertainty over the scale of environmental benefit, it is clear that option 2 will encourage better environmental practices. This option gives the best chance of achieving the maximum benefit, by enabling the EA to most effectively tackle the remaining licences causing damage. This benefit outweighs the net costs to business, which are found to be zero.

Option 2 also overcomes many of the disadvantages of the other options and has the further advantage of defining a new term in primary legislation, as well as providing a clear justification for the changes. This option has the correct balance of having the biggest impact, while also not fully hindering the working relationship between the EA and licence holders. For this reason it is the preferred approach.

\textsuperscript{134} NWEBS has 6 components: fish, other animals such as invertebrates. Plant communities, clarity of water, condition of the river channel and flow of water, and the safety of the water for recreational activity.
Annex 29: Statement of impacts – Increasing the circumstances in which the Environment Agency can vary or revoke an abstraction licence without being liable to pay compensation: under used

Background

The Environment Agency (EA) is the regulator of the abstraction licencing regime. Each year the EA requires licence holders to report how much water they have used. The EA’s records show that a large number of licence holders consistently take much less water than they are authorised to take.

The Water Resources Act 1991 (Section 61(4)) allows the EA to change an abstraction licence if it has been unused for four years or more, without paying compensation to the licence holder. However, the EA is liable for compensation if it varies a licence that has been used in the last four years, unless it is a water company licence or is classed as ‘serious damage’. Hence, the EA is liable for compensation if it changes a non-water company licence to remove unused licence quantities.

The policy issue and rationale for Government intervention

A large number of licence holders consistently take much less water than they are authorised to take. The EA has estimated that over 2000 licence holders (about 12% of all licence holders) consistently take less than half and almost 3000 licence holders (about 17%) consistently take less than three quarters of their licensed volume.

These under used licence volumes pose two issues:

1. It ties up water, which in some catchments prevents potential abstractors from being granted abstraction licences.

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135 Since 2008, the EA has not asked for returns for licences with an authorised daily quantity of less 100m³, unless the licence holder has a two-part tariff agreement and/or there is an agreed exception.

136 By way of comparison about 2800 abstraction licences were unused for ten years or more at the end of 2016.
2. In some catchments there is risk of the environment deteriorating if actual abstraction increases within licensed volumes.

The EA cannot make compulsory changes to under used licences as it would become liable to pay compensation to licence holders and it does not have the necessary funds. Note legislation is already in place for unused licences, which sets out that the EA is not liable for compensation if it revokes a licence that has been unused for four years or more.

Policy objectives and intended effects

The proposed measure would allow the EA to vary licences to remove unused volumes without being liable for compensation. It would be analogous to the existing legislation that allows the EA to revoke a licence if it has not been used for four years or more (Water Resources Act 1991 Section 61(4)).

As such, we are proposing to remove the right to compensation for the unused part of licence volume when at least 25% of the licence has been unused in each of the previous twelve years. This would mean when at least 25% of the licence has been unused in each of the previous twelve years, the licence would be in scope for the EA to propose variation or revocation of part or all of the underused portion without the payment of compensation.

The intended effects of this measure would be to:

- help the EA secure proper use of water,
- help make the Catchment Based Approach for water resources a success,
- build environment resilience; and
- help deliver the water abstraction plan goals.

These effects would mean that the Government would be able to monitor water abstraction licences more effectively, to ensure supply and demand issues are addressed, leading to a more efficient allocation of resources.

Some licence holders have good justification for not taking their full volume every year. For example, many farmers need headroom in their licences so that they can irrigate more in dry years. Similarly, water companies need headroom in their licences so that they can maintain supply during dry years. Sometimes licence holders need the additional water on their licence as they intend to expand their
business in the future. Appropriate safeguards\textsuperscript{137} would need to be put in place to protect these licence holders.

Before making a change under this proposed measure, the Environment Agency would need to consider a licence holder’s justification of need and allow appropriate operational headroom for day to day management. If a licence was cut too much it could lead to enforcement issues. For example, it would not be appropriate to cut a licence by half if the licence holder had regularly been using the other half of their licence. In this case it may be appropriate to cut the licence by 30-40% depending on the licence holder’s headroom requirements.

The change would be mostly used as a ‘stick’ to encourage licence holders to reduce their licence volumes voluntarily if they have no requirement for the underused licence volume. The EA would only look to use the measure in high priority water bodies (where there is serious damage, risk of serious damage or a risk of deterioration, or where the water freed up could sustainably be used by other abstractors). If the measure is enacted, it would not force the EA to change all licences that appear to meet the definition: it would enable the EA to change the licences that it deems to meet the definition.

This measure may encourage some abstractors to take more than they need to prevent them losing part of their licence for under use. This would be contrary to the intended impacts of the policy. The Environment Agency would be careful to manage implementation of the measure to reassure abstractors that it would not seek to remove licence volumes which abstractors could justify the need for. The Environment Agency would be able to tell from abstraction records if a licence holder increased abstraction in direct response to correspondence about under use of their licence. The subsequent action that the EA may take however, is yet to be decided.

Primary legislation may be controversial, as some stakeholders who hold licences will be affected by the change. This may have a negative impact on working relationships with licence holders and a loss of trust. However, it should be noted that this will only apply to the licence holders who are underusing their licences.

Policy options considered, including alternatives to regulation

Option 0 – do nothing

- No change in the ability of the EA to make changes to under-used abstraction licences.

\textsuperscript{137} There is the possibility of including an additional protection as concession only, providing that headroom of at least 10% of the total licence volume above the highest level of usage in the last 12 years could not be removed without the payment of compensation.
• The EA would continue to be liable to pay compensation. It would only be able to do this if it raised funds from all non-water company licence holders.

Option 1 - remove right to compensation for any part of licence volume that is unused – do not define percentage use or assessment period

• The EA would be able to vary an abstraction licence that is consistently under-used to remove the unused (and unneeded part) without paying compensation to the licence holder.
• This could be open to challenge as being retrospective in practice (although no timeframe given in legislation).
• Would create considerable uncertainty for licence holders on whether they are in scope of the proposal or not.

Option 2 – remove right to compensation for any part of licence volume that is unused for 12 years – do not define percentage use

• The EA would be able to vary an abstraction licence that is consistently under-used for 12 or more years to remove the unused (and unneeded part) without paying compensation to the licence holder.
• It would give licence holders more certainty, allowing them to plan ahead, and it fits in with the Abstraction Licensing Strategy six year cycle, along with allowing for variations in use during wet/dry years.
• It would allow the EA flexibility to apply the measure as appropriate to protect the environment, e.g. constrain to recent peak, and free up water for other abstractors.
• Not defining a percentage use will increase uncertainty for licence holders, and also give less clarity to the EA on what specific licences they should look to address.

Option 3 (preferred option) – remove right to compensation for unused part of licence volume when at least 25% of the licence has been unused in each of the previous 12 years

• The EA would be able to vary an abstraction licence when at least 25% of the licence has been consistently under-used for 12 or more years to remove the unused (and unneeded part).
• It would give licence holders more certainty, allowing them to plan ahead, and it fits in with the Abstraction Licensing Strategy six year cycle, along with allowing for variations in use during wet/dry years.
• It would restrict the EA’s flexibility to apply the measure as appropriate to protect the environment, e.g. constrain to recent peak, and free up water for other abstractors.
• By specifying a percentage use (or alternatively under use) when the measure would apply, it could be seen as a target by licence holders. This does give
more certainty to licence holders however, and also gives greater clarity to the EA on what licences they should look to address.

Option 4 – remove right to compensation for any part of licence volume that is unused for a set period of years in priority catchments

- This would focus on catchments where under used licence volume poses most risk of deterioration or limits future growth but would need to define priority catchments, either in primary legislation or subsequent consultation.
- It would also restrict the EA’s flexibility to apply the measure as appropriate to protect the environment and free up water for other abstractors, i.e. it may be appropriate to apply outside priority catchments.

Expected level of business and wider impacts

Primary benefits and costs of the “do something” options (Options 1 to 4) which involve removing compensation for any part of licence volume that is underused.

Business impacts
The main impact to business of the preferred option would be that a licence holder would not be eligible for compensation if the EA varied their licence to remove unused volumes. The EA currently advises licence holders that they can claim for compensation under four headings if their licence is varied or revoked. These are: mitigation measures, loss of profit, loss of land value, and asset value losses.

The EA has estimated that almost 3000 licence holders (about 17%) consistently take less than three quarters of their licensed volume, including over 2000 licence holders (about 12% of all licence holders) who consistently take less than half of their licensed volume. These figures provide a maximum estimate of the number of licences which could be varied to remove the unused volumes.

However, the EA would only look to use the measure in high priority water bodies (where there is serious damage, risk of serious damage or a risk of deterioration, or where the water freed up could sustainably be used by other abstractors). The EA estimate that around 1000 licence holders consistently take less than three quarters of their licensed volume, including about 750 licence holders who consistently take less than half of their licensed volume, from high priority water bodies.

Furthermore, the EA would seek to enter into discussions with licence holders to understand their future needs and to achieve voluntary changes where possible. Hence, this measure would only be used where the licence holder was not able to provide a reasonable justification for the unused licence volume and was not willing to change their licence voluntarily.
The amount of compensation licence holders have received in the past, if their licence is removed, varies massively on a case by case basis. This is because the amount paid can depend on a number of factors such as: type of change, impact of change, impact on business, and if the change will require any mitigation. It is likely to be difficult for a licence holder to justify they had experienced loss due to the removal of licence volume that had not been used for an extended period of time, and for which the licence holder cannot justify. As a result, we do not have specific information on the likely compensation that would be agreed with licence holders for the under used volumes on their licences.

These compensation costs to licence holders however, would have to be paid for by the other estimated 17,500\(^{138}\) non-water company licence holders. This is because the established system involves the EA charging companies for licences, an element of which is used to fund a compensation pot. The current compensation pot is ring fenced to particular licence holders and can only be used for programmes such as the Restoring Sustainable Abstraction Programme (RSA). The changes we are proposing would mean the new claimants are not eligible for this existing compensation, resulting in the other non-water company licence holders being charged by the EA to pay for the compensation.

Consequently, the net cost to business would be zero, as compensation would need to be collected from all non-water company licence holders who would need to pay into a compensation pot to fund these changes. The logic for this is as follows:

- Under the RSA programme\(^{139}\), the average compensation figure paid to a licence holder was £256,000 and of all licence holders eligible for compensation, only 30% claimed for it.
- Licence holders would only be able to claim for compensation of the unused part of their licence\(^{140}\). Therefore taking the RSA program as a benchmark, we have assumed the average compensation figure under this proposal to be £100,000.

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138 The estimate in 2016 was 17,643, however this has been rounded to 17,500 for simplicity - https://www.gov.uk/government/statistical-data-sets/env15-water-abstraction-tables
139 We have assumed that the compensation figures and percentage of claimants of the RSA programme will be similar to the one of this proposal. The main difference is that the 1500 licences that could be affected by this proposal were derived from a desktop analysis of compliance with flow standards, whereas the RSA licences were derived from reported environmental issues. Hence, it is likely that there will be a higher number of issues that need resolving through licence change under the RSA programme and therefore a higher number of claimants than for this proposed measure. However, information from the RSA programme has been used for the purposes of this assessment due to lack of other evidence.
140 Under the RSA programme, licence holders can claim for compensation under loss of profit, mitigation measures or asset value loss. In comparison, it would be difficult for licence holders losing the under-used part of the licence to claim for these impacts, such as loss of profit, given they are not even using this part of the licence. As such, we have assumed the average compensation figure to be £100,000.
- There are about 1000 under used licences in high priority water bodies (serious damage, risk of serious damage or risk of deterioration).
- Therefore, total loss to licence holders under the proposed changes (assuming £100k average compensation and 30% claim compensation) is £30m.
- We have assumed for this estimation that there are 17,500 non-water company (non-WCo) licence holders who would have to pay for this compensation.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under used licences</td>
<td>300*</td>
</tr>
<tr>
<td>Average compensation</td>
<td>£0.1m</td>
</tr>
<tr>
<td>Total loss in compensation</td>
<td>300 x £0.1m = £30m</td>
</tr>
<tr>
<td>Number of non WCo licences</td>
<td>17,500</td>
</tr>
<tr>
<td>Average additional charge to cover compensation</td>
<td>£30m/17,500 = £1,715</td>
</tr>
<tr>
<td>Total cost</td>
<td>17,500 x £1,715 = £30m</td>
</tr>
</tbody>
</table>

**Net cost to licence holders**

£30m - £30m = 0

* The number of underused licences will be different (smaller) under Option 4, but the same principle of zero net cost to business applies; in this case because costs will (subject to regulatory decisions) be passed on to customers. Benefits under Option 4 will also be smaller, however.

**Distributional Impacts**

The measure is not intended to impact any particular sector more than another. However, it is likely to have most impact on the agricultural sector. The agriculture sector (including spray irrigation) accounts for the largest number of licenses (64%). Hence, it will be most affected by these proposed changes.

Of the about 2,000 under used licence holders who consistently take less than half of their licensed volume, 67% of these licences are either agriculture or spray irrigation, and 27% are for industrial uses. Appropriate safeguards will be put in place to protect businesses and sectors who need to maintain licence ‘headroom’. For example, spray irrigators who only use their full licence volume in dry years.

The largest number of underused licences are in the West Midlands area, where 25% is accounted for. The next region that will be most impacted is Lincolnshire and Northamptonshire, along with Yorkshire, which both individually account for 14% of underused licences.
**Small Business Impacts**

The measure will not lead to disproportionate burdens on small businesses. It seeks to remove under used licence volumes that the licence holder does not need and cannot justify. This will be a cost saving as it will reduce the licence fee (all other things being equal).

**Wider Impacts**

By varying licences that are under used, there will be a benefit to the environment, as the risk of deterioration will be reduced. This benefit has been estimated at £50m per annum to the environment, using the National Water Environment Benefits Survey (NWEBS)\(^{141}\). This has been calculated as follows:

- The EA estimates that there are benefits to business in a small number of water bodies where there is ‘restricted water available’ and no risk of deterioration from additional licensing.
- The EA has used NWEBS to estimate a central forecast benefit to the environment of £50m per year.
- NWEBS is based on a study that assessed the willingness to pay (WTP) values from around 1,500 people for improvements in the water environment with respect to the Water Framework Directive.
- We have estimated the benefits of preventing deterioration flow in 343\(^{142}\) high priority surface water bodies (serious damage, risk of serious damage or risk of deterioration), where under used licences could cause damage to the environment if used to their full licensed volume.
- We have assumed that preventing abstraction from increasing has prevented the water body status from deteriorating by one class\(^{143}\).
- 4 components of the 6\(^{144}\) NWEBS have been applied; flow and the benefit this has on fish, invertebrates and plants. This is appropriate as if flow decreased it would have a wider impact on ecology than improvements that increase flow (since other factors may also limit ecological improvement).
- It has been assumed that the benefits are felt along 50% of the river length, as we do not specifically know where the abstraction points are in each of the water bodies.
- Values are in 2018 prices.

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142 This is the number of water bodies that are estimated to be affected by the number of underused licences, which could cause damage to the environment.
143 Ecological status in water bodies are expressed in terms of five classes (high, good, moderate, poor or bad). We have estimated that the class is improved from poor or bad to moderate.
144 NWEBS has 6 components: fish, other animals such as invertebrates, plant communities, clarity of water, condition of the river channel and flow of water, and the safety of the water for recreational activity.
• The values have not been discounted – the £50m is the benefit you would receive now, if all the under used licences relating to the 343 bodies were varied today.
• In reality, these licences would be gradually changed over time, with future years being discounted. Account would also be taken of reasonable need.

It will also have a benefit to other abstractors in ‘restricted water available’ catchments as it will release water for others to abstract. These benefits have not been assessed.

Preferred option

To summarise, even though there remains some uncertainty over the scale of environmental benefit, it is clear that option 3 will bring some benefit to the environment. Option 3 gives the best chance of achieving the maximum benefit, by enabling the EA to most effectively tackle the ‘rump’ of underused licence. This benefit outweighs the net costs to business, which are found to be zero.

Option 3 overcomes many of the disadvantages of the above options as it gives licence holders certainty and assurances of what licences are in scope, and it is also consistent with EA licensing policy. This option has the correct balance of having flexibility to a degree, but gives certainty to both the EA and licence holders, whilst allowing licence holders to manage abstraction according to their needs.
Annex 30: Statement of impacts – Statutory Drainage and Wastewater Management Plans (DWMPs)

Background

Water companies have a number of duties in relation to drainage, wastewater and sewerage. For example, they have a specific duty to ‘effectually drain’ within their areas of operation, to provide and maintain sewer systems and to adopt new sewers if certain conditions are met. However, they have no specific, statutory duty to plan for the management of drainage and wastewater networks. Our aim is to make the process for drainage and wastewater planning as effective as possible, giving us more assurance that companies are planning and investing in drainage and wastewater strategically, managing the risks of pollution, flooding or spikes in future bills.

The policy issue and rationale for Government intervention

Water and wastewater services in England and Wales are provided by private regional monopolies – the Water and Sewerage Companies (WaSCs). Economic theory suggests that companies with significant monopoly power will tend to underprovide services and charge high prices. Because of this tendency, the WaSCs are subject to economic regulation by Ofwat, who determine allowable revenues and, along with environmental and drinking water regulators, specify and monitor minimum standards of service.

There already exists a statutory framework, supported by regulators, to determine standards of water supply provision – the Water Resources Management Plans. These plans are guided and scrutinised by Ofwat and as applicable the Environment Agency and/or Natural Resources Wales. Together with similar plans for Drought Management, they are providing a framework for improving water supply resilience and protection of the environment.

So far, no such statutory framework exists for the provision of drainage and wastewater services, beyond the high-level summary legislative requirement for WaSCs to “effectually drain” their areas (Water Industry Act, 1991). Under-provision of adequate investment in these services, in the face of development pressure, ageing assets and climate change, is leading to significant economic costs in terms of “surface water” flooding and environmental pollution. For example, the Environment Agency has estimated the annual average cost of surface water (drainage-related) flooding in England at £700m. Although the water industry has
been developing a voluntary framework of Drainage and Wastewater Management Plans (DWMPs), not all companies are pursuing and implementing these with the same vigour and there is a lack of clarity as to whether investment recommended by voluntary DWMPs should be treated by Ofwat in the same way as other investment with a clearer statutory basis. Furthermore, a voluntary approach does not allow WaSCs fully to assess sewer and asset capacity. Due to the nature of the ownership of drainage networks, some assets will be owned by other public bodies or individuals who may be reluctant to share information with WaSCs if planning is not a requirement.

Policy objectives and intended effects

Defra and Welsh Government intend to make drainage and wastewater management plans (DWMPs) a statutory planning obligation for water and sewerage companies in England and Wales. This will ensure that water and sewerage companies (WaSCs) undertake long-term planning of their drainage and wastewater statutory functions and their services to a minimum standard for the industry. The intended effect of putting these Plans on a statutory footing is to allow WaSCs to establish the capacity of their sewerage network (including sewers and sewage treatment works), the resilience of those networks and assets, the risks that they have for the environment and how to mitigate them via the plans and assets required now and in the future to take account of increasing population and climate change.

Statutory DWMPs will make drainage performance much more visible, using modelling to project future performance as drainage networks come under pressure from climate, growth, urban creep, mis-use and asset deterioration. This will allow investment decisions to be made with a long-term view and informed by stakeholders. Investment recommended by statutory DWMPs will also clearly be within scope of the regulated business of the WaSCs, and therefore able to be assessed by Ofwat for adding to revenues (subject to efficiency and value for money). This makes the funding of beneficial investments by customers (beneficiaries) more certain, leading to improved outcomes in terms of flood risk, pollution reduction and service provision generally.

Building on existing requirements for cooperative information sharing among flood Risk Management Authorities will ensure information about drainage networks is provided appropriately, and could lead to economies of scale and scope in promoting targeted investment on a joint basis with other bodies.

Policy options considered, including alternatives to regulation
The main policy option under consideration is to make DWMPs a statutory obligation from the beginning of 2023, in order that the first statutory plans are prepared in time to influence business plans for the 2028 Price Review. The ‘do nothing’ option means that DWMPs will continue to be produced on a voluntary basis. This is a non-regulatory approach. In theory it might appear that there are good incentives for companies to pursue plans given that they can earn returns on associated investment. However, there has been a lack of regulatory clarity that drainage and wastewater investment should be prioritised alongside other water company statutory duties, and rewarded accordingly. In turn this, along with the lack of a firm requirement, has led some companies to pursue voluntary plans more slowly than might otherwise be the case.

**Expected level of business and wider impacts**

There are two areas in which costs would, in principle, be imposed on businesses as a direct result of making DWMPs statutory, when compared with doing nothing (where plans continue to be voluntary):

**Extra direct costs to WaSCs**

There are nine WaSCs operating wholly or mainly in England, and two operating wholly or mainly in Wales. Although all companies have made at least some progress in developing and implementing voluntary DWMPs, progress is variable and a small number of companies have significantly less developed plans than others. Putting DWMPs on a statutory footing would involve additional costs in ‘lagging’ companies to develop plans more fully. We estimate that plans cost around £250k per company per annum, perhaps within a range of £50-400k, based on experience with other statutory planning exercises like Water Resource Management Plans\(^{145}\). Even if all eleven companies had to incur the full costs of a plan at the upper end of the range, the direct costs would be modest at 11 x £400k, or £4.4m per annum ahead of the 2028 price review (for the first cycle). This is very much an upper bound however as we estimate that perhaps 6-7 companies have well developed voluntary plans already.

Furthermore, data sets that have already been developed for WRMPs, for example population forecasts and climate projections, will be useful when WaSCs are developing statutory DWMPs. Familiarisation with the procedures for developing

\(^{145}\) The central estimate of £250k/company/year is derived from experience with Water Resources Management Plans (where significant resource issues exist, as in the South and East), which are judged broadly similar in terms of activity. The Water Resources South East group has an estimated planning budget of £8m to cover plans in 6 companies over a five-year period. £8m divided by 6 and then by 5 equals £267k which, rounded to £250k is taken as the average annual cost of a DWMP. Given the parallel with WRMPs is not perfect, we have fitted a range around this central estimate to consider uncertainty.
statutory DWMPs should be straightforward for WaSCs, given they have already had to develop statutory WRMPs. These two factors could mean that the additional costs of developing statutory DWMPs over the current voluntary approach are lower than these predictions. Costs on other drainage owners from providing information and/or participating in planning

A statutory requirement would require third parties to provide information to WaSCs. In most cases, parties such as local authorities will be flood Risk Management Authorities and will already have a requirement to share information for flood management purposes under the Flood and Water Management Act 2010. In principle therefore, costs should not be significant for these parties (who are likely to be the most involved) but the added weight of statutory plans may cause some authorities and private parties to incur limited costs from information sharing. These are very difficult to estimate but we consider will be modest administrative costs. Some authorities need the information in the DWMPs to inform their own Plans and will want to influence the DWMPs, so good levels of cooperation are expected at no additional net cost. A standard DWMP format (part of the statutory requirement) should make it easier for those bodies to structure their engagement, introducing the potential for efficiencies. Furthermore, where third parties collaborate with WaSCs in drainage planning there are likely to be at least some offsetting financial benefits, for example from developing shared solutions with associated economies of scale and/or scope.

Assessment of wider impacts

We have not provided a formal monetised assessment of impacts, because at this stage it is impossible to quantify the expected beneficial link between a more formal planning expectation and changes in outcomes on the ground. However, there are two key areas of benefit, and some more minor ones, to weigh alongside the direct costs illustrated above.

Reduced flood risk
The wider benefits of better drainage planning are significant in terms of reduced flood risk. Around 3 million properties in England are estimated by the Environment Agency to be at risk of surface water flooding, with an annual average damage estimated at £700m (Source: EA Long Term Investment Scenarios: Additional Analysis, May 2019). Several serious recent flooding events have been at least partially attributable to inadequate drainage. For example, the summer 2007 floods, which cost the economy £3bn, had a significant surface water component.

Whilst investment will be required to secure the benefits of reduced flood risk (that investment represents an indirect cost of DWMPs), surface water flood risk investments typically have benefit-cost returns of £3-4 of benefit for every £1 invested, based on schemes known to the Environment Agency. A statutory planning
process for drainage will incentivise the WaSCs to demonstrate that their chosen measures are those with the greatest benefit-cost returns.

**Environmental and health benefits**
Better drainage and wastewater management also delivers significant environmental and health benefit. For example, we know that the public place value on the reduction of Combined Sewer Overflow (CSO) discharges in urban areas and at the coast, where they lead to risks and disamenity associated with discharges of untreated sewage. This is illustrated by the rise of groups such as ‘Surfers Against Sewage’, but has also been formally tested through public surveys. In the case of one very significant infrastructure proposal, the Thames Tideway Tunnel ‘super sewer’, the estimated aggregate long-term public ‘willingness to pay’ to secure environmental and health benefits is £7-12 billion, significantly in excess of the cost of the Tunnel of circa £4 billion. DWMP interventions are likely to be on a much smaller scale. However, interventions such as those that disconnect areas of hardstanding from draining surface water into the sewer network in preference to sustainable drainage solutions, will reduce peak loads on the sewer network. The cumulative effect of such small scale interventions is likely to be reduced uncontrolled sewage discharges with associated environmental and health benefits.

**Other benefits**
More formalised planning could lead to better approaches across whole drainage catchments like SuDS (Sustainable Drainage Systems), securing wider benefits such as amenity, biodiversity and natural filtration whilst being cost-effective compared with traditional “piped” drainage systems. An historic lack of planning means that these kinds of approaches, which require assessment over space and for multiple objectives, are not necessarily considered (though are being to a degree as part of voluntary DWMPs).

More proactive planning of future drainage and sewerage requirements will cost-effectively anticipate and facilitate the economic growth of areas including new housing. For example, part of the wider business case for the Thames Tideway Tunnel in London was facilitation of the continued economic growth of London through removing the possibility of infrastructure (and hence planning) constraints.

A more transparent planning process for drainage and wastewater will also help identify solutions in the delivery of water resources, with the associated benefits described in Annex 31.

**Assessment of Distributional Impacts**

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146 Defra (2015):
Benefits of better drainage and wastewater management planning will be felt throughout the community and by households and businesses alike. Benefits are likely to fall most especially to those who are, for example, most at risk of damage from surface water flooding.

The direct and indirect (investment) costs of better drainage will be met by water customers, generally according to the way all standard water and sewerage costs are distributed.

**Assessment of Small Business Impacts**

None of the eleven WaSCs is a small business.

Small businesses will benefit from better drainage and wastewater management. Any costs, incurred via wastewater charges, will be regulated by Ofwat as part of regular scrutiny of WaSC business plans.

**Summary of impacts**

Overcoming the two basic market failures of a) lack of incentive for WaSCs to plan, where relevant (due to monopoly power) and ii) lack of information provision from third parties, will enable new net beneficial drainage and wastewater investment to take place, or make existing investment more targeted, beneficial and cost-effective. Statutory drainage planning will introduce more certainty to the delivery of drainage and wastewater investment and be subject to Ofwat scrutiny of value for money, which should benefit customers.
Annex 31: Statement of impacts – Water Resources Management Plans (WRMPs)

Background

The investment provided since privatisation in 1989 has delivered some improvements to existing water supply assets, but little new supply infrastructure has been built. Water transfers have stayed at about 4-5% of water used and a large proportion of this is made up of historic transfers, the largest the transfer from Welsh Water to Severn Trent Water via the Elan aqueduct. The water resource management planning process relies heavily on water companies' analysis of water resources options. Despite some regional planning already being in place, incentives for companies to co-operate with other companies and sectors are weak and the statutory water resources management planning process leads companies to prefer options to meet their own forecast water supply deficits considering the social, economic and environmental impacts of only those solutions within their local areas. This leads to suboptimal solutions because it does not fully consider opportunities to develop shared water resources and trade water with other company areas where there may have surpluses and generally take account of the wider geography of river basins. This leads to higher overall water costs for companies and other sectors than necessary and more pressure on the environment, where water is scarce and in times of drought.

The policy issue and rationale for Government intervention

The government, the Environment Agency and Ofwat have previously issued guidance and policy encouragement to water companies for their water resources management plan (WRMP) preparations that sets out the expectation that we should see more collaboration and water transfers. This has generally not translated into the WRMPs both in the existing WRMPs revised in 2014 and the current revisions, despite Ofwat’s incentives for its price review in 2019147. Water companies have weak incentives to lower costs looking for more efficient solutions at the regional scale because they can pass their inefficiencies to consumers through higher water bills without the pressure of market competition to restrain them from doing so.

Policy objectives and intended effects

We believe legislation is required to ensure effective collaboration between water companies and between water companies and other water abstractors. The proposed legislation will allow the SoS or Welsh Ministers to intervene if they consider it necessary:

- for water companies to prepare a regional plan (or inter-regional) to consider water resources options. And/or
- for water companies to take account of the resulting regional plan in their water resources management plans.

Policy options considered, including alternatives to regulation

As explained above the government, the Environment Agency and Ofwat already issue guidance and policy encouragement to water companies for their WRMPs, this “do nothing” option has generally not translated into the WRMPs both in the existing WRMPs revised in 2014 and the current revisions.

The preferred option, explained above, will complement the existing approach to improve water resources management at a regional level but allow for regulatory intervention to help ensure the benefits are realised.

Expected level of business and wider impacts

The Environment Agency's 2011 ‘Case for Change’\textsuperscript{148} considered the implications of future pressures such as climate change for water supplies regionally and nationally and concluded that while demand management is essential, significant new water resources will be needed to meet the needs of people, businesses and the environment. The results of the Environment Agency’s work show that for many of the climate change and future demand scenarios there will be unmet demand for water. The possibility of unmet demand is a risk which should be managed carefully. The Environment Agency found that in order to manage the risks to meeting the needs of people, business, agriculture and the environment in the future, action to deliver regulatory reform and to manage supply and demand will be necessary.

The National Infrastructure Commission report, Preparing for a Drier Future\textsuperscript{149} reiterates the importance of the twin track approach – demand management and new water resources; it indicates that one third of the predicted public water supply deficit could be addressed by reduced leakage from water company pipes and a further third by improved efficiency (by reducing household consumption), but that

the remaining third would need to be addressed by water transfers between companies and new water resources. This split will inevitably vary across the country.

Legislation can overcome weak incentives and provide greater responsibility for the environment and collaboration between companies and other sectors to manage the risks of water scarcity and drought. This will help ensure that predicted unfulfilled demand for water, drought resilience improvements and the needs of the environment are met optimally in companies’ statutory water resources management plans.

Water companies in the East and South East of England have already set up regional planning groups and the remaining companies have plans to set these up. Therefore we do not anticipate the direction will be widely used to start up new regional groups. We estimate that would be a maximum of 6 companies. The cost to each company for planning will initially be around £250k (based on Water Resources in the South East’s existing costs) and the aggregate cost, therefore, £1.5 million. We expect these costs will reduce to zero over time (about 10 years), as the water companies embed regional planning into their own arrangements.

The benefits will come from better option selection taking place at a regional level, compared with considering the individual water company areas alone. More efficient regional planning and regulatory oversight will improve the selection of more transfers using water resources in other companies’ area where they reduce the companies’ costs for securing water. This is because water companies will be more likely to select options from other companies’ areas when it is beneficial than investing in more resources in their own areas. Shared water resources and water transfers will increase costs in surplus areas, as production increases there to meet the demand from areas with deficit but these costs will be less than developing additional water resources in the receiving company’s area.

Currently marginal costs range from close to zero in areas of water surplus to over £1 for every cubic metre in Thames Water’s area. The benefit of more collaborative options such as water transfers should therefore be around £1 minus transportation costs per cubic metre of water supplied.

Transportation costs depend on the distance and amount of water transferred with big economies of scale. They have been estimated at 3 pence per km and cubic metre (p/km/m³) for smaller transfers (less than 2 million litres/day (Ml/day)) to less than 0.5 p/km/m³ in the case of larger transfers (40-50 Ml/day or more).

As competition is limited, there is a risk that water companies may use these benefits to increase their profits. However Ofwat controls prices companies can charge their customers balancing consumers’ interests with the need to ensure the sectors are
also able to finance the delivery of water and sewerage services and obligations including the environmental duties. Therefore we expect these benefits will be passed to consumers through lower water bills as Ofwat will lower prices following reductions in water companies’ operational expenses. This will be done in those price reviews posterior to the implementation of those cost-beneficial options identified in regional plans150.

In a report commissioned by Ofwat151, Deloitte has estimated the benefits of water transfers for England in the high hundreds of millions, much more than any additional costs. There are also some other studies cited in the Deloitte report about the benefits of particular transfers, see table next, all of them confirming that the benefits of water transfers significantly outweigh the costs.

<table>
<thead>
<tr>
<th>Source</th>
<th>Category of benefits</th>
<th>Quantified benefits</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Ofwat (2010)20 | Lifetime cost saving, across England and Wales | £950m (2007/08 prices) | • NFV of proposed inter-company and intra-company interconnections, adopted in lieu of schemes in water companies’ WRMPs.  
• Of the 31 interconnections with positive NFV, 13 were intra-company and 17 were inter-company.  
• Ofwat consider this to be the lower bound on the total potential benefits.  
• Top 10 most valuable interconnections in the south and east of England. |
| Cave (2008)21 | Productive and dynamic efficiency | Initial savings: £280m* Long-term savings: >£3.5bn* | • Driven by assumptions on 5% increase in productive efficiency and a 0.25% increase in dynamic efficiency a year for 10 years.  
• The upfront savings correspond to 3.5% of total turnover. |
| Cave (2009)22 | Lower financing costs | £280m* | • NFV of reducing the financing costs for small companies, over a 30-year period. |
| WRSE (2010)23 | Lifetime cost savings (regional) | £501m* | • NFV savings based on least-cost modelling across the WRSE group for the planning period to 2035.  
• The baseline model includes demand management schemes, but excludes environmental and social and carbon costs.  
• See Box 3 for further details. |
| Anglian Water, Cambridge Water, Essex & Suffolk Water (2010)24 | Capex and opex savings | £28.2m capex and £0.45m/year opex (2007/08 prices) | • Not capex and opex savings from schemes developed as an alternative to the AMP5 company proposals.  
• Two specific interconnections between Essex & Suffolk Water and Anglian Water, and between Cambridge Water and Anglian Water. |


The realisation of these benefits depends on the optimisation of new water resources selected and the amount of water effectively traded since, as we have seen,

150 Except for the return on the investment needed to transfer water between companies. This is currently 62% of the investment in the year it takes place and the remaining 38% enters the regulatory asset base and is reattributed at a 4.2% each year.
transportation costs decrease markedly with the amount of water being transferred. Should there be reluctance or barriers in achieving these benefits, the policy will give the SoS powers to help ensure they are materialised.

Water is an important input in many other sectors, the policy for increased collaboration with other sectors will have some wider benefits across the economy. We expect that lowering the cost of water for those businesses that use it as a raw input will benefit the economy by improving its competitiveness, especially in the more water intensive sectors like, for example, the food and beverage industry or the production of some chemicals (see the table next).

<table>
<thead>
<tr>
<th>Top 10 water intensive sectors</th>
<th>Sector</th>
<th>Water intensity (= purchases of water / value of total sales)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacture of vegetable and animal oils and fats</td>
<td>2.3%</td>
</tr>
<tr>
<td>2</td>
<td>Manufacture of dyestuffs, agro-chemicals - 20.12/20</td>
<td>0.7%</td>
</tr>
<tr>
<td>3</td>
<td>Processing and preserving of fish, crustaceans, molluscs, fruit and vegetables</td>
<td>0.4%</td>
</tr>
<tr>
<td>4</td>
<td>Manufacture of alcoholic beverages &amp; Tobacco Products</td>
<td>0.4%</td>
</tr>
<tr>
<td>5</td>
<td>Libraries, Archives, Museums And Other Cultural Activities</td>
<td>0.4%</td>
</tr>
<tr>
<td>6</td>
<td>Water Collection, Treatment And Supply</td>
<td>0.4%</td>
</tr>
<tr>
<td>7</td>
<td>Manufacture of other basic metals and casting</td>
<td>0.4%</td>
</tr>
<tr>
<td>8</td>
<td>Insurance and reinsurance, except compulsory social security &amp; Pension funding</td>
<td>0.3%</td>
</tr>
<tr>
<td>9</td>
<td>Waste Collection, Treatment And Disposal Activities; Materials Recovery</td>
<td>0.3%</td>
</tr>
<tr>
<td>10</td>
<td>Manufacture of other food products</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

*Supply and Use Tables, 1997 – 2014, published by the ONS*

Other abstractors are also users of water - a shared resource - and hence will also benefit from the opportunity to collaborate with water companies to meet their water needs and build drought resilience where it is beneficial to them. As demonstrated in the table below, the agricultural sector demand is likely to grow. It is not possible at this stage, however, to quantify or monetise those benefits since we do not know what projects will materialise and hence how the resulting amount of water available after these regional transfers or resource options will be shared between water companies and other abstractors.

<p>| 375 | 950 | 1000 | 725 | 475 |</p>
<table>
<thead>
<tr>
<th>Baseline</th>
<th>Lots of choice in smart technology at low cost.</th>
<th>Farming becomes more intensive.</th>
<th>People accept what the climate gives them, rather than irrigate.</th>
<th>Significant increase in area under cereal / vegetable crops.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High water use efficiency (in terms of 'crop per drop' – and low wastage).</td>
<td>Increase in water use because of high quality expectations.</td>
<td>Farmers are subsidised so efficiency is more widely practised.</td>
<td>Lack of available technological innovation to reduce water demand.</td>
</tr>
</tbody>
</table>

The Environment Agency’s “Case for Change” (appendix 1) - agriculture water demand in 2050 under different scenarios (million litres per day)

Finally, better regional planning will deliver more effective solutions for the benefit of the environment. Water resources are already under pressure. Reliable supplies of additional water for abstraction are not available across much of England and Wales. In some places current levels of water abstraction are already harming nature conservation sites or the ecological health of water catchments.

The Environment Agency’s “Case for Change” found that the scale of the problem needs to be assessed at both local and regional levels. Although analysing water availability only at a river basin districts or regional level would hide significant local problems, once local environmental needs are considered, some large scale water resources solutions, such as new reservoirs are best planned for at a strategic level. Interconnectivity to allow greater water transfers between catchments will be an important part of the solution to protect and improve the environment. The Environment Agency is taking action to improve our understanding of local catchment water needs, through the implementation of the Government’s Abstraction Plan.

It is not currently possible to monetise these benefits, as it is difficult to know what additional resource options will be identified compared to the options that they would replace. Even if it were technically possible the analysis required would be disproportionately costly. However we believe that better collaboration on environmental needs to develop more optimal water resources will have significant environmental benefits.


Background

Ofwat enforces licence conditions and can, under provisions in the Water Industry Act 1991, modify the conditions following consultation and agreement with the individual company. These conditions cover a range of issues. For the main water companies these include: terms and expressions used in the Instrument of Appointment (Condition A); the formula for calculating price limits (Condition B); charging for first time provision of a water supply or sewerage services (Condition C).

The types of modifications that Ofwat have looked to make in the past has been to modernise the terms in a condition, to address new challenges as the sector develops, to simplify a condition or, as in recent changes of company control, to make sure that any change of control does not compromise effective company management.

Modification of licences

Ofwat usually initiates general discussion with a water company about a possible licence condition modification and policy consultations, before undertaking any formal licence modification consultation. This helps inform the possible licence modification. During any of these consultation periods the company and other interested parties can respond to the proposal.

After considering consultation responses, Ofwat issues a final decision document on the proposed modification, and if the company (or one or more companies in the case of modifications to more than one company’s licence) does not agree with the proposal, it is open to Ofwat to re-consult on a lesser or different change, or they can refer the matter to the Competition and Markets Authority (CMA). The CMA then

153 In the case of standard licence conditions in water supply licences, licence conditions can be changed by collective licence modification with the agreement of more than 80% of relevant companies (weighted by market share). This proposal does not concern collective licence modification.
154 Change of control effectively means whenever there is a change in the persons who are Ultimate Controllers of the water company. Ultimate Controller means any person who or which (alone or jointly with others and whether directly or indirectly) is in a position to control, or to exercise material influence over, the policy or affairs of the Appointee or of any holding company of the Appointee (water company).
155 In the case of supply licensees, this occurs if there is a blocking minority 20% or more of licensees.
makes a decision on whether it is the public interest to modify the licence, and, if so, what change should be made.

As part of the CMA process, the CMA will consider the matter afresh and can widen the scope of the review, potentially beyond the scope of the specific matters in dispute. Further, the remedy the CMA propose can differ from Ofwat’s original proposal.

The policy issue and rationale for Government intervention

This means that under the current system, water companies can block a change for trivial reasons – however, it can be difficult for Ofwat (or the CMA) to judge if the objection is trivial or not because there are limited incentives for a company to reveal its view (notwithstanding the threat of a CMA determination). If a company opposes a licence modification, Ofwat has to make a decision on whether to seek a CMA determination based on a number of factors, including the cost of a reference (where the CMA considers the entire issue from scratch); whether there are alternative approaches (including those that might be more costly to firms and customers) of achieving the desired outcome; and practical and reputational impact (including firms’ reactions to future licence changes).

The current process for modifying licence conditions can therefore be slow and resource intensive, leading to several problems with this regime, as follows:

- constrains responsiveness to policy priorities;
- can result in some socially sub-optimal licences if Ofwat negotiates a lesser change than it has ideally required or does not make a change at all; and
- creates divergence between water companies’ licence conditions.

In March, following the severe, cold weather and the effects on some customers’ water supplies, the government asked Ofwat to consider what more could be done to rebuild trust in the water sector and address certain aspects of some companies’ behaviour. The Secretary of State also committed to update Ofwat’s regulatory powers should this be needed to ensure that Ofwat could respond to these priorities promptly and efficiently.

The EFRA Committee also recently drew attention to regulatory powers. It recommended that the government consider giving Ofwat powers to bind water companies on governing principles for the sector through licence conditions.

While Ofwat has been taking a number of actions to bring the sector back in balance, given the limitations of the current licence modification system, we have therefore reviewed the system again. This has also led us to consider further the licence modification powers of other utility regulators.
Other utility sectors such as telecoms (since 2003) and energy (since 2011) have a different regulatory framework for modifying licence conditions. These have evolved over time, to create a more modern, flexible and transparent process. In the energy sector, the economic regulator, Ofgem, can modify any licence held by an energy company following consultation, even if the company does not agree with the change. If the company does not agree, it, not the regulator, can appeal against the change to the CMA on specific grounds. While the case is being heard, the company can apply to the CMA to suspend or dis-apply the licence modification until after the appeal has been concluded. There is also a power for the Secretary of State to direct the regulator not to make the proposed licence modification.

**Policy objectives and intended effects**

In considering the future needs of the environment and the water sector, a more responsive model for licence modification will enable Ofwat to better regulate the water industry and amend licences taking better account of future priorities.

The transparency of such a model for the water sector would address the limitations of the current model.

It would create a more responsive, modern model enabling Ofwat to better regulate and amend licences, taking account of ongoing current and future priorities 156, including the environment. It would also increase regulatory certainty as both Ofwat and water companies would have to explain clearly their reasons for and against any proposed change, and any impacts it may have for the water company, customers or other parties.

**Policy options considered, including alternatives to regulation**

**Option 1: Do nothing.** Ofwat continues with the current model for licence modification.

**Option 2: Ofgem model (slightly adapted).** This would enable Ofwat to consult companies on proposed licence changes, but to make those changes even if all companies did not agree. Ofwat would indicate in the consultation how the licence change proposals were consistent with their statutory duties and any SoS priorities set out in the Strategic Policy Statement to Ofwat. The SoS would have the ability to direct Ofwat that the change should not be made. The company can refer the licence change to the CMA broadly on the grounds of Ofwat making a material error of law,

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156 The actual price limits and their underlying methodologies are set periodically through a determination process under licence conditions rather than through modifying specific licence conditions. We are not proposing to make any changes to the process for review of price control determinations.
a material error of fact, that Ofwat has not followed the statutory process for making a change (i.e. consultation etc.), or it has been made outside of Ofwat’s duties.

**Option 3: Ofgem model with additional safeguards.** As option 2, but with a requirement that the Secretary of State is notified of the licence change proposal at least 28 days prior to consultation.

Our preferred option is 2. Our assessment is that it treads the right balance between strengthening Ofwat’s hand and ensuring the sector remains attractive to investors.

**Expected level of business and wider impacts**

Under options 2 and 3 we anticipate that companies’ costs will remain broadly the same, as under option 1. There are two key reasons for this:

1. Under the current approach no licence modification decision has ever been referred by Ofwat to the CMA (implying that the cost to firms of appeals under the current regime is zero). There is no reason to believe that Ofwat’s approach to licence modification (i.e. the substance of the changes proposed) would change solely as a result of the proposed change in process. It therefore stands to reason that companies will accept (by consent) future licence changes proposed by Ofwat, as they do now.

2. Under the revised approach, a decision to appeal a licence modification is a voluntary decision on behalf of the water company. As the CMA referrals process under option 2 or 3 is permissive, no new / additional obligations that are being imposed on the water company. (N.b. it is worth noting that a decision by a company to appeal a licence modification under option 2 or 3 is the same as the decision to consent to a licence modification under option 1).

The proposed changes to the model is primarily a measure to level the regulatory playing field amongst water companies (some of which have differing conditions, for example relating to maintaining investment grade credit ratings, because of the historic difficulty of modifying licences under current arrangements). The measure will support regulatory consistency by bringing licence-making powers in the water sector into line with those of other economic regulators.

Ultimately Ofwat will have more control to make licence changes swiftly and be more responsive to shifting consumer needs, including ensuring more transparent financial and corporate behaviours.

We do not expect significant direct costs to water companies under the new framework. Water companies may incur negligible one-off familiarisation costs of around £16,000 (our ‘best’ estimate for this measure) to £72,000 (‘high’ estimate) associated with engaging with the new licence modification framework. The new powers may have a small, direct impact on credit rating agencies assessment of the credit worthiness of the sector if they are perceived to affect the stability and
predictability of the regulatory regime. However, by any objective measure the water sector will continue to remain an attractive destination for investment, as highlighted by the £50bn investment proposed by water companies in draft Price Review 2019 business plans, an increase of 13% relative the previous price review period (PR14).

The main indirect impact of this measure relates to potential for additional future appeals to the CMA. In our central scenario, we assume on the basis of historic evidence and discussions with Ofwat that there will not be additional future appeals to the CMA. However, in our ‘high’ cost estimate, we have considered a scenario of two potential additional appeals per year. This analysis provides a ‘high’ cost estimate for this measure of around £4.6m NPV. The costs are summarised below.

**NPV for ‘best’ estimate:** - £15,834, arising from one-off familiarisation costs. Note that this estimate applies for options two and three.

<table>
<thead>
<tr>
<th></th>
<th>Total Transition (constant prices)</th>
<th>Average Annual (excl. Transition, constant price)</th>
<th>Total Cost (Present Value)</th>
<th>Total Benefits (Present Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>£15,834</td>
<td>0</td>
<td>£15,834</td>
<td>0</td>
</tr>
<tr>
<td>High</td>
<td>£72,474</td>
<td>£480,000</td>
<td>£4,491,461</td>
<td>0</td>
</tr>
<tr>
<td>Best estimate</td>
<td>£15,834</td>
<td>£0</td>
<td>£15,834</td>
<td>0</td>
</tr>
</tbody>
</table>

- Estimated Business Net Present Value : - £15,834
- Estimated Equivalent Annualised Net Costs to Business :- £1,840

**Familiarisation costs.**

Water companies will also face one-off costs, to familiarise themselves with the new licence modification framework. It is our intention for any familiarisation costs to be minimised through frequent engagement and consultation. Whilst it is difficult to quantify these costs at this stage, with 26 water companies, and if we assume that 1 to 3 individuals would need to take one 7.5 hour working day to familiarise themselves with the arrangements, this might imply around 26 to 78 working days. The median hourly wage rate of a general counsel in the Power and Utilities sector\(^{157}\) is £131,950 to £201,315 per annum (£67.67 to £103.24 per hour). This is uprated by 20 percent to take account of overhead costs, leading to an adjusted hourly wage rate of £81.20 to £123.89. This suggests that these transitional costs might be in the range of £15,834 to £72,474.

**Assessment of Distributional Impacts**

We do not anticipate that there will be any significant distributional impacts as a result of this change in policy. The proposals will affect the way that the regulator,\(^{157}\) [https://www.slideshare.net/HudsonUK/uk-salary-guides2017legallondon](https://www.slideshare.net/HudsonUK/uk-salary-guides2017legallondon)
and water companies approach licence modification decisions, with no direct economic impact, or relevance to customers.

**Assessment of Small Business Impacts**

There are a small number of small businesses in the business retail market (currently 9 new appointees and variations (NAVs) fall under the CA2006 definition. We do not expect any difference in burden between small businesses and other companies operating in the water retail market as a result of this change in policy. Because of the current (collective licence modification) approach in the business retail market, small businesses will benefit from being able to appeal decisions to the CMA that they would currently be forced to accept, if accepted by the majority of companies.

**Brief Assessment of Wider Impacts**

Unquantifiable benefits:

A level playing field in the sector, including greater transparency of decision making processes. Ofwat’s decision document would need to set out the grounds on which Ofwat believed a licence modification to be appropriate. Firms would then have the opportunity to appeal on:

a. The basis for Ofwat’s decision to introduce a licence modification – is there sufficient evidence that the policy change will achieve its stated objectives, and is a licence change the best way of achieving the stated outcome?
b. How Ofwat has taken into account the views of stakeholders – i.e. has due process been followed?
c. How Ofwat has met and balanced all of its duties in coming to its decision – e.g. balancing the customer and financeability objectives; and consistency with the SPS.
d. Whether Ofwat has relied on a material legal or factual error in making its decision.

The arguments Ofwat could put forward to defend itself would be limited to the reasons it supplied in its decision document. This both expedites the appeals process as the appeal to the CMA will be targeted and focussed on specific flaws in Ofwat’s reasoning; and helps place additional safeguards on the ex-ante policy development process undertaken by Ofwat for all licence change proposals to ensure that they are robust.

158 Relative to the current situation, where, if Ofwat makes an appeal to the CMA, the CMA must conduct an independent review of the issue from scratch to judge whether a public interest detriment has been sufficiently evidenced and whether a licence modification (whether the one Ofwat proposed or another) could remedy or alleviate the problem. The CMA has a wide discretion and can reach its own view on the nature of any public interest detriment and how that might be remedied. As a result the review risks duplication, and can be costly and lengthy, and can introduce regulatory uncertainty.
A reduction in the number of sequential licence change processes as Ofwat would be better able to modernise and simplify existing licences for firms in parallel, rather than more opportunistically, e.g. on a change of control.

A more responsive regulator leading to better outcomes for customers and the environment. Individual licence changes could be made on their own merits, as opposed to the current situation where Ofwat can sometimes need to craft delicately balanced packages that trade off regulatory advancements against company ‘asks’ for licence changes.

Unquantifiable costs:

One potential unquantified cost risk is around impacts on the cost of borrowing in the sector. It is very challenging to quantify these effects due to the high levels of uncertainty (CAPM and other models, for example, do not directly allow for such analysis) however there are two potential mechanisms through which these effects might present themselves: 1) as a direct result of the change in licence modification powers; and 2) as an indirect result of increased regulatory uncertainty depending on the nature and frequency of changes (and subsequent challenge).

1) Direct effects: it is possible that credit rating agencies (CRAs) and other stakeholders may conclude that changes to Ofwat’s licence modification powers impact on firms’ credit worthiness in and of themselves. In particular, Moody’s negative outlook for four UK water groups in May this year set out that a key component of their decision was that “We also see heightened risk of future political interference in the design of the regulatory framework and are [therefore] changing our assessment of the stability and predictability of the UK water regulatory regime under our methodology to Aa from Aaa”. Under both options 2 and 3 there is therefore the potential for greater political checks and balances to impact on negatively on Moody’s assessment sector. We have assessed these risks to be greater under option 3.

2) Indirect effects: notwithstanding the impact of legislative change, there is a risk that cumulatively, future licence changes could impact on CRAs assessment of the stability of the regulatory regime for water. Ofwat has been clear that it does not have a specific work programme that it would only undertake should these powers be granted, however, it is not possible to pre-empt what future changes may be needed to the regulatory regime a number of years in the future. It should be noted, however, that both firms and the regulator could anticipate receiving prior warning of a cumulative build-up of regulatory pressure, e.g. through a negative watch, prior to any downgrade. Ofwat would then need to consider any further regulatory action in light of both this, and its financeability duty.

Background

The Water Industry Act 1991 (section 216) requires documents being served under the Act to be provided in hard copy. This can relate to a range of documents from water resource planning documents; business plan documentation that companies submit for price reviews; and information documents to customers.

The policy issue and rationale for Government intervention

The policy issue is that the requirement of serving documents in hard copy can be costly to both Ofwat and water companies. For example, price review documentation can run to 1000s of pages for each company to send via the postal service. Recipients such as Ofwat and water companies then have to store the physical copies sent. This whole process can be harmful to the environment too, in terms of the amount of paper used.

We are therefore proposing a modernising technical amendment to an existing regulatory measure, to permit electronic communication of these documents instead of being required to serve them in hard copy. Ofwat and the companies currently do tend to serve these documents in electronic form already, as well as providing a hard copy. The proposed deregulatory measure will now allow both parties to only serve these documents in electronic form, if they wish to do so.

Policy objectives and intended effects

The intended effect of the proposal is that it will allow water companies and Ofwat to now only serve these documents in electronic form, lifting the current burden that requires them to serve them in hard copy. This will lead to a more efficient way of serving these documents, resulting in minor cost savings to both parties of not having to print and post these documents in hard copy.

Policy options considered, including alternatives to regulation
There are no alternatives to regulation, given the current Water Industry Act is the current legislation that requires companies to serve documents in hard copy. This is a minor technical amendment to existing regulation.

**Option 1 – Do nothing**

Continue with current paper approach only. While this does not prohibit electronic communications, it does still require the service of documents in hard copy, which creates a likely duplicate process of both electronic and hard copy service, and provides no savings for business.

**Option 2 – amend the Water Industry Act 1991**

This would enable all documents that have to be served under the Act to be served electronically with the consent of the recipient and on the confirmation of a valid email address.

**Expected level of business and wider impacts**

The main impact to businesses of this proposal is the cost saving associated with sending and receiving documents in hard copy. It is worth noting that this is an optional policy, as it gives Ofwat and the water companies the choice to no longer serve documents in hard copy, if they wish to do.

However, as our assessment of impacts shows, we have estimated that there are net benefits to businesses of taking up this proposal. This would therefore imply that both parties would opt for no longer serving documents in hard copy.

The main impacts of this proposal that are amenable to monetisation are the postage and printing costs that are saved, in no longer having to serve documents in hard copy under the WIA. Labour costs and time spent associated with the printing/posting activity are subject to significant cross-organisational economies of scale; the impact of this measure is negligible.

**Ofwat**

Ofwat, the economic regulator, are the ones who are required to serve the bulk of the documents required under the WIA. In order to calculate an informed estimate of the scale of the burden placed upon the sector by the WIA requirements for Ofwat to serve documents in hard copy, we consulted with Ofwat to establish an approximation. Seventeen water companies participate in the price review process. The results are as follows:

**Table 1: documents served by Ofwat under the WIA**
<table>
<thead>
<tr>
<th>Document type</th>
<th>Sample equations</th>
<th>Avg pages for a year</th>
<th>Copies sent</th>
</tr>
</thead>
</table>
| Licence 
 modifications 
 (monopoly 
 companies) | On average Ofwat complete 2 large exercises per year (18 pages x 17 companies + 2 SoS/Welsh ministers for consultation; 2 pages x 17 companies for final determinations) = 752 pages. Ofwat also complete a number of small exercises relating to one or a group of companies. On average this would produce an extra 250 or so pages. Total number (average, rounded) = 1000. | 1000 | 38 |
| New appointment 
 variations (NAVs) | Last financial year Ofwat completed 40 NAVs. On average there are 3 pages sent to 6 stakeholders per NAV consultation and the same number for final determinations. Total number (average) = 1440. | 1440 | 480 |
| Water supply and/or 
 sewerage licences 
 (WSSLs) | On average Ofwat complete 5 WSSLs per year. Average 4 pages to 50 stakeholders. Please note with each new WSSL Ofwat are required to send to all licensees, so the number of pages increases each time. Total number (average) = 1000. | 1000 | 250 |
| Strategic cases | On average Ofwat complete 2 strategic cases per year. The page numbers vary quite substantially – based recent cases, Ofwat averaged to 60 pages per consultation and | 240 | 4 |
Notice, which are sent to 2 stakeholders.

Total number (average) = 240.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
<th>Page Number</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual report</td>
<td>Total page number of 2018 report. Published once per year and sent to 2 stakeholders.</td>
<td>302</td>
<td>2</td>
</tr>
<tr>
<td>Forward programme</td>
<td>Total page number of 2018 report and accompanying document. Published once per year and sent to 3 stakeholders.</td>
<td>39</td>
<td>3</td>
</tr>
<tr>
<td>Price review determinations</td>
<td>Price review determinations occur once every five years. Ofwat used PR14 documents and averaged page numbers for a small company, a medium company and a large company (i.e. small page numbers, medium page numbers and large page numbers). This gave a rounded total of 4000. Ofwat divided by 5 to get a ‘per year’ average, but the actual burden is only ever on a single year. Average per year number = 800.</td>
<td>800</td>
<td>17</td>
</tr>
</tbody>
</table>

**Total**                                                                 | **4821**     | **792**     |

In 2018, Ofwat also completed a licence simplification exercise. These happen irregularly, with this one occurring as a one-off simplification process for older licence conditions, and we have therefore not included it in the table above. In that instance, Ofwat printed and sent 4,628 pages per their statutory requirements for that single exercise. It would be inherently uncertain to predict when, or indeed if, another of these single exercises may occur. Fewer conditions would actually require amendment in this way as most of them have now been simplified and the process for licence condition modification is itself being modified. However, given that is a significant process, we have estimated that an additional such exercise may be approximately a fifth of the size of this one, and added an upper bound estimate of a
further 1,000 pages on to our overall estimate and assume 100 copies will be sent out. This brings the total pages to 5,821 and copies sent to 892. For simplicity purposes, this has been rounded to 6,000 and 900.

The main cost savings that arise will be the postage and printing costs that are now forgone, as a result of not having to serve the above listed documents in hard copy. We have assumed that the cost of printing a double sided A4 piece of paper for a business is 4.5p\(^{159}\). The estimated cost of a first class stamp is £0.70\(^{160}\). This results in cost savings as follows:

**Printing costs:** \((6,000 / 2) \times 4.5p = £135\)

**Postage costs:** \(900 \times £0.70 = £630\)

**Total costs savings to Ofwat:** £765

These are costs savings incurred by a non-ministerial government department. They are therefore not included in the EANDCB, however we have shown them, given that these are the bulk of the documents that are served under the Act.

**Water Companies**

There are currently a total of 27 water companies\(^{161}\) that will be affected by this proposal, as shown in Table 2.

**Table 2: Number of business impacted**

<table>
<thead>
<tr>
<th>Type of business</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water and sewerage companies (WASCs)</td>
<td>11</td>
</tr>
<tr>
<td>Water only companies (WoCs)</td>
<td>6</td>
</tr>
<tr>
<td>Small water and sewerage companies (NAVs)</td>
<td>9</td>
</tr>
<tr>
<td>Infrastructure provider: Bazalgette Tunnel Limited (Thames Tideway Tunnel).</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

One of the potential benefits to the water companies of this measure is that the companies no longer have to receive and store the physical hard copies of these documents, listed under table 1. As displayed, these can range to a large array of lengthy documents. It is estimated that a standard file box can hold 2000-2500 pages\(^{162}\), therefore the companies are receiving a maximum of two boxes a year which can be stored anywhere. This physical storage will effectively be replaced by electronic storage on company servers. These benefits have not therefore been monetised. We have not quantified any real estate savings from reducing the

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159 [https://startups.co.uk/printer-prices/](https://startups.co.uk/printer-prices/)
160 [https://www.royalmail.com/personal/uk-delivery/1st-class-mail](https://www.royalmail.com/personal/uk-delivery/1st-class-mail)
161 [https://discoverwater.co.uk/water-sector](https://discoverwater.co.uk/water-sector)
physical space potentially freed up by this measure. The real estate strategies of the companies will depend on a complex set of factors, and are extremely unlikely to be influenced by a reduction of filing cabinets potentially brought about by this measure.

Companies will also incur some similar cost savings, as incurred by Ofwat in relation to the documents that they currently have to serve in hard copy under the WIA. It has been established by Ofwat that there are very few/no documents which companies have to serve annually on Ofwat under the WIA. Any cost savings here are estimated to be negligible: postage costs will be minimal as the documents are only being served on one party, Ofwat, and printing costs are very low due to the small amount of pages involved.

However, every five years companies have to submit their business plans to Ofwat, this consist of one document for each firm. Each individual document is on average approximately 250 pages for a company. This exercise does only occur every 5 years and hence to obtain an annual total we must divide by 5. Therefore the costs involved in printing and posting are:

- Printing costs: \[\frac{250}{5}/2 \times 17 \times 4.5p = £20\]
- Postage costs: \[\frac{17}{5} \times £0.70 = £2\]
- Total company costs: £22

There are however more clearly defined requirements about what documents water companies have to serve to customers in hard copy, under the WIA. These are in the form of provisions in the WIA that require the undertaker (the water company) to serve a formal notice on them.

It is clearly difficult to give an exact indication of the number of these documents served under each provision, and these will vary from company to company. We have consulted with some of the water companies, in order to provide an indicative estimation of the number of documents that are served. These are as follows:

Table 2: documents served in hard copy under the WIA by water companies to customers

<table>
<thead>
<tr>
<th>Section under the WIA</th>
<th>Documents served (approximation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 47: connection condition counter-notices</td>
<td>12,000</td>
</tr>
<tr>
<td>Section 64: separate service pipe notice</td>
<td>120</td>
</tr>
<tr>
<td>Section 75: wasted water notices</td>
<td>700</td>
</tr>
<tr>
<td>Section 168: seven day notice of entry; and section 169: surveys</td>
<td>3,000</td>
</tr>
</tbody>
</table>
Section 162/172: installation of meters without a customer request

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,000</td>
</tr>
</tbody>
</table>

**Total**: 18,820

For simplicity, we have rounded this number up to 20,000. We do not have specific estimations on the length of each of these documents, but they can range from single paged letters, to much longer terms and conditions that can run into several pages. As these documents vary on a case by case basis, it is very difficult to come up with an estimate.

For the purposes of avoiding over or underestimation, we have assumed an upper bound figure that all these documents are 10 pages long. The costs involved in printing and posting these are:

- **Pages**: $20,000 \times 10 = 200,000$ pages
- **Printing costs**: \( \frac{200,000}{2} \times 4.5p = £4,500 \)
- **Postage costs**: $20,000 \times £0.70 = £14,000$
- **Total individual company costs**: £18,500

It should be noted that these predictions are based on estimations by Severn Trent and Anglian Water – two of the largest water companies operating in England and Wales. We have used this as an approximation of what every other water company would save. Given that Severn Trent and Anglian Water are two of the largest water companies, it would be expected that the total amount of documents served across the industry would be much smaller than this. Therefore, an upper bound estimate of cost savings incurred by water companies as a result of this proposal would be:

**Total cost savings to the industry**: $(£18,500 \times 27) + £22 = £499,522$

It should also be noted that £499,522 cost savings is assuming that as soon as this proposal is introduced, water companies will cease to serve any of these documents to customers in hard copy. In reality, this is unlikely to be the case. Many customers may choose to have these documents to be continued to be served in hard copy. It is only the customers who express a real preference to have these documents served only in electronic form, is where the cost savings to the water companies will be incurred.

As such, it can be justified that the £499,522 savings in postage and printing costs to companies represents the very upper bound of annual savings that will be incurred.
Annex 34: Statement of impacts – Ofwat information gathering power

Background

Ofwat, the economic regulator for the water industry of England and Wales, has limited powers for gathering information from water only undertakers, water and sewerage undertakers and water supply and sewerage licensees (all referred to here as ‘water companies’), whom they regulate, about the carrying out of their functions and activities.

Ofwat’s current powers are very much set in the limited context of their role in the consumer complaints regime. Ofwat:

i. Has a general duty (Section 27, Water Industry Act 1991 (WIA91)) to keep matters concerning the protection of customers under review, and this allows Ofwat to collect information from water only undertakers, water and sewerage undertakers and water supply and sewerage licensees in connection with them carrying out their functions and activities with regards to protecting customers. However, Ofwat cannot take enforcement action if the information is not supplied.

ii. Has a modified Section 202 WIA91 power to enable Ofwat to request information under Section 116(a) (10) Procedure for dealing with complaints; Section 150A Billing disputes; and Section 203 Powers to acquire information for enforcement purposes. Section 202 is primarily a Defra’s Secretary of State power to request information from water companies. The power is also enforceable by the Secretary of State and not by Ofwat, even as modified.

iii. Can request information from companies through a condition within water companies’ licences. However, this information is in relation to specific licence condition factors, not for general information.

Water companies’ functions and activities are much broader than these issues and cover a number of areas such as their day-to-day provision of water supply to homes; managing major leakages following a burst main; the operation of their sewerage treatment plants; their use of combined sewer discharges through which they discharge diluted, but untreated, water to rivers and seas to prevent sewer flooding following an extreme rainfall event; or their transfers of water between companies. Ofwat cannot require water companies to provide information on these issues.
The policy issue and rationale for Government intervention

The current powers can make it difficult for Ofwat to enable it to carry out its statutory function of providing information and advice to customers (Section 201 WIA91), which is an element of its functions, separate from the consumer complaints regime. Ofwat has used this function to collect data to publish information and reports on the state of the business retail market.

In terms of current information gathering powers, Ofwat can:

i. informally request information from companies, but companies are not under a duty to provide it or, if they do, they do not have to do so to a specific timescale;

ii. request information from companies which is within a licence condition within water companies’ licences to operate. However, this information is in relation to specific licence condition factors, not for general information.

Ofwat also has a general duty (Section 27, Water Industry Act 1991 (WIA91)) to keep matters concerning the protection of customers under review, and this allows Ofwat to collect information from water only undertakers, water and sewerage undertakers and water supply and sewerage licensees in connection with them carrying out their functions and activities. However, Ofwat cannot enforce the provision of this information.

Under Section 202, WIA91 Defra’s Secretary of State can request information from water companies under the Water Industry Act 1991, which the company is under a duty to provide to the Secretary of State. This power has also been modified to enable Ofwat also to request information under Section 116(a) (10) Procedure for dealing with complaints; Section 150A Billing disputes; and Section 203 Powers to acquire information for enforcement purposes.

We believe therefore that Ofwat requires a much broader power in order to enable them to assess water companies’ overall carrying out of their functions and activities more effectively in all situations and not just through a periodic review. This includes situations where an adverse environmental impact may have occurred because of a water company action.

Freeze Thaw

In February / March 2018, following the extreme winter weather that occurred which resulted in a large number of customers being without water supply, Ofwat also used this function to obtain information about the then current situation with supply and sewerage services The Freeze Thaw report is an example of the use of reputational
incentives to promote industry-wide improvements in service at speed in a proportionate way without the need to resort to formal (and time consuming) enforcement or to impose new legal requirements.

In order to obtain this information, Ofwat therefore had to informally request it from companies, which were not under any duty to provide it. While companies did respond to the request, Ofwat could not impose requirements on form or content of the information provided. This led to a delay in obtaining information and it was difficult for Ofwat to interpret, seeing as it was not standardised across companies.

Other information gathering under WI91

The Consumer Council for Water (CCWater – the consumer body for the water industry), as established by the WIA91, provides for them under Section 27H to request a range of information from water only undertakers, water and sewerage undertakers and water supply and sewerage licensees in order to fulfil their duty in investigating consumer issues. CCWater are able to enforce these requests, but the information only directly relates to consumers, and does not cover water companies carrying out their functions more broadly.

Other regulators information gathering powers

The energy regulator Ofgem has a power which enables it to request information in order to keep under review its duties in relation to generation, transmission and supply of electricity and including the provision of smart meters. This power is much broader than Ofwat currently has as it is not just in relation to the protection of customers, but much wider.

Policy objectives and intended effects

Recent events have therefore highlighted the importance of Ofwat having sufficient information gathering powers. We believe therefore that Ofwat requires a much broader power in order to enable them to assess water companies’ overall carrying out of their functions and activities in all situations and not just through a periodic review. This includes situations where an adverse environmental impact may have occurred because of a water company action.

This will enable Ofwat to deliver better information to consumers about the water and sewerage services that they received, and obtain information from water companies which enables Ofwat to identify where water company performance improvement is required. This will lead to better outcomes for both the consumer and the environment.

The power will also alleviate problems Ofwat faced during the Freeze Thaw incident, enabling it to move faster and better focus, to improve services for customers in a proportionate way.
We believe that Ofwat should have the power to enforce the information requests if water companies do not comply with them.

The intended effects is that Ofwat can better deliver information to consumers about the water and sewerage services that they received, and obtain information from water companies which enables Ofwat to identify where water company performance improvement is required.

We consulted on the measure in January 2019 and while there was broad support for the additional power, water companies did seek reassurance that in times of emergencies (such as severe weather – drought or flood) Ofwat would consider the circumstances in which the requests for information would be made.

During such incidents which may involve restrictions on water supply, companies are normally directing all resources to deal with the problem that has occurred and may not therefore be able to respond to requests for information to very tight deadlines. In providing the power, Defra will raise this point with Ofwat that the power should not be used during such incidents.

**Policy options considered, including alternatives to regulation**

**Do nothing** – Continue with current largely informal approach to gathering some information. The disadvantage of this approach is that it remains a non-regulatory approach and is reliant on voluntary compliance with information requests.

**Option 1: Modify Section 202 WIA91 further.** This is primarily a Secretary of State power to require information. Modifications would need to be for pieces of information relating to specific water company functions and activities and would not be suitable for a blanket modification to cover them all. In addition, the power would still only enable enforcement through the Secretary of State and Ofwat. It would require amendment if companies’ functions and activities were amended in the future.

**Option 2: Replicate for Ofwat the CCWater Section 27H information gathering power.** This is a very broad power which enables CCWater to request any information needed to carry out its consumer protection duties from a range of parties and not just water companies. The enforcement power is also very broad and effectively makes non-provision of information a criminal offence enforceable through the courts. We would not wish to use such an enforcement regime, preferring to rely on existing provision in WIA91.

**Option 3 (Preferred option): Provide Ofwat with a specific, new information gathering power enabling them to request any information from water companies, in line with some other regulators about the way in which companies are carrying out their duties and activities.** Enforcement would be by
Ofwat under existing WIA91 enforcement powers. This would be a more comprehensive approach to the problem, and would be future proofed as it would relate to all companies’ functions and activities both now and if they were to change in the future. For example, option 2 would require updating if functions and duties were to change.

**Expected level of business and wider impacts**

There are currently 27 water companies (businesses) who will be affected by this proposal, as summarised in table 1.

**Table 1: Number of business impacted**

<table>
<thead>
<tr>
<th>Type of business</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water and sewerage companies</td>
<td>11</td>
</tr>
<tr>
<td>Water only companies</td>
<td>6</td>
</tr>
<tr>
<td>Small water and sewerage companies</td>
<td>9</td>
</tr>
<tr>
<td>Infrastructure provider: Bazalgette Tunnel Limited (Thames Tideway Tunnel).</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

Water companies are likely to incur small one-off transitional costs, to familiarise themselves with Ofwat’s new power.

It is difficult to quantify these familiarisation costs, but we have estimated that these could be in the region of £16,843 (‘best’ estimate) to £75,263 (‘high’ estimate). A summary of the assumptions are provided in Table 2.

**Table 2: Summary of familiarisation cost assumptions**

<table>
<thead>
<tr>
<th>Estimate</th>
<th>Number of companies</th>
<th>Staff</th>
<th>Time (hours)</th>
<th>Wage (per hour)</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central/low</td>
<td>27</td>
<td>1</td>
<td>7.5</td>
<td>£81.20</td>
<td>£16,443</td>
</tr>
<tr>
<td>High</td>
<td>27</td>
<td>3</td>
<td>7.5</td>
<td>£123.89</td>
<td>£75,263</td>
</tr>
</tbody>
</table>

Total of 27 water companies - we assume that 1 (central) to 3 (high) individuals would take one 7.5-hour working day to familiarise themselves with the arrangements, this might imply around 27 to 81 working days. The median hourly wage rate of a general counsel in the Power and Utilities sector is £131,950 to £201,315 per annum (£67.67 to £103.24 per hour). This is uprated by 20 percent to take account of overhead costs, leading to an

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163 [https://discoverwater.co.uk/water-sector](https://discoverwater.co.uk/water-sector)
164 [https://www.slideshare.net/HudsonUK/uk-salary-guides2017legallondon](https://www.slideshare.net/HudsonUK/uk-salary-guides2017legallondon)
This is the only direct monetiseable business impact of this policy option, given it is envisaged that Ofwat will not request any new categories of information from companies or materially increase the volume of requests as a result of this power.

Water companies already monitor information covering most of their activities, ranging from environmental performance, customer satisfaction, and leakage levels. This means that in the majority of cases where Ofwat will request information under this proposed power, it is thought that the water companies will already have this information to hand. As stated previously, Ofwat are under a duty to have regard to best regulatory practice and to be proportionate in how it carries out its functions, and is mindful of this obligation in the information requests it makes of industry. It would not want to divert water companies' attention away from serving their customers, by requesting abstract information that is difficult to collect.

There may be some slight minor costs for the water companies in aligning the data with the specific request desired by Ofwat. This is thought to be fairly negligible and is too uncertain to place a monetary value on it.

**Enforcement orders**
This proposal will give Ofwat the power to enforce these information request if the water companies fail to comply with them. Enforcement orders are normally issued as a provisional order stating a date for compliance (normally within three months) and if it has not been complied with, can become a formal order. Ofwat can revoke an enforcement order if no longer needed.

Companies may disagree with an order and they can go to the High Court to seek to overturn if it is not something that Ofwat can enforce under Section 18 or if Ofwat has not followed the process for issuing an order. Ofwat can impose a financial penalty for non-compliance order, and if a company disagrees with a financial penalty or the amount, the water company can appeal it in the High Court. The High Court can then either, quash the amount, require a lower amount to be paid or change the payment date for the penalty.

Ofwat has only used its full enforcement powers three times in the past five years\(^1\)\(^6\)\(^5\), and these have largely centred round environmental incidents, e.g. pollution or leakage.

We have stated previously that Ofwat are incentivised to make targeted requests of industry in a manner which does not divert from companies' core responsibility to serve customers. This point, along with the fact that we do not envisage Ofwat

\(^1\)\(^6\)\(^5\) [https://www.ofwat.gov.uk/regulated-companies/investigations/closed-cases/enforcement-cases/](https://www.ofwat.gov.uk/regulated-companies/investigations/closed-cases/enforcement-cases/) (the other is more recent when a penalty was imposed on Southern for significant breaches of its licence conditions and its statutory duty).
making any material new information requests under this power, and previous enforcement requests have only been made regarding environmental incidents, we believe there is sufficient evidence to support the assumption that this power will not result in any new enforcement orders.

**Benefits**

There are a number of benefits related to this measure, but these are not amenable to monetisation. These include:

- **A more effective regulator** leading to better outcomes for customers and the environment. This power will enable Ofwat to better carry out its functions by a more thorough monitoring of water companies duties. This in turn will lead to better information to consumers about the water and sewerage services they receive, and also empower Ofwat to identify where water company performance improvement is required.

  Under the Freeze Thaw example, when Ofwat requested information its response deadlines could not be enforced leading to delays. Information was also not provided in standardised format making comparisons harder, and companies were free to interpret the amount and comprehensiveness of detail with which to respond. All these factors created unnecessary delay and subsequent costs in Ofwat ensuring water companies were carrying out their statutory functions.

- **Greater transparency** in Ofwat’s decision making and their ability to hold water companies to account. This power will now make much more visible the type of information Ofwat are requesting from companies, which in turn makes it easier for government to ensure Ofwat is effectively carrying out its statutory duties.

*Brief Assessment of Distributional Impacts*

We do not anticipate that there will be any significant distributional impacts as a result of this change in policy.

*Brief Assessment of Small Business Impacts*

There are a small number of small businesses in the business retail market, and there are also currently 9 new appointees and variations (NAVs) that fall under the Companies Act 2006 definition. We do not expect any difference in burden between small businesses and other companies operating in the water retail market as a result of this change in policy.

*Summary of monetised impacts*
- Estimated Business Net Present Value: -£16,443, arising from one-off familiarisation costs.
- Estimated Equivalent Annualised Net Costs to Business: £1,912
- The Price Base Year (2018) and Present Value Base Year (2020)
Annex 35: Statement of impacts – Power to update the Water Framework Directive’s list of priority substances and environmental quality standards for surface and ground waters

Background
The Water Framework Directive (WFD) is the principal EU Directive for protecting and enhancing surface and ground water quality across the EU. As part of WFD, a European-wide list of priority substances which pose a threat to or via the aquatic environment has been established, together with their corresponding Environmental Quality Standards (EQS). EQS are limits on the concentration of the priority substances (i.e. thresholds which must not be exceeded if a good chemical status is to be met). Member states are obliged to monitor their surface and ground waters for these substances and classify the chemical status of the waters by comparing levels with EQS values. The ultimate aim is to reduce and eliminate risks of chemical pollution to our water bodies.

The list of these substances and their EQS are reviewed by the Commission every six years, and the next review for the EQS Directive and Groundwater Directive (the daughter directives of WFD) is currently under way. This is likely to lead to changes to the list with more substances being added, together with their EQS, and some EQS values for existing substances being amended in light of new scientific and technological knowledge. The UK Government and Devolved Administrations (DA) will need the power to update the list of substances and their EQS after the end of the UK’s EU exit transition period.

The policy issue and rationale for Government intervention
Now we have left the EU, the transposing legislation for the WFD will be saved when the EU Withdrawal Act 2018 comes into force at the end of the transition period, becoming part of retained EU law. Section 2(2) of the European Communities Act (ECA) 1972 is repealed by the 2018 Act and in its absence ministers will not have suitable powers to update the list of substances and their EQS – these will be ‘frozen’ at that point.

Without these powers, now we have left the EU the UK and DA Governments would be left operating to an out-of-date list of substances and/or EQS and this has the
potential to increase the environmental and/or human health risks posed by existing and new priority substances present in our ground and surface water bodies.

**Policy objectives and intended effects**

The objective of this policy is to continue the existing regulatory framework for assessing the chemical quality status of our waters. As part of the Water Framework Directive, the 'priority list' of substances posing a threat to or via the aquatic environment has the goal of decreasing naturally occurring pollutants to the background value and man-made synthetic pollutants to values close to zero.

Stakeholders (especially environmental NGOs) recognise that if these measures were not granted, it would lead to the UK and DA Governments operating according to an out-of-date list of substances (and EQS), potentially harmful to surface and ground water. Conversely, if standards are relaxed at EU level and the UK water quality legislation remains static, it could create unnecessary economic costs for water companies and others who have to meet the higher standards and unnecessarily take up regulators’ resources.

**Policy options considered, including alternatives to regulation**

**Option 0: Do nothing.** The UK would be operating to a ‘frozen’ list of priority substances and their EQS which may become outdated based on new scientific and technological advancements. The outcome of this could increase the risk these substances pose to the water environment, wildlife, and human health.

**Option 1: Legislate to make a new power to update the list of priority substances and the corresponding EQS for surface and ground waters.** The power will also enable monitoring and timing requirements to be defined. This will continue the existing regulatory framework for assessing the chemical quality status of our waters and ensure there is no regulatory gap now the UK has left the EU.

There is no alternative to regulation. The priority substances list and EQS in the WFD regulations can only be updated via legislative routes to avoid the list being frozen. More broadly, the monitoring of water quality standards needs to be underpinned by legislation to enable the regulators to enforce standards where necessary.

**Option 1 is the preferred option.**

**Expected level of business and wider impacts**

There will be no direct impact to business as a result of this measure.

The measure in the Environment Bill will give the Defra Secretary of State and DA Ministers the power to amend the priority substances list or EQS through secondary legislation. The list is currently updated by the EU.
Impacts to businesses will only occur if the power is exercised and secondary legislation is used to update the priority substances list or EQS. If a new substance is added to the list or an existing substance’s EQS is lowered, it may result in the UK’s environmental regulators imposing stricter discharge consents to businesses utilising that chemical. This could result in elevated costs for the business in ensuring their discharges meet the stricter EQS. This is in line with the ‘polluter pays’ principle. Additional monitoring and analytical costs could also be incurred by the UK’s environmental regulators if new substances are added to the list or an EQS is lowered. During the legislative process, an impact assessment (IA) or Regulatory Triage Assessment (RTA) would be completed in line with the UK and DA government’s regulatory guidelines, specifically focussed on the impact of regulating a certain substance. There is no readily available quantitative data on the benefits of the priority substances regulations. Before the implementation of the Priority Substances Directive (2013/39/EU), surveillance, operational and investigative monitoring costs were estimated at between £20.4 and £35.4 million over one river basin management plan six-year cycle. The benefits of monitoring priority substances and their EQS outweigh the serious consequences of these substances in water for wildlife and human health and the significant costs of removing them.

The primary sector that would be affected is the water industry dealing with domestic sewage as this is the main pathway for priority substances entering the water environment. Other sectors include companies which manufacture and/or use chemicals and are permitted to discharge their wastewaters to the environment. The agricultural sector may also be affected through their use of pesticides and fertilisers.

A chemical included on the priority substances list could be subsequently banned or limited in its use on the basis of the determined risk the chemical poses to the environment and human health. This would have additional impacts on businesses, but would be realised through other legislation including the environmental permitting regulations or REACH. This would require an additional IA/RTA in line with the UK and DA government’s regulatory guidelines to estimate the impact to businesses.

It is not anticipated that updating the priority substances list or EQS would lead to a significant transfer between different business and sectors. Distributional impacts should be assessed in the secondary legislation IA/RTA in line with the UK and DA government’s regulatory guidelines.

It is not expected that there will be disproportionate burdens on small businesses if the power is exercised. The majority of discharges to the environment originate from water companies dealing with the treatment of domestic sewage. If small businesses generate emissions of substances to the environment, they may discharge to mains sewers or wastes are collected by tankers to be treated at wastewater treatment plants. This should be assessed in the secondary legislation IA/RTA in line with the UK and DA government’s regulatory guidelines.
If the power is exercised, it could bring significant environmental benefits. Previous chemicals identified as priority substances include pesticides, heavy metals and industrial substances because of the significant risk they pose to or via the aquatic environment. Other substances such as mercury and flame retarding chemicals have been classified as priority hazardous substances. This is because they demonstrate properties such as persistence in the environment or in an organism, they bioaccumulate in wildlife and humans and are toxic. By adding these chemicals to the priority substances list, it is evident that levels for a number of substances are demonstrating steady declines. This is significantly working towards improved water quality and ultimately sustainable aquatic ecosystems. Clean water also ensures a safe food supply to both aquatic wildlife and humans. Society will also benefit with access to a clean water environment for leisure/recreational activities.

Any wider impacts would be assessed in the secondary legislation Impact Assessment/Regulatory Triage Assessment in line with the UK and DA government’s regulatory guidelines.

Background

The Water Framework Directive 2000/60/EC requires integrated approaches for the protection, improvement and sustainable use of the water environment. The key mechanism for delivering these aims is the river basin management planning process which applies to a “river basin district” (a geographical area defined on the basis of hydrology).


The Solway Tweed RBD straddles the English-Scottish Border covering an area of 17,500km². It incorporates much of the Scottish Borders, Dumfries and Galloway and the Eden and Esk valleys. Around 450,000 people live in the district. As well as supporting a wide range of internationally important habitats and wildlife, the district also supports a range of economic activities, including tourism, agriculture, forestry and manufacturing.

The policy issue and rationale for Government intervention

The current Solway Tweed Regulations require a joint approach to be taken to the management of the district between England and Scotland. For example, it requires the Scottish Environment Protection Agency (SEPA) and the Environment Agency (EA) to jointly establish monitoring programmes, prepare environmental objectives and programmes of measures, and establish a process for UK and Scottish Ministers to approve the objectives and programmes of measures.

Water policy is devolved and Scottish Ministers have devolved responsibility for protection of the water environment, including the setting of environmental standards in Scotland (including the Scottish part of the Solway Tweed RBD). As we have now left the EU the current regulations could be amended to better reflect devolved competencies. The current arrangements also place unnecessary administrative burdens on the Agencies. For example, it would be more efficient to recognise that
the EA monitor water bodies wholly in England and SEPA monitor water bodies wholly in Scotland.

More generally, there are different regulatory regimes and environmental programmes in England and Scotland, especially relating to farming and land management, affecting water quality. These still apply in the Solway Tweed RBD even though planning and reporting must be carried out at the RBD level. Subject to the outcome of a future review of the current arrangements, reporting, target setting and focus of effort could be more efficient and accurate if a single plan was produced for the Scottish part of the Solway Tweed and the English part, respectively. The latter separation would be especially important for Scotland as the majority of the current RBD lies in Scottish territory.

**Policy objectives and intended effects**

Following a future review of the current arrangements, the regulation making power will allow functions to be exercised separately in the RBD in respect of Scotland and England (for example, for SEPA only to monitor the water bodies which are wholly in the Scottish part of the RBD). The power will allow the separation of functions in respect of water bodies wholly in Scotland and water bodies wholly in England. Joint functions will remain for water bodies which straddle the border and are therefore partly in Scotland and partly in England.

**Policy options considered, including alternatives to regulation**

**Option 0: Do nothing approach**

If a do nothing approach was taken, the existing functions would remain. This does not fully reflect devolved competence nor the work carried out by the Agencies on individual water bodies wholly in their territories within the RBD. The unnecessary technical and administrative burdens for the Agencies would remain.

**Option 1: Create a regulation making power to amend the Solway Tweed Regulations**

This regulation making power will enable the Secretary of State to transfer functions within the Solway Tweed Regulations. After a full review between the UK and Scottish Government, secondary legislation will reallocate functions. It is expected that UK Ministers and the EA will be responsible for water bodies wholly in England and Scottish Ministers and SEPA will be responsible for water bodies wholly in Scotland. Joint functions will remain for cross-border water bodies (which straddle the border). This will better reflect devolved competence and bring administrative efficiencies.
Option 1 is the preferred option.

**Expected level of business and wider impacts**

Changes to the management of water bodies in RBDs (under WFD) generally have no impact on business. This power allows for a separation of Ministerial functions and a technical change to the way the Agencies manage the Solway Tweed RBD. Depending on the outcome of a future review of the current arrangements, there may be minor impacts to a small number of businesses. For example, if it was proposed that multiple river basin management plans (RBMPs) should be produced for the current Solway Tweed RBD area, businesses with interests that span across multiple RBMPs would have to engage with multiple consultation processes instead of one.
Annex 37: Statement of impacts – Valuation calculation for internal drainage boards (IDBs)

Background

As public bodies, internal drainage boards (IDBs) have the necessary powers to raise and apply funds and conduct works. IDBs are mainly funded locally through drainage rates paid directly by agricultural landowners and special levies issued to district or unitary authorities. In order to determine the special levy charge, the Land Drainage Act 1991 ("the 1991 Act") refers to rateable values outlined in the “non-domestic rating list of a charging authority on 1st April 1990” and “valuation list on 31st March 1990”. IDBs use this information to calculate the value of all "other land" (mostly urban) in the district as part of their annual calculation to apportion their expenses between drainage rates and special levies.

This statement only covers the IDBs in England. With regard to the IDBs in Wales, the Environment (Wales) Act 2016 already includes an enabling power to allow Welsh Ministers to make regulations and to include a valuation calculation of non-agricultural land (this Act omitted reference to the valuation of agricultural land). The Welsh Government has not started work on preparing its valuation calculation but has been in contact with Natural Resources Wales about how this will be progressed.

The policy issue and rationale for Government intervention

In some areas this crucial data is missing or incomplete and the 1991 Act does not allow for any other valuation lists to be used. Also, land values have changed in the last 30 years and 1990 values do not reflect today’s relative values of land and business premises resulting in an unfair distribution of charges amongst individual agricultural landowners or businesses.

Policy objectives and intended effects

Updating the valuation calculation and using more up to date values will allow new IDBs to be created, and existing IDBs to be expanded, (with local support) enabling wider flood and water management benefits to be realised.
Policy options considered, including alternatives to regulation

Option 0: Do nothing. Leave IDBs using the existing valuation calculation (using ratings data) and accept that in certain parts of England no new IDBs will be created or existing IDBs expanded because there is not the necessary information.

Option 1: Revert back to the pre-1991 Act valuation calculation where every household, business and non-agricultural land holding is charged directly by the IDB or local authorities may collect on behalf of the IDB. This would still require an amendment to the 1991 Act to set out a valuation calculation.

Option 2: Amend the 1991 Act to enable the creation, via Statutory Instrument, of an alternative valuation calculation for the value of land enabling IDBs, subject to local support, to review their current charging schemes and to enable government to create new IDBs and/or expand existing ones.

Option 0 will prevent new costs being placed on local authorities and agricultural landowners as new IDBs or expanding existing IDBs could not be taken forward. This also means they would not receive the benefits, reduced flood risk, from IDB activities.

Options 1 and 2 would place a cost on local authorities and agricultural landowners in an IDB area. This would be a new cost where a new IDB or expanded IDB is proposed or an ongoing cost where there is an existing IDB. Option 1 costs would probably be higher if IDBs have to bill everyone directly. Each area that is covered by an IDB will receive the benefits from IDB activities.

Option 2 is the preferred option.

Expected level of business and wider impacts

Where there is an existing IDB we do not anticipate a change to costs and benefits (positive or negative) received. Where a new IDB is proposed or where an existing IDB proposes to expand its boundary there will be new costs and benefits for the affected local authorities and agricultural landowners.

It is not possible at the moment to calculate how many and where new IDBs will be created. However, we have estimated impact on local authorities and agricultural landowners under various scenarios defined by the aggregate increase in IDB area
as a proportion of current area. These scenarios range from no new IDBs (or extension of existing IDBs), to a maximum 7.5% increase in their area where the cost to businesses is estimated to be around £3.6 million per annum:

<table>
<thead>
<tr>
<th>Extension/Creation of IDBs (as a proportion of existing)</th>
<th>Drainage rates (paid by agricultural landowners)</th>
<th>Special levy (paid by local authorities)</th>
<th>Total costs (pa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0%</td>
<td>£0</td>
<td>£0</td>
<td>£0</td>
</tr>
<tr>
<td>1.0%</td>
<td>£168,400</td>
<td>£315,026</td>
<td>£483,426</td>
</tr>
<tr>
<td>2.5%</td>
<td>£421,000</td>
<td>£787,565</td>
<td>£1,208,565</td>
</tr>
<tr>
<td>5.0%</td>
<td>£842,001</td>
<td>£1,575,130</td>
<td>£2,417,131</td>
</tr>
<tr>
<td>7.5%</td>
<td>£1,263,001</td>
<td>£2,362,695</td>
<td>£3,625,696</td>
</tr>
</tbody>
</table>

Depending on where IDBs might be created or expanded we have assumed the same proportion of rural and urban areas as we currently have now.

Derivation: According to the 2015-16 IDB annual report, IDBs income from special levies was £31.2 million. In the same fiscal year the drainage rate was £16.8 million.

The special levy is passed on to all district and unitary authorities within the Internal Drainage District and it is up to each local authority to determine how it funds this charge. There is currently not a comprehensive return on how each local authority apportions the special levy and therefore we are unable to split this between council tax, businesses rates or other income. It is possible that all or none of the special levy is passed on to business rate payers.

To ensure that these costs are fair and proportionate all local authorities covered by an IDB are members and should send representatives to board meetings, especially when setting levies. This good governance is important locally and provides local accountability to the electorate.

The average benefit-cost ratio for flood and coastal erosion risk management is £8 per every £1 spent. This is from Environment Agency flood risk management activities. If we assume that IDBs activities will perform similarly we should expect that the extension of existing IDBs or the creation of new ones would be cost-beneficial. In any event, the extension or creation of IDBs will only be undertaken in consultation with local beneficiaries which will ensure any new activity is worthwhile.

For existing IDBs, the total annual costs are estimated to be circa £84 million. This is the overall per annum total for the current 112 IDBs in England. This ranges from £25,000 up to £5 million per IDB. Out of the £84 million, £17 million were paid by agricultural landowners and £32 million by the local authorities. The overall impact of
the change in valuation calculation will be null in the aggregate as it won’t affect the type or level of activities IDBs carry out nor how their cost is distributed among agriculture land owners and local authorities (except for the case where new IDBs were created or existing ones expanded.

However, if the apportionment of charges changes as a result of re-calculation local authorities and agricultural landowners might see a difference in their individual costs (upwards or downwards).

In brief,

- We do not anticipate any net aggregate impact but a redistribution amongst current payers.
- The proposal is not a regulatory provision since it doesn’t regulate business activities. It only updates the levies IDBs raise to better reflect the relative changes in the value of land and urban properties in the last 30 years.
- We believe the costs to businesses will be under £5 million RTA threshold even in the worst case scenario.
Annex 38: Impact Assessment – Biodiversity net gain and local nature recovery strategies

Available at:
Annex 39: Statement of impacts – Amendment or replacement of section 40 of the Natural Environment and Rural Communities Act 2006 (NERC): duty on public bodies to have regard to the purpose of conserving biodiversity

Background

Section 40 of the Natural Environment and Rural Communities (NERC) Act (2006) introduced a ‘biodiversity duty’ on public authorities. The current legislation states that ‘a public authority must, in exercising its functions, have regard so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity’.

The provision was originally introduced for England and Wales as a means of implementing the requirement in the Convention on Biological Diversity (CBD) to “integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies”.

However, the provision has been subject to criticism concerning its effectiveness. Most recently, a 2018 report by the House of Lords Select Committee on the NERC Act found that the section 40 duty is ‘ineffective’, ‘weak, unenforceable and lacks clear meaning’. The Committee suggested that the Government should consider changes to the wording of the duty, and introduce an obligation to report.

The policy issue and rationale for Government intervention

The Policy Issue

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166 It was replaced with respect Wales by section 6 of the Environment (Wales) Act 2016.
There are a range of issues with the current duty, many of which were highlighted both in the Lords Committee review and in a Defra-commissioned review of the duty in 2010.168

- **Awareness and understanding**: There is considerable variation in awareness of the duty and in the level of biodiversity action (whether as a result of the duty or independently of it) that has been taken by the public authorities.169
- **Reporting requirements**: It is widely felt that the lack of reporting requirements on actions taken in adherence to the duty have decreased the impact of the duty, as the practical impact of s40 cannot be quantified without this accountability.170
- **Wording of the duty**: The wording of the duty was seen to be rather vague.171
- **Enforceability of the duty**: Local authorities have many duties and often have to give priority to actions relating to duties over which they are most likely to be prosecuted. Hence the biodiversity duty may not be implemented as readily as others, due to the lack of a current enforcement mechanism.172
- **Changing context**: The current perception of the state of biodiversity, in contrast with that in 2006, is such that merely maintaining what now exists is insufficient, and that the current duty’s focus on ‘conserving’ biodiversity is no longer appropriate. The objective should instead be on reversing (however slowly) deficiencies and on improving biodiversity and the robustness of ecosystems. This shift in focus is reflected in the ambition of the *25 Year Environment Plan*, the aims of which these provisions support.

**Rationale for Government Intervention**

Public authorities have a key role to play in the provision and conservation of habitats and biodiversity. As a result of the issues with the existing duty as outlined above, public authorities are not fulfilling their full potential to deliver our 25 Year Environment Plan ambitions to improve biodiversity. By requiring a more active approach to biodiversity conservation and enhancement, improving awareness and understanding, clarifying expectations, and enforcing standards more rigorously through a revised duty, public authorities will be encouraged to take more actions for wildlife. This increased ambition matches that of the Government’s manifesto

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170 House of Lords (2018) NERC Report (chapter 4, para 191)
commitment as mentioned in the 25 Year Environment Plan to improve the environment within a generation, and thus deliver benefits for wildlife and people.

Various initiatives have sought to highlight the need for improved understanding and accounting for biodiversity in decision-making, and clarified the way in which ecosystems contribute to human wellbeing; for example the Millennium Ecosystem Assessment (MA), The Economics of Ecosystems and Biodiversity (TEEB), and the UK National Ecosystem Assessment (UK NEA).

However, where awareness and understanding is low, and expectations unclear, biodiversity can be neglected in decision-making, as emphasised in criticism of the current NERC duty. Furthermore, as biodiversity is a public good and its benefits take many forms and are widespread, its value risks being underestimated. Habitat creation and biodiversity also deliver ecosystem services (e.g. carbon sequestration, water quality, pollinators) that both mitigate negative externalities and deliver positive externalities.

**Policy objectives and intended effects**

In driving forward and delivering the ambitions of the 25 Year Environment Plan (25YEP), we believe that public authorities should play a full role. They can contribute more to the government’s ambitions to increase wildlife-rich habitat and to reverse declines in our native species. Strengthening the wording of the NERC Biodiversity Duty will send the important signal to public authorities that they should take a more active approach to achieving improvements for nature through their functions.

- It will send a strong signal of the important role public authorities can play in improving biodiversity, both to them but also those who work with them.
- It is part of a package of biodiversity measures in the Bill which will provide clarity to authorities about how they can improve biodiversity, making it clearer for them what positive changes they can make and giving them better tools to do so.
- It will bring into scope of the Nature chapter all public bodies and the full breadth of their functions, rather than only local authorities and land use activities (as covered by net gain and Local Nature Recovery Strategies).
- It will demonstrate that our ambition is not weaker than that in devolved administrations, noting that there is insufficient evidence to say whether the perceived stronger wording in the DAs has had any specific impact on the actions of authorities.

Introducing a reporting requirement on local authorities and other designated public authorities with significant landholdings will give additional impact to the duty by encouraging authorities to take action for biodiversity. The accountability and transparency, which has been identified as lacking thus far, created by a reporting requirement should prompt designated authorities to more thoroughly consider how
they can conduct their functions in a way that benefits biodiversity. We anticipate that public authorities would take action to avoid publicly admitting that they have not acted to improve nature, so this reporting requirement would be a tool for enforcement of the duty. As such, this would respond to the criticism around the current duty’s ‘lack of enforceability’,\textsuperscript{173} with the expectation of increasing compliance with the duty.

A reporting requirement will also facilitate insight into the actions being taken by designated authorities for biodiversity, and the publication of reports will enable public authorities to learn from the actions of others. Reports will increase public confidence in the government’s delivery of 25 Year Plan Commitments, and can be used to inform actions undertaken in the future.

A strengthened NERC duty sits within a package of nature provisions in the Environment Bill. The introduction of a mandatory biodiversity net gain system offers a mechanism to local planning authorities by which they can implement a strengthened biodiversity duty. The strengthened duty will also require public authorities to have regard to any relevant Local Nature Recovery Strategy (LNRS). These will contain information about biodiversity priorities in the area and areas of importance for biodiversity, which will assist public bodies in considering how they can maximise opportunities to take action. We want public authorities bound by the updated biodiversity duty to consider how they can exercise their functions to enhance biodiversity and to do so in the context of LNRSs.

**Intended effects**

**Strengthened wording**

Our aim in strengthening the NERC duty is to oblige public authorities to better consider how their existing functions could be delivered to improve biodiversity, and to take a more active approach to undertaking actions that benefit nature.

The aim is not to put public authorities to unnecessary expense, as we will not impose decisions that carry additional cost nor compel public authorities to establish onerous, new programmes of work. The public authority will continue to be able to choose how it will meet the duty through the exercise of its day to day functions, but under the revised duty, this will follow a more rigorous and proactive assessment of the possibilities to further the conservation and enhancement of biodiversity that are available to them. As we steer away from reactive decisions on the exercise of individual functions to a more strategic, proactive consideration of all opportunities, this will allow public authorities to better assess the most effective and appropriate actions they can take for biodiversity.

Clauses specify that public authorities should have regard to any relevant LNRS under the delivery of their general duty. The actions they take under the biodiversity duty will be informed by the priorities and opportunities articulated in the LNRS.

Although the NERC duty can be primarily fulfilled through land management activities, it extends to the full complement of a public authority’s functions. The GOV.UK guidance on the current duty\(^\text{174}\) refers to integrating biodiversity into procurement decisions and economic, environmental and social programmes – actions that fall outside the scope of LNRSs. Additionally, the biodiversity duty covers all public authorities, whereas LNRSs and net gain are narrower in their focus, applying only to planning policy.

*Changing behaviour by strengthening the general biodiversity duty*

We are strengthening the biodiversity duty with the aim to oblige public authorities to more actively consider how they can improve biodiversity across the whole portfolio of their functions, and to take action where possible and where consistent with those functions. As such, we are not imposing specific actions that public authorities should take with to comply with the duty – this will be at their discretion.

However, examples of behaviour that public authorities could take to satisfy the revised biodiversity duty and that we would like to encourage, include:

- Bringing protected and local sites into positive management for wildlife.
- Creating habitat for pollinators and/or other threatened or declining species.
  - Changing the frequency of grass-cutting in parks and on road verges to allow for species to thrive.
  - Planting and managing trees in a way that maximises benefits for biodiversity.
  - Stimulating local community nature conservation projects e.g. pond creation, wildflower meadow creation, woodland management.
  - Improving the management for biodiversity of council landholdings (cemeteries, village greens, commons, woodland, heathland). [Local authorities].
  - Establishing greening projects within landholdings, such as the planting of native trees and shrubs.
  - Incorporating barn owl or bat ‘lofts’, erecting bird boxes, using bat or swift ‘bricks’.
  - Joining local biodiversity partnerships and undertaking partnership projects with nature conservation organisations.
  - Creating green infrastructure where possible (e.g. green roofs on buildings, tree planting).
- Adopting Biodiversity Action Plans or biodiversity components within wider Natural Capital or natural environment plans.

• Considering biodiversity in procurement and contract work.
  o When tendering contracts, requiring that impacts on biodiversity are set out for each option, and then factoring this biodiversity assessment into the final decision.

• Developing comprehensive data and monitoring on biodiversity and management.
  o Working with local environmental records centres to centralise and make available information on biodiversity.
  o Maintaining networks of local groups, partners and specialists to encourage data-sharing.

• Embedding biodiversity within the culture of the authority and in its wider objectives.
  o Incorporating training on conservation management and biodiversity into internal training programmes.
  o Ensuring that biodiversity objectives are incorporated into the authority’s strategic, long-term planning.

• Engaging the public with biodiversity work and performance.
  o Featuring biodiversity in community projects and in outreach initiatives to schools and other community groups.

**Implementing a reporting requirement**

We are seeking a power for the Secretary of State to designate public authorities to which the reporting requirement will apply (in addition to local authorities and local planning authorities which are designated on the face of the Bill), and power for the Secretary of State to prescribe the form of reports by regulations. We will require reporting from all local authorities and local planning authorities, and those other public authorities which have the most potential to improve biodiversity through the exercise of their functions, because of both the nature and scale of their functions. Our expectation is that this would cover:

a) Major infrastructure bodies and utilities with a significant impact on the environment (e.g. Network Rail, Highways England, Water Companies);

b) Major landowning authorities which manage large areas of land (e.g. Royal Park, Crown Estate Commissioners);

c) Government departments and bodies with large estates (e.g. Ministry of Defence, Ministry of Justice, Department for Transport, NHS England, HMRC).

We are proposing that reports should contain a qualitative summary of the actions taken in order to comply with the duty over the reporting period, and their plans for the subsequent reporting period. We will require such designated bodies to report at least once every five years.

The reporting duty will be part of a coherent package across the nature improvement provisions in the Bill. This will capture not only actions taken under the NERC duty,
but a summary of actions taken under net gain and other biodiversity information as required by the Secretary of State. The Biodiversity Reports could be a valuable source of evidence for updating LNRSs over time, as public authorities are required to have regard to LNRSs when planning actions they should take to comply with the biodiversity duty. Reporting will also complement 25 YEP monitoring and reporting, enabling us to improve information on protected sites, priority habitats and priority species.

Policy options considered, including alternatives to regulation

Option 1 - Do nothing (baseline): This option would retain the status quo and maintain the current duty on public authorities to ‘have regard to’ conserving biodiversity under section 40 of the NERC Act (2006). There would be no requirement to report on delivery of the duty.

Option 2 (preferred option) - Introduce an enhanced duty: This option looks to replace the existing duty in section 40 of the NERC Act 2006, with an enhanced duty on public authorities in England. The enhanced duty will include strengthened wording and impose a reporting requirement on some public authorities. This option will apply to the same geographical extent as option 1 (i.e. England), and use the same definition of public authority.

Expected level of business and wider impacts

The preferred option outlined will not have any direct impact on business. The principal impact of the policy will be on public authorities.

For the purposes of considering the impact of the proposal, this section is split into two components. 1) The impact of strengthening the wording of the duty, and 2) The impact of imposing a reporting requirement on a subset of public authorities.

Before considering the additional impact of the preferred option, it is important to consider the baseline.

The Status Quo

Under the status quo, public authorities would continue to be under a duty to ‘have regard to’ conserving biodiversity under section 40 of the NERC Act (2006), but with no requirement to report on delivery of the duty.

Consideration of similar duties in the devolved administrations highlights some differences:

175 The intention is to initially require reporting from local authorities, major infrastructure bodies, major landowning authorities, and Government Departments with large estates
- **Scotland** - Under the Nature Conservation (Scotland) Act 2004 public bodies in Scotland have a duty to further the conservation of biodiversity. Furthermore, the Natural Environment (Scotland) Act 2011 seeks out the requirement on public bodies to report every 3 years on how they are compliant with the biodiversity duty.

- **Wales** – The Environment (Wales) Act 2016 introduced an enhanced duty for public authorities in the exercise of functions in relation to Wales. The wording was amended to read ‘public authorities must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in doing so promote the resilience of ecosystems’. Compliance with the duty requires most public authorities to prepare and publish a plan setting out what they propose to do in adherence with the duty.

- **Northern Ireland** – Section 1.1 of the Wildlife and Natural Environment (Northern Ireland) Act 2011 lays out that ‘it is the duty of every public body, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions’. Guidance sets out that this is a step beyond prior legislative requirements in requiring all public bodies to protect and maintain biodiversity on their land and to seek opportunities to enhance and restore it.

Where relevant, evidence of the impact of strengthened wording and/or reporting requirements in the devolved administrations, is drawn upon in the discussion below.

However, it is important to acknowledge from the outset the difficulties in assessing costs. There is no baseline from which we can project additional costs, as we have no assessment of the cost of the actions being taken by public authorities under the current duty. It is also very difficult to assess the costs directly attributable to actions under the duty as opposed to those arising from the ordinary functions of a public body. Likewise, costs for the specific actions that might be taken under a strengthened duty are not readily available, and will vary according to the type and scale of action. There is such a wide range of authorities under scope, with the possibility to undertake such a wide range of actions, that it is impossible to quantify exact costs. Costs will also depend on the priorities of the individual public authority. We expect that any costs will be manageable, and based on the decisions that the individual public authority chooses to undertake. Examples of actions can be found in Section 3.

1. **The impacts of strengthening the wording of the duty**

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178 Section 6 – Biodiversity and resilience of ecosystems duty. Accessed via: [https://www.biodiversitywales.org.uk/Section-6](https://www.biodiversitywales.org.uk/Section-6)
As outlined in Section 3, the intention of the measure is not to oblige public authorities to incur additional costs (although this would not be discouraged where a public authority considers it justified) but to oblige them to more actively seek to improve biodiversity through the exercise of their functions.

Under the strengthened duty, public authorities will have to consider from time to time how they can deliver the biodiversity objective set out in the duty. This extends the existing duty from a case-by-case consideration of biodiversity to a strategic assessment of available opportunities to benefit nature, followed by implementation of suitable actions.

We acknowledge that actions to conserve or enhance biodiversity can have associated costs. However, as public authorities evaluate the suitability of a wide range of measures of varying cost, they will be able to balance burdens and benefits as they see fit. Moreover, the options available may allow for the offsetting of costs, for example through reduced land management activity or use of pesticides to allow nature to flourish.

Additionally, it is expected that an amended duty will reveal ways in which the exercise of a public authority’s functions could be changed to benefit biodiversity in a cost-neutral manner, such as through the rescheduling of existing land management activities or the introduction of biodiversity components to procurement processes. Public authorities, with or without this duty, are always free to choose to take action at an additional cost, and we do not wish to discourage them from undertaking supplementary projects or estate management activities specifically designed to benefit biodiversity. However, requiring public authorities to make a periodic, strategic assessment across all their functions as a result of this duty could highlight more opportunities for them to build improvements into, or deliver them alongside, existing functions at an earlier stage. This should enable them to improve biodiversity for a small cost or even a cost saving.

Indeed, actions that conserve or enhance biodiversity do not have to be costly, and there is a wide range of examples of action being taken by public authorities for biodiversity at minimal expense. For example, HMRC has introduced nesting boxes for small birds, bat roosting boxes, hedgehog houses and biodiversity awareness signage at three of their north-east sites, at nil cost to HMRC.\(^\text{180}\) The MoD utilises conservation groups, largely comprised of volunteers, to identify projects that can be undertaken to manage or improve the habitats found on a site.\(^\text{181}\) Suffolk County Council has established a Roadside Nature Reserves projects, supported by volunteers, to conserve species-rich plant areas and plants of national or country

importance on verges.\textsuperscript{182} Northumbrian Water has set out in its biodiversity strategy\textsuperscript{183} its commitment to using business networks to promote biodiversity and addressing indirect environmental impacts deriving from purchasing policy, transport, water use, and energy consumption. All these actions represent cost-neutral activities that can be undertaken as part of the biodiversity duty.

As we would encourage public authorities to adopt a partnership approach and to work closely with local conservation groups, this further reduces any financial burden that public authorities might experience. Additionally, public authorities could also seek grants or awards, such as from the Heritage Lottery, to support more costly projects that they may wish to undertake.

For those authorities which are currently doing little or nothing to enhance biodiversity there will be some proactive planning required. They should strategically consider the biodiversity impact of their existing policies and how they can improve them within the constraints of funding and other priorities. The modest administration costs that this will entail may be offset by the adoption of good practice that actually saves money such as less intensive land management.

Crucially, the revised duty will not impose decisions that carry additional costs, and the public authority will be free to choose those actions they are able to carry out under the strengthened duty once they have given consideration to available opportunities, as consistent with their functions. For LPAs, who can satisfy the duty through delivering biodiversity net gain, additional costs have been accounted for in the separate IA. In terms of considering biodiversity in functions such as procurement, we would expect the furtherance of biodiversity to be one factor used in decisions, and not to the detriment of the efficient use of public money.

As such, overall, we consider that any burden on public bodies as a result of strengthening the wording of the duty will be minimal, and dependent upon the level of ambition and the priorities of the individual public authority. The revised duty itself will not require them to incur burdensome costs. This position is consistent with that set out by the Devolved Administrations (all of which have duties that appear more demanding than the current s.40 NERC), who all estimated that their duties to ‘further biodiversity conservation’ were cost neutral. In the Welsh Government’s impact assessment, it was stated that “it is not anticipated that the enhanced duty will result in net financial costs.” Further to this, it is noted that “Both Scotland and Northern Ireland have introduced a similar duty in legislation and have estimated that their duty to ‘further biodiversity conservation’ was cost neutral.”\textsuperscript{184}

2. The impacts of imposing a reporting requirement on a subset of public authorities

\textsuperscript{183} https://www.nwl.co.uk/_assets/documents/Biodiversity_strategy.pdf
\textsuperscript{184} http://www.assembly.wales/laid%20documents/cr-id10386/cr-id10386-e.pdf (para 249)
As described in Section 3, the intention is to require those public authorities deemed in scope (due to the size of their landholdings and capacity to benefit biodiversity) to report at least every five years on how they have exercised their functions so as to enhance or improve biodiversity. Currently, there is no mandatory reporting on actions taken by public bodies to fulfil their biodiversity duty.

We will seek a streamlined approach which minimises the reporting burdens on public authorities whilst making sure they are providing the information necessary to make these policies effective and to ensure that there is transparency around the impact of public authorities on nature.

The main evidence on the impact of imposing a reporting requirement is drawn from the experience of the Scottish government, with public bodies in Scotland required to publish a biodiversity duty report every three years which details the actions they have taken for nature. A report on the Scottish biodiversity duty in 2015 found that public bodies were largely noncompliant with the requirement. 44% produced a biodiversity report, 35% did not, and while the remainder may have produced a report, but did not respond to the survey nor make the report available online. It was assessed that public bodies did not report due to a lack of awareness of the duty, belief that the duty was not relevant to them, and fatigue to reporting.

In 2018, the Scottish Government commissioned another report on the biodiversity duty which gathered that the reporting requirement was not seen to have additional impact. The report noted that public bodies already furthering biodiversity would do so with or without a reporting duty. The report also found a correlation between compliance with the reporting requirement and the overall biodiversity duty, as local authorities were likely to ignore both. The report recommended better guidance about appropriate actions and expectations, and more training and support with more tailored guidance.

These findings have been taken into account in the design of the proposed reporting requirements in England. It is considered that the reporting requirement in Scotland is a substantially higher burden than we are proposing to introduce in England. They seek a long-form, written report with numerous different sections, and provide a list of prompts to which they expect responses, e.g. ‘Describe and illustrate your organisation’s involvement in partnership working on biodiversity’. For designated authorities in England, we will only require very light-touch reporting, which should increase the response rate by reducing the time required to produce the report.

Reports will also be based on information that public authorities are likely to already hold, such as records of their land management activities, procurement documents and materials for training or community projects. As such, the routine maintenance of

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185 Report on compliance with Scotland’s biodiversity duty (2016)
https://www.gov.scot/Publications/2016/10/9295/downloads
186 Scottish parliament review of biodiversity duty (2018)
http://www.parliament.scot/S5_Public_Audit/Reports/PAPLSS052018R2_(2).pdf
accurate records should prevent this reporting duty from being onerous, as public authorities should be able to use information that they have already collected in the process of delivering their biodiversity duty, with the reporting requirement complementing the overarching duty. While net gain is a new requirement, the mechanisms set out above should support reporting and, as we heard was crucial at consultation, local authorities will be properly funded and resourced to deliver this.

In the case of local authorities, although all local authorities (excluding parish councils) will be required to report, we anticipate they will largely choose to report at the upper-tier level. This will both reduce burdens and keep the reporting requirement consistent with provisions under net gain and LNRSs. It might also be more practical for government departments to produce a single overarching report to cover related functions. For example, the Department for Transport might choose to report also on biodiversity projects for HS2 Ltd and the Highways Agency, if they so desired.

We conservatively estimate that up to 500 public bodies and 152 upper-tier local authorities will report on actions taken in adherence to the duty. Our estimate of all public bodies is drawn from GOV.UK data on ministerial and non-ministerial departments, agencies and public bodies, as well as public corporations. This is combined with known statutory undertakers (e.g. the 9 water companies operating in the UK). This estimate has been rounded up to give a buffer in cases of omission. Anticipating that local authorities will choose to report at the upper-tier is consistent with provisions on mandatory biodiversity net gain which call for additional ecology resource at this level.

Whilst we have estimated the total number of public bodies and local authorities in England, those public authorities required to report (other than local authorities) will only be those designated by the Secretary of State through secondary legislation. In assessing which public authorities should report on their actions to fulfil the biodiversity duty, we expect some to be exempted, for example on the basis that their landholdings are not significant or their functions have little relevance to biodiversity. Please see the Implementing a Reporting Requirement section above for an indication of the sorts of public authorities with significant landholdings which we expect to be covered by the Duty.

The time taken to complete the necessary reporting will vary by organisation. We would expect larger organisations, those with greater land ownership, and those whose responsibilities are most directly linked to biodiversity, to spend more time on reporting. At a local authority level, the total number of sites under management varies significantly, and we would expect local authorities with a greater number of sites to spend more time on reporting.

187 https://www.gov.uk/government/organisations
We estimate that a total of between 20 to 40 days of an individual’s time will be required for the production of the report, spread out over the course of the 5-year reporting period. This equates to additional resource of between 4 to 8 days per year, on average. We anticipate that this a sufficient time-frame to collate the reports, given that the reports will be based on information on actions for biodiversity that should be reasonably easy to access.

We assume that all work is undertaken by a Government Ecologist at an annual wage rate of £37,096, with a standard assumption of 30% uplift applied as an approximation of overhead costs. This gives a day rate of approximately £185 for a full-time Government Ecologist.

Although any officer will be capable of collating information into a report, we have used the annual wage rate of a Government Ecologist here. This is firstly in order to be conservative, and secondly to ensure consistency with the net gain IA which provides for additional ecologists to support Environment Bill provisions.

Our best estimate, set out in Table 1, is an annual reporting cost of around £725k, this equates to an average annual cost per public authority of around £1,100. The present value of net cost to all public authorities (the maximum that could be designated) over the 10-year appraisal period is £4.16m. In comparison, the biodiversity net gain IA suggests a cost of £6.4m per year to local authorities, which equates to around £42k per upper-tier authority.

<table>
<thead>
<tr>
<th>Table 1: Summary of Reporting Costs</th>
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</thead>
<tbody>
<tr>
<td><strong>Low</strong></td>
</tr>
<tr>
<td><strong>Annual Reporting Cost</strong></td>
</tr>
<tr>
<td><strong>Average annual cost per public authority</strong></td>
</tr>
<tr>
<td><strong>Present value of net cost (10yrs)</strong></td>
</tr>
</tbody>
</table>

In calculating our low, high and best costs, we have used the same day rate of £185. At the low end, we have estimated 4 days per year spent on collating the report, and at the high end, 8 days per year. Our best estimate is based on 6 days per year, a median that accounts for the fact that different public authorities will spend varying amounts of time producing their report, based on the kind of information they are working with and the scale of their activities.

However, in setting out the costs of this measure, we need to avoid double counting resource that has already been captured in the analysis for other Environment Bill measures. The net gain impact assessment and new burdens assessment set out that in any given year, 197.6 FTE would be required across 152 upper-tier authorities to implement mandatory biodiversity net gain and Local Nature Recovery Strategies.

188 CIEEM salary and employment survey 2017-18
Given this upskilling across local authorities to deliver these provisions, a requirement to produce reports will not require further resource on top of this. For local authorities, reports will mainly capture their contributions to net gain and LNRSs, which this additional capacity already captures. Any supplementary information, such as on land management activities or procurement processes, will be minimal and therefore can be easily subsumed by the existing new burdens assessment. In essence, local authorities will pull together information that already exists and draw on planning taking place under LNRSs.

Table 2 therefore sets out reporting costs, excluding costs to Local Authorities, described as additional reporting costs (in so far as they are additional to the net gain impact assessment and new burdens assessment). Again, our estimates for low, best and high are based off of 4, 6, and 8 days of work respectively.

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Best</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Reporting Cost</strong> (additional)</td>
<td>£ 371,000</td>
<td>£ 556,400</td>
<td>£ 741,900</td>
</tr>
<tr>
<td><strong>Present value of net cost (10yrs)</strong> (additional)</td>
<td>£ 3,193,100</td>
<td>£ 4,789,700</td>
<td>£ 6,386,200</td>
</tr>
</tbody>
</table>

**Distributional, small business, and wider impacts**

In many cases, improvements to the state of nature may also deliver wider benefits, including to ecosystem services and to people’s wellbeing. The improvement to mental health and feelings of wellbeing that can be derived from spending time in the natural environment are a key area of focus within the 25 Year Environment Plan. The behaviours of public authorities that we hope to encourage through amending the duty may make these benefits of the natural environment more accessible.

Sources:
- HoL NERC report 2018  
- HoL Govt response  
- 2010 Entec review of the biodiversity duty  
- Welsh Environment Bill Stage 1 Committee Report  
• Welsh Environment Bill Explanatory Memorandum Incorporating the Regulatory Impact Assessment and Explanatory Notes

• Report on compliance with Scotland’s biodiversity duty –
  https://www.gov.scot/Publications/2016/10/9295/downloads

• Scottish parliament review of biodiversity duty -
  http://www.parliament.scot/S5_Public_Audit/Reports/PAPLSS052018R2_(2).pdf
Annex 40: Statement of impacts – Conservation Covenants

Background

A conservation covenant is a private, voluntary agreement between a landowner and a “responsible” body, such as a conservation charity, government body, local authority or for-profit body. It aims to deliver lasting conservation benefit for the public good. A covenant sets out obligations in respect of the land which are legally binding on the landowner and will generally be on subsequent owners of the land.

The absence of this legal tool has resulted in people using costly and complex workarounds to conserve our wildlife, habitats or heritage assets.

The Law Commission examined the need for conservation covenants in 2013 and published its report in 2014.\(^{189}\) It concluded that legislation should be introduced. As part of their work, the Law Commission undertook an impact assessment (IA) of their proposals.\(^{190}\) Their IA sets out the rationale for the introduction of conservation covenants and some of the potential impacts and has been considered when undertaking this assessment.

The Government’s 25 Year Environment Plan\(^ {191}\) contains a commitment to review the demand and potential for conservation covenants, and to take forward the Law Commission’s recommendations in relation to England.

The policy issue and rationale for Government intervention

Rationale for intervention

In order to help leave the environment in a better condition for the next generation, we need to restore and enhance the natural environment. For example by creating areas of wetland, woodland, grassland and coastal habitat, we can provide some of the greatest opportunities for wildlife to flourish. This in turn will improve the natural environment and promote the wider economic and social benefits that healthy

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\(^{190}\) Conservation Covenants Impact Assessment, completed by the Law Commission (2014). Available here

habitats offer\textsuperscript{192}. We also need to protect and restore our heritage assets, which are an important source of economic prosperity and growth. Heritage assets have an important social value which manifests itself in a sense of identity, memories, belonging and place.\textsuperscript{193}

Private conservation efforts can play an important role in the delivery of our conservation objectives. However the provision and conservation of habitats, biodiversity and our heritage suffer from a number of market failures. These include:

- Provision of public goods: people cannot usually be prevented from enjoying biodiversity (non-excludability), and a person’s enjoyment of biodiversity does not deplete its availability to others (non-rivalry). Therefore the price mechanism does not function well for the provision of such goods because consumers do not have an incentive to pay, and therefore producers do not have an incentive to supply. Some heritage assets can also be public goods, for example, public monuments or the exterior of historic sites.

- Externalities:
  - Land use change or land management, for example through agricultural intensification, imposes a range of negative environmental externalities (e.g. habitat loss, pollution). However, these impacts are not fully internalised in decisions, leading to biodiversity loss or degradation and other environmental damage. This is demonstrated by historical trends in the state of nature.
  - Heritage assets can generate positive externalities. Individuals value the existence of heritage by direct consumption which may be a source of local or national identity, engendering a sense of pride, and understanding of an area, as well as wellbeing, emotional, spiritual and aesthetic benefits. They may value heritage even without using it themselves (non-use value). In both cases the owner of the asset cannot be remunerated for this benefit and the market is likely to under supply.

In the absence of government intervention, these characteristics lead to a lower level of conservation effort overall than is economically optimal. There is therefore a clear rationale for government to take action to facilitate private conservation efforts.

Conservation covenants offer one means of doing so. The lack of an appropriate mechanism to enable private, voluntary agreements between a landowner and a “responsible” body in the current legal framework limits the ability of landowners to conserve heritage and environmental assets for the long term.

\textsuperscript{192} http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx
The limitations of the current law

It is currently very difficult for landowners to agree conservation obligations that will bind future owners of the land. The Law Commission’s IA describes several ways of attempting to do so, including freehold covenants and statutory powers. However, all of these options suffer from serious drawbacks.

- A freehold covenant can be agreed over the land, but there has to be neighbouring land which benefits from it. Further, landowners cannot use these covenants to impose positive obligations (e.g. a requirement to take on certain conservation measures), nor can they bind land for the public good. These are major shortcomings which pose a particular problem in a conservation context, where positive action is often required to benefit society.

- Statutory powers exist that allow certain organisations, such as the National Trust, to make covenants with landowners without the need to benefit other land. These powers are also limited in the fact that, generally they can only impose restrictive obligations (e.g. a requirement not to undertake certain harmful actions). Further to this, covenants made under these statutes can only be held and enforced by a very limited number of bodies.

The consequences of the current law

A major consequence of the current law is missed opportunities to conserve heritage and environmental assets. Opportunities to expand voluntary conservation efforts by private landowners and the conservation sector are, therefore, being lost and ultimately environmental and economy-wide benefits that flow from private conservation efforts are foregone.

The limitations in current legal mechanisms may also be inhibiting wider conservation aims; for example, the ability of developers to fully mitigate or compensate the impact associated with developments. They could also be hampering innovation in the context of payment for ecosystem services.

Some landowners and conservation organisations use unwieldy “workarounds” in an attempt to realise conservation objectives. These arrangements are very often complex, uncertain and expensive, and therefore inefficient from an economic and conservation perspective.

Intended effects and potential uses

The policy intent is to create a simple and versatile legal tool which is capable of:

- Unlocking currently missed conservation opportunities, by overcoming the legal difficulties faced when creating binding obligations;
- Facilitating better ways of delivering existing conservation initiatives;

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194 E.g. an obligation to restore and maintain a historic stone bridge
Providing assurance to investors and others that the conservation benefits will be long-lasting.

A conservation covenant may be created to conserve (which includes to protect, to restore and to enhance) (1) the natural environment of the land or natural resources of the land; (2) land that is a place of archaeological, architectural, artistic, cultural or historic interest; or the setting of land in relation to (1) or (2).

There are a significant number of potential uses for conservation covenants, namely:

- as an alternative to acquisition of land by public or voluntary sector bodies;
- as a safeguard where the voluntary sector or public bodies sell land;
- as a guarantee for individuals who sell or bequeath their land;
- as an alternative way for individuals to donate to a conservation cause;
- to facilitate payment to a landowner for conservation action;
- to secure a biodiversity net gain under the planning system; and
- to create connectivity between habitats to improve biodiversity

The use of conservation covenants in other jurisdictions

The Law Commission collated the following information on the number of conservation covenants in existence in Scotland, the USA and New Zealand (as of 2014):

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Approximate no. of covenants in existence</th>
<th>Approximate area of land covered (in acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>581</td>
<td>Unknown</td>
</tr>
<tr>
<td>The USA</td>
<td>95,448</td>
<td>18,072,520</td>
</tr>
<tr>
<td>New Zealand</td>
<td>3,700</td>
<td>617,000</td>
</tr>
</tbody>
</table>

The statutory regimes for conservation vary considerably across different jurisdictions, so we cannot make direct comparisons. However these figures do illustrate that conservation covenants are widely used by landowners in other jurisdictions as a private and voluntary mechanism for the conservation of land.

Policy objectives and intended effects

- To create a simple and versatile legal tool (a conservation covenant) which is capable of: (a) unlocking currently missed conservation opportunities by overcoming the legal difficulties faced when creating binding obligations; (b) facilitating better ways to deliver existing conservation objectives; and (c) providing assurance to investors and others that conservation benefits will be long-lasting.

195 In addition to those listed below, we also aware of the use of conservation covenants in the following countries: Australia, Canada, Costa Rica, Ecuador, and Mexico
To create a simple, certain, and cost effective framework for conservation covenants; and

To ensure that any decisions taken about the modification or discharge of conservation covenants balance flexible land use against the conservation of land as an environmental, and/or heritage asset.

Policy options considered, including alternatives to regulation

Option 0: Do nothing (base case). Under this option the legal landscape would remain unchanged; the legal framework enabling implementation of conservation covenants would not be introduced.

Option 1 (preferred option): Legislate to enable the use of conservation covenants in England. The reform creates a new tool to fill a gap in the law.

Expected level of business and wider impacts

Overview

This measure does not introduce any direct costs to business. The use of conservation covenants will be voluntary. This measure simply gives landowners and responsible bodies a tool to use to secure the conservation of land. Those who choose to voluntarily enter into a conservation covenant will only do so if they perceive there to be a net benefit from doing so.

It is difficult to quantify the net benefits to parties to conservation covenants from this measure as:

- There is significant uncertainty around the number of landowners and responsible bodies that will choose to use this voluntary measure.
- Each conservation covenant will be tailored to the circumstances and the preferences of the parties entering into the agreement; therefore the specific costs and benefits will vary.

Given these challenges - and since this measure does not impose any direct costs to businesses - it is not proportional to try and monetise the net benefits to participants for this assessment of impacts. However, the voluntary nature of the measure does mean that any costs are only likely to be voluntarily incurred by the parties to covenants if they are outweighed by the benefits that they anticipate.

The measure is also expected to have a wider benefit to society through:

- increased use of land for conservation purposes (as the measure provides a tool to secure the use of land for conservation purposes) and;
• improved conservation outcomes.

These benefits cannot be quantified for this impact assessment, given the uncertainty around the number and nature of conservation covenants that will be entered into, as well as the inherent challenge of quantifying the benefits to society arising from conservation. However more detail about these expected benefits is set out below.

Potential numbers of covenants

There are no central records of the number of conservation opportunities currently being lost because of the absence of conservation covenants; nor is there a figure that can be placed on the number of workarounds being used in an attempt to realise a conservation objective. Therefore there is a great deal of uncertainty around the likely take up of the voluntary conservation covenants. However, stakeholders have made clear that they believe there is an appetite for them.

Based on evidence from other countries, and from respondents to the Law Commission consultation, the Law Commission estimated that each responsible body would enter into 25 covenants per year\(^{196}\) and also that as a result of the legislation 21 conservation projects would be completed each year which would not have happened without it.

It is noted that these estimates carry a very significant degree of uncertainty for a number of reasons. That includes the fact that the Law Commission analysis was undertaken in 2014, and does not account for policies in the Environment Bill which are expected to increase opportunities and incentives to enter into a conservation covenant (e.g. Biodiversity Net Gain and Local Nature Recovery Strategies).

Costs to business

There are no direct costs imposed as a result of this measure as conservation covenants are voluntary. Landowners and responsible bodies do not have to take any action or make any changes as a result of this legislation. They simply will have the additional option of using a conservation covenant as a mechanism to secure the conservation of land.

Since this measure is voluntary, it can be assumed that a landowner or responsible body will only choose to enter into a conservation covenant if they feel there is a net benefit from doing so, i.e. that any costs are outweighed by the benefits.

Potential costs for business choosing to enter into a conservation covenant

For those landowners and organisations that do choose to take up this voluntary option, there are likely to be some costs incurred. The Law Commission estimated that the following types of costs could occur:

- Transactional costs of creating a conservation covenant - the cost of creating a conservation covenant will vary with the complexity of the circumstances and obligations. The likely areas of expenditure are legal fees (in terms of legal advice and the drafting of the conservation covenant), administration fees (on the part of the responsible body) and registration fees.
- Monitoring costs - responsible bodies will have a role of overseeing delivery of covenants.
- Enforcement costs – e.g. legal fees, administrative fees, and court fees – if a party to the covenant uses those means to enforce obligations under the covenant. The experience of other jurisdictions is that enforcement activity is rare.
- Costs to modify or discharge a conservation covenant, if required.

However, these costs do not occur simply as a result of this legislation being introduced. They will only occur if a landowner or responsible body subsequently chooses to enter into a conservation covenant. Since conservation covenants will be entirely voluntary, it can be assumed that parties will only choose to incur these types of costs if they decide that the potential benefits exceed the potential costs.

**Wider public costs**

There will be some transitional costs to Government in implementing the legislation. However these are considered to be negligible and central government would be able to absorb the administrative costs into existing workloads.

In areas where local authorities hold the local land charges register, the measure will introduce some additional work for local government to register any conservation covenants in their areas as local land charges, maintain the relevant elements of their register and respond to search requests. However any additional cost should be minimal and can be recovered via the fees charged to register a conservation covenant. HM Land Registry is incrementally taking over responsibility for these registers.

**Benefits to those entering into conservation covenants**

Conservation covenants will be voluntary. Therefore we can assume that they will only be created where participants feel that there is a net benefit associated with doing so.

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This measure gives landowners and responsible bodies an optional new tool that they can choose to use to secure the conservation of land. At present, this option is not available, and those who do wish to secure conservation benefits for the long term may either find it too difficult to do so, or will have to use unwieldy “workarounds” in an attempt to secure conservation objectives. Such arrangements are very often complex, uncertain and expensive. Therefore the introduction of conservation covenants should bring benefits to the individuals involved, by giving them a simpler legal tool to use. For example, the Law Commission suggested that there could be around £1.35 million of benefits arising from the savings generated by the avoidance of costly workarounds for landowners and the conservation sector for two example scenarios that they considered in their impact assessment198.

However, the precise extent of benefits occurring will depend on the number and nature of conservation covenants that are voluntarily used. They will not occur automatically as a result of this legislation, they are indirect benefits that will be realised if landowners and organisations choose to make use of this new legal tool. Given this uncertainty, and since this is a low cost measure which imposes no direct costs to businesses, it is not possible to try to quantify these potential benefits to participants for this assessment of impacts.

Wider benefits to society

By introducing a mechanism to help facilitate conservation agreements between landowners and relevant bodies, this measure is expected to bring benefits to society. This is because the legislation is expected to lead to realisation of conservation opportunities that may otherwise have been missed. The Law Commission IA sets out two types of social benefits that are expected to occur.

- The first is the release of land that could be used for development by providing the assurance that compensatory land will be managed for conservation purposes. The Law Commission’s IA estimated that one additional development per year as a result of a conservation covenant facilitating compensation for biodiversity loss would bring annual benefits of around £5.41 million199. This estimate is based on a set of assumptions set out in their IA.
- The second benefit from the realisation of missed conservation opportunities is improved biodiversity and environmental outcomes which can arise from conservation covenants. Key benefits include:

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199 A number of assumptions underpin this estimate which are consistent with those set out in Defra’s Biodiversity Offsetting Impact Assessment. Specifically, the average number of houses in a major development is assumed to be 46, the average house price is taken as £235k, and land purchase price is assumed to be 50% of development value. A range of potential benefits from unblocking developments is estimated to be between £0 - £10.81m, depending on whether there 0, 1, or 2 additional developments unblocked.
the retention and protection of habitats and their associated species as well as increased connectivity between nature conservation sites;

- increased income for landowners, in the form of payments for ecosystem services;

- the health and wellbeing that results from enjoying and exploring nature;

- a source of natural resources and environmental services to society, such as the regulation of climate and improved water quality;

- increased recreational opportunities;

- possible employment opportunities resulting from national and local tourism and from increased recreational opportunities;

- the conservation and enhancement of heritage assets.

It is not possible to quantify these benefits for this assessment, given the uncertainty around the number and precise nature of conservation covenants taken up, as well as the inherent challenges with quantifying these types of conservation benefits. However, these qualitative benefits have been set out above to give a sense of the types of benefits that we would expect to arise as a result of the introduction of this new legal mechanism.

**Distributional and small business impacts**

The proposed measure is voluntary and enabling. This means any small business which voluntarily enters into a conservation covenant will likely do so because they consider the benefits from their perspective outweigh the costs. As a result, we do not anticipate that this measure will lead to negative impacts for small businesses.

There is significant uncertainty around the number and nature of conservation covenants that will be entered into following the introduction of this legislation. However, since these agreements will be entered into voluntarily we do not anticipate any adverse distributional impacts.
Annex 41: Statement of impacts – Local Authority Duty to Consult on felling street trees

Background

The Government has a 2017 manifesto commitment to “place new duties on councils to consult when they wish to cut down street trees”200.

Information from this assessment will be used to produce a new burdens assessment which draws out the specific implications for local authorities (MHCLG, 2011)². This is in line with the requirements of The New Burdens Doctrine²⁰¹ which requires all Whitehall departments to justify why new duties should be placed on local authorities, as well as how much these policies and initiatives will cost and where the money will come from to pay for them.

Local Authorities (LAs) often consult with local communities prior to felling trees, but there is currently no legal duty requiring them to do so or any guidance on how to consult. Those that currently consult typically do so in order to inform the public of reasons behind felling that may be perceived as contentious (such as removal of healthy of prominent mature trees). There are currently no Government standards or guidelines for Local Authority street tree management, and so the decision to consult, as well as felling policy, is individual to each council. Different LAs typically have different governance structures and systems, and so care is needed to create a high level approach that can apply across LAs. Given the general public support for street trees and current lack of accountability associated with street tree felling in some Local Authorities, there is a need for greater community engagement in decision-making affecting street trees. This legislation is also in line with the aspirations set out in the 25 Year Environment Plan, which aims to “introduce new requirements to ensure councils properly consult if they are considering removing street trees”²⁰².

The policy issue and rationale for Government intervention

200 In advance of this primary legislation, as an interim measure, an additional condition will be added to the incentive funding that is provided by central government to those Local Authorities that adhere to the non-statutory Highways Code of Practice.
202 25 Year Environment Plan (2018), page 78
1. This section provides background information and description of the policy options.

2. Street trees can be defined as a **public good** because nobody can be excluded from the benefits they provide (**non-excludable**) and the enjoyment of (most) the benefits they provide by one person does not diminish the ability of other to enjoy the same benefits (**non-rival**). These characteristics mean that if the supply of street trees was left to the market, there would be fewer trees on the streets than society would like (i.e. the market would **underprovide** street trees relative to the socially optimal level) because not all the benefits of street trees can be captured by businesses. Therefore, there is a role for the public sector to provide street trees (the number of which will be determined by societal preferences rather than profit) and this is the responsibility of Local Authorities in England.

3. Local Authorities may fail to provide the number of street trees that local communities would like (i.e. **government failure**) if there is (i) **insufficient information** on the value that local communities place on street trees, and/or (ii) **perverse incentives** to remove street trees, and/or (iii) **lack of accountability**, all of which could lead Local Authorities underproviding street trees relative to the level that local communities would like. In such a situation, there is a role for central government to intervene and require LA’s to address these issues so that they deliver a level of street tree coverage that aligns with the public interest.

### Policy objectives and intended effects

The policy is intended to introduce a duty on LAs to consult with local communities to ensure that consultation takes place when a street tree is to be felled and that the consultation process meets certain standards. Communities will have an opportunity to understand why a tree is being felled within their local area and if necessary to raise concerns regarding the felling of trees that will be heard by the local authority. This will contribute to mitigating the current deficiencies in the governance and management of street trees and empower local communities to (i) have their say in decisions affecting street trees and (ii) holding LAs to account for their actions.

### Policy options considered, including alternatives to regulation

An outline of each option is provided below, including the baseline option that reflects the current standard. Option 1.4 has been explored as a regulatory alternative to individual street tree consultation. Following our options appraisal, we have identified option 1.4 as the preferred option. This decision reflects both legislative aims, cost implementation and the outcomes of stakeholder consultation.

#### Option 0. Baseline

The relevant baseline for this IA is "status quo" which is the current laws and governance practices that exist with regard to managing street trees in England.
Under felling licence exemptions set out in the Forestry Act 1967 LAs may fell a street tree if they perceive it to be impacting on the normal functioning of the highway (and so their delivery of the Highways Act 1980), including damaging pavements, restricting access or posing a safety risk. This decision is made solely by the LA in its role as a Highways Authority. There is no national governance surrounding street tree management.

**Option 1: Introducing legislation - Local Authority duty to consult on street tree felling**

Various policy options have been designed following research of current LA tree management policies, consideration of negatively-perceived felling in the past, and discussion with key stakeholders including the Forestry Commission, Woodland Trust and the Local Government Association. For any chosen option a set of statutory guidelines will be provided alongside legislation. For all options which involve consultation on individual instances of felling, exemptions will be required. In the interest of health and safety, no consultation should be held in circumstances where urgent, immediate felling is required. The risk management framework that guides this assessment is usually developed by Tree Officers, who identify trees that may pose risks to the environment or human health. This includes cases where trees themselves are dangerous, as well as where trees cause roads or other infrastructure to be dangerous. While it is possible that the expert opinion provided by Tree Officers may be swayed to further individual/organisational agendas, we have no reason to believe this is the case. This risk is, however, reflected in the uncertainty associated with expert opinion.

Different LAs have different demographics and facilities (for example those with limited rural broadband), therefore we will only prescribe a minimal consultation method. This will allow LAs to use delivery methods most suited to their systems. The costs associated with each option being carried out are included in Table 1 at the end of this document. These are based on analysis conducted using existing case studies of these options in Local Authorities, and expert opinion. Figures provided do have a high level of uncertainty, as not much data was available and assumptions are based on heavily caveated expert opinion.

**Option 1.1: individual street tree consultation**

Consult on each individual tree to be felled with individual consultations. This would give local residents the greatest opportunity to input into plans for felling, but would impose the greatest monetary and time costs on LAs. There are various routes to pursue this policy option, and this has been considered in our options appraisal.

**Option 1.1a: Public consultation on individual street tree felling**

This option would consult on each individual tree to be felled with public consultations. This involves pinning a notice on the tree, writing letters to residence within 100m and publishing notices both online and in town halls.

**Option 1.1b: trigger option consultation.**
This option would follow the consultation method of option 1.1a, with a trigger point that would require wider consultation (up to 100m around the felled tree). The trigger point would be activated if >50% of respondents disagree with tree felling activity.

Option 1.2: street-by-street consultation

Under this option LAs would be able to consult on tree felling on a street-by-street basis. Notices would be placed on the relevant trees and a notice would be placed online.

Option 1.3 bi-annual felling plan

This option would require LAs to consult bi-annually on a street tree felling plan, which details all street trees to be felled over the relevant period. Consultation would be online.

Option 1.4 Tree Strategy Consultation

This option would require LAs to consult on a Tree and Woodland Strategy: a document setting out how LAs manage their tree stock, including policy on street trees.

Option 1.5 Revised Consultation

Under this option – which was developed as a result of responses to the public consultation on the duty – consultation would be by placing notices on the tree and on town halls, to which anyone would be able to respond. This is the preferred option.

Expected level of business and wider impacts

This assessment will inform the New Burdens Assessment in line with the MHCLG New Burdens Doctrine which requires that any new burden placed on LAs must be fully funded by central government. The Department for Transport has a voluntary incentive fund for Highways Authorities, and have agreed to include an eligibility criterion relating to street trees. Estimated costs have been developed based on the best available evidence and consultation with stakeholders.

Brief assessment of distributional impacts

As the costs will fall entirely on central government, there will be no distributional impact across LAs in England. It is assumed for the purposes of this assessment that LAs will undertake consultation in a way that meets the minimum requirements of the duty and no more. Therefore the additional burden on LAs that is quantified and valued in this assessment reflects the costs of meeting the option in as cost-effective way as possible.

Brief assessment of small business impacts

There are no business impacts associated with this legislation.

Brief Assessment of Wider Impacts
Will the measure have significant wider social, environmental, or financial impacts?

The objective of this policy is to improve the transparency and accountability of LAs with regards to the felling of street trees, and to make the public feel more fully involved in decisions about street tree felling. This intervention will enable local communities to:

i) Understand the justification for removing street trees. Felling is often accompanied by concern within the local communities who value these trees for the range of social, environmental and economic benefits to communities (as shown by the public response to some recent tree-felling programmes across the UK). Benefits include enhancing the attractiveness of streets, reducing air pollution, noise levels, wind speeds, summer temperatures, and ultraviolet (UV) radiation through shading, providing an environment conducive to physical activities, reducing stress and improving mental health (Forest Research, 2011);

Become empowered to (a) influence decisions on which trees are felled and (b) hold Local Authorities to account for their actions regarding the management of street trees. Some Local Authorities consult with local communities prior to felling trees, but there is currently no legal duty requiring them to do so or any guidance on how to consult.

There are no costs to business associated with this policy. Benefits to local communities are assumed to be the same under each option (meaning that the analysis is effectively a cost-effectiveness analysis) and so have been described but have not been quantified or monetised.

Table 1. Estimated annual and total costs (PV, 10 years) of Duty-to-Consult options

<table>
<thead>
<tr>
<th>Estimate description</th>
<th>1.1a: Individual street tree felling</th>
<th>1.1b Trigger point consultation</th>
<th>1.2 Street-by-street</th>
<th>1.3 Bi-annual felling plan</th>
<th>1.4 Tree strategy consultation</th>
<th>1.5 Revised consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual costs to LA’s in England</td>
<td>£1,300,000</td>
<td>£1,900,000</td>
<td>£1,900,000</td>
<td>£1,000,000</td>
<td>£400,000</td>
<td>£2,800,000</td>
</tr>
<tr>
<td>Present value cost to LAs in England over 10 years</td>
<td>£11,000,000</td>
<td>£16,000,000</td>
<td>£16,000,000</td>
<td>£9,000,000</td>
<td>£3,000,000</td>
<td>£24,000,000</td>
</tr>
</tbody>
</table>
Annex 42: Statement of impacts – Forestry Enforcement

Background

The Government has a commitment within the 25 year environment plan to “Expand woodland cover and make sure that existing woodlands are better managed to maximise the range of benefits they provide”.

Woodlands provide a wide range of social, environmental and economic benefits to communities. Benefits include timber and fuel production, carbon sequestration, flood mitigation, water quality, health and recreation, and biodiversity (Forest Research, 2015). Many of these benefits from woodlands exhibit public good characteristics because nobody can be excluded from enjoying them (non-excludable) and the enjoyment of (most) these benefits by one person does not diminish the ability of others to enjoy the same benefits (non-rival). These characteristics mean that if the supply of woodland in England was left to the market, there would be fewer woodlands than society would like (i.e. the market would underprovide woodland relative to the socially optimal level) because not all the benefits of woodland can be captured by businesses. Therefore, there is a role for the public sector to provide or subsidise woodland (the extent of which will be determined by societal preferences rather than profit).

It is also important that the public sector monitors and regulates the loss of woodland so that society can continue to enjoy woodland benefits into the future. This is particularly important because the pressures for alternative land uses means there is a significant opportunity cost associated with woodland land cover which incentivises land use change (i.e. landowners can profit from allowing woodland to be felled). Therefore, to manage woodland cover and the continued delivery of public goods, all felling activity in England is regulated under the Forestry Act (1967).

The policy issue and rationale for Government intervention

The Act requires licences to be obtained from the Forestry Commission prior to felling and provides the Forestry Commission with a range of powers to prevent the illegal felling of trees (i.e. felling without a licence). However, current Forestry Commission enforcement powers have failed to eliminate illegal felling in England, the drivers of which are changing. Historically, felling activity was undertaken to realise the value of the standing timber. Today the pressures have moved towards

203 Forest Research (2015) Ecosystem services and forest management
204 Some of the benefits provided by woodland are rivalrous in consumption (e.g. shade)
realising the value of the land. Consequently, the statutorily prescribed enforcement procedures are no longer adequate and the maximum penalties that can be prescribed by the courts no longer provide a deterrent to illegal felling. Moreover, the state’s ability to ensure that an illegally felled site is replanted (through Restocking and Enforcement Notices)\(^{205}\) is entirely without a statutory backstop. See “policy issue and rationale for Government intervention” in “Supporting Evidence” below for a more detailed breakdown of the rationale for intervention.

In the 50 years since the current felling licence regime has been set out in statute, a number of loopholes have developed. This has created challenges in relation to enforcing non-compliance. The current rate of illegal felling (that is reported) is 40ha of woodland per year. Indeed, it is widely recognised by the sector that non-reported rates of felling are considerably higher than this. This anecdotal evidence has been supported by preliminary satellite imaging data from the South East of England. Of those 40ha per year, approximately 20ha a year are covered by a Restocking Notice. However, this leaves about 20 hectares, plus the area covered by Restocking Notices that are not complied with, remaining deforested leading to an overall loss of tree cover. Strengthening the powers of the Forestry Commission to tackle illegal tree felling, closing certain legal loopholes and refining the disincentives (fines) faced by those wanting to illegally fell timber is therefore needed to reduce illegal felling and ensure society’s continued enjoyment of the public good benefits from England’s woodland.

**Policy objectives and intended effects**

To ensure that the enforcement regime provides a credible deterrent, and that the environmental and amenity damage which is done by unlicensed felling can be reversed, the Forestry Commission proposes six amendments outlined in Option 2 below to the Forestry Act 1967, specifically surrounding enforcement of non-compliance with the felling licence regime. In summary, these aim to:

- Change current penalties for existing offences related to illegal felling to provide a greater deterrent;
- Resolve a number of loopholes with regards to Restocking and Enforcement Notices and where and on whom they can be served; and

\(^{205}\) For context, when an instance of illegal felling occurs the Forestry Commission (FC) may or may not refer the case to the Crown Prosecution Service (CPS) for prosecution by a Magistrates Court for the act of illegal felling itself (section 17 of the Act). The FC may also issue a Restocking Notice (RN), regardless of whether it makes a referral for prosecutions or not. A RN compels the person served to restock the land that was felled. If a RN is not complied with, the FC can issue the individual served with the RN (or new land owner if the land is sold during the life of the RN), with an Enforcement Notice (EN), which again requests that the restocking set out in the RN is complied with. Failure to comply with an EN is an offence in its own right and the FC can refer those individuals to the CPS for prosecution by a Magistrates Court for failure to comply (section 24 of the Act).
- Improving the ability for FC to gain access to information of who has an interest (ownership/leasehold etc.) in the land.

All these measures are excluded from the Business Impact Target as they are regulatory provisions “concerning fines and penalties and redress and restitution”.


**Policy options considered, including alternatives to regulation**

The options below constitute a summary of the proposed policy intervention. The amendments proposed under Option 2 will close legal loopholes in the current legislation and make the regulatory regime for forestry fit for purpose for modern application. The most effective way to achieve these changes is through amendments to primary legislation which are compared against the baseline ‘do nothing’ option (Option 0), and the ‘improve information’ option (Option 1).

**Option 0. (Do nothing (Baseline))**

A baseline is a reference case against which the impacts of the proposed intervention can be assessed. The baseline for this RTA is a ‘do nothing’ option which assumes a continuation of the current statute that exists with regard to illegal felling and enforcement and the associated outcomes from this system (e.g. levels of illegal felling).

The Forestry Act 1967 sets out the penalties and actions that can be applied and has become dated in a number of areas. It is therefore not fit for purpose to ensure adequate protection to trees, woodland and forests. The current rate of illegal felling (that is reported) is 40ha of woodland per year.

**Option 1: Improve Information on Felling License Requirements**

Most woodland owners are aware of the requirement to seek a felling licence and are in regular contact with FC area teams or regulatory managers in relation to environmental grant schemes and felling licence applications. Flouting of existing regulations is generally intentional and done with the intention of increasing the value of land which has been felled. FC therefore requires updated statutory powers to tackle this practice, rather than improving the provision on information on the existing system. As such, this option is not considered further.

**Option 2: Increasing Forestry Commission enforcement powers**

To resolve the loopholes and challenges experienced through the current regulatory regime for forestry, this option provides six specific amendments to the Forestry Act 1967. The majority of these are very minor amendments designed to allow the Act to effectively deliver as intended. The remaining amendments are designed to bring
enforcement up to date, reflecting the change in motivation for illegal felling (from realising the value of timber to realising the value of land). These amendments are:

1. Give the courts the power to order restocking (following conviction for an offence of non-compliance with a Restocking Notice (RN) + Enforcement Notice (EN)).
2. Provide for the FC to list RNs, ENs and the new Court ordered Restocking Order (RO) on the Local Land Charge Register.
3. Clarify how Enforcement Notices are affected by change in land ownership once served.
4. Compel the “owner” of the felled land to tell us who has an interest in the land (i.e. who their tenants (who may have conducted the felling) may be), in addition to the “occupier” and “anyone receiving rent from the land” at present.
5. Increase the current fine for felling without a licence from “£2,500 or twice the value of the trees” to a standard level 5 fine (unlimited).
6. Allow FC to serve Notices on “directors” of companies, not just the “secretary” or “clerks” as is currently specified in the Act.

**Expected level of business and wider impacts**

Impacts (cost and benefits) that are within scope of this impact assessment are as follows:

- Amending the law to expand enforcement powers and/or increasing sanctions (e.g. fines) to deal with illegal felling does **not** lead to additional costs being imposed on businesses because businesses should not be undertaking illegal activity in the first place. Amendments to the law are necessary because the current legal provisions are insufficient to dis-incentivise illegal felling to an extent where all of the benefits expected from the original legislation (Forestry Act 1967) are realised. Businesses that continue to fell woodland illegally **will** face increased costs but these are attributable to the original legislation (which made the activity illegal) and therefore remain under the baseline. This covers measures [1], [2], [5] and [6] see Table 1 below,

- Technical clarifications to the law do not result in any impact on business. This covers measure [3], see Table 1,

- Where measures under Option 2 impose a new regulatory burden on business these are additional costs (to the baseline) that are attributable to Option 2. This covers measure [4] see Table 1,

- All benefits associated with changes in the extent of woodland felling - legal or illegal – that result from changes in behaviour due to additional enforcement measures are additional to the baseline and so are within scope of this assessment.

In other words, where additional intervention (relative to the baseline) is required to achieve the expected benefits from the Forestry Act 1967 (i.e. due to inadequate dis-
incentives to fell woodland and legal loopholes that have since emerged), all benefits and some costs (i.e. those associated with closing loopholes) are attributable to Option 2. This effectively means that any cost-benefit analysis that was undertaken for the original Act (in 1967) would have over-estimated the benefits that the Act would deliver (in its 1967 form) and underestimated the required costs (associated with the regulatory changes that are now being introduced e.g. to close loopholes). It is these costs and benefits that are additional to the baseline and which we will quantify under Option 2. These are summarised in the “additional cost to business” column in Table 1.

Table 1. Additionality of costs to business for each proposed measure

<table>
<thead>
<tr>
<th>Proposed amendment to enforcement regime</th>
<th>Additional cost to businesses a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Give courts the power to demand restocking</td>
<td>✗</td>
</tr>
<tr>
<td>2. Provide for the FC to list RNs, ENs, and the new Court ordered Restocking Order (RO) on the local Land Charges Register</td>
<td>✗</td>
</tr>
<tr>
<td>3. Clarify how Enforcement Notices affected by change in owner</td>
<td>✗</td>
</tr>
<tr>
<td>4. Powers to compel “owner” to tell FC who has an interest in land</td>
<td>✓</td>
</tr>
<tr>
<td>5. Increase the fine for prosecution for illegal felling</td>
<td>✗</td>
</tr>
<tr>
<td>6. Allow the FC to serve Notices to the Directors of companies</td>
<td>✗</td>
</tr>
</tbody>
</table>

a There is no additional cost to business where measures increase sanctions on illegal felling activity, are technical clarifications to the law or correct deficiencies in the current enforcement regime which mean that the FC cannot properly hold to account the actors responsible for the illegal felling. Additional costs to business occur where a measure is imposing a new regulatory burden on business.

Costs

Only measure [4] (see Table 1) leads to an additional cost on business.

It involves amending powers under s.30 to compel the “owner” to tell the Forestry Commission who has an interest in the land. Currently the Forestry Act gives the Forestry Commission a power to require the “occupier” or "anyone who receives rent" from the land to state the nature of their interest in the land and any other person known to them who might have interest in the land. Tracking down the 'occupier' is time consuming and often not possible. This can waste time and also stop Restock Notices being served to the correct person. This is in comparison to the owner, who will be listed on HM Land Registry.
The Forestry Commission estimates that this power would be used in around 15% of credible cases of alleged illegal felling, which would be 9 cases per year, according to historical averages.

This will require businesses to spend 1 hour writing a response to share the knowledge that they have (~£13 per letter based on ONS Annual Survey of Household Earnings) and the cost of a stamp (£0.60). These costs are therefore negligible (~£120 a year).

**Benefits**

The aim of these amendments is to reduce/eliminate the current level of illegal felling activity in England. The maximum benefit that can be delivered by these measures is therefore a reduction in felling of 40ha of woodland a year and the associated ecosystem service benefits. A range of indicative per ha values for woodland in England are provided which reflect the range of market benefits (e.g. timber) and non-market benefits (e.g. recreational value, carbon sequestration, air quality regulation) that woodlands provide.

The 2018 Tree Health Strategy reports an annual value of £4.9bn of woodland across the UK – this reflects woodland processing, landscape and biodiversity estimates. Their publication estimates that average per ha values for woodland are ~£1550/ha.

The 2017 Woodland Accounts values woodland at £2.3bn. This would equate to an average estimate of ~£737/ha.

We have therefore used these figures as ranges for our analysis below.

**Net present value**

Given the cost to business are zero or negligible (~£120 per year) and the average societal value of woodland are estimated to be between ~£737-1550 per hectare, any reduction in illegally felled woodland from the current annual level of 40 hectares will result in a positive NPV.
Annex 43: Statement of impacts – REACH Amendments

Background

The European Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) is the main plank in the EU’s legislation for the management of the manufacture, marketing and use of chemicals across the Single Market. It aims to ensure a high level of protection of human health and the environment. Industry has the primary duty to understand and manage the hazards and risks of chemicals but the regulatory authorities also have various tools to remove risks and drive substitution of hazardous chemicals with safer alternatives.

Now we have left the EU, under the terms of the European Union (Withdrawal) Act 2018 (EUWA) as amended, REACH will be transferred directly into UK law at the end of the transition period following the UK’s exit from the EU. The EU REACH Regulation contains “deficiencies” due to the EU centralised nature of its processes; these have been fixed by a Statutory Instrument to ensure that the UK continues to have effective regulation of chemicals. The first REACH exit SI has since been amended by two further revising instruments in response to issues raised by stakeholders. The provision in the Bill would mean that the government could respond to further transitional issues that might arise in the period after exit.

Looking forward, the Annexes within REACH can be amended by Commission Regulation using general powers (Article 131) or specific ones (e.g. Articles 58 and 68). However, the Articles cannot generally be amended, although there are some exceptions, e.g. the requirement on compliance checks in article 41(7). The same distinction has been carried into the UK REACH Regulation.

This risks freezing the UK REACH Regulation in its current form. It would not allow for the continued development of the REACH framework, e.g. where the government with the agreement of the Devolved Administrations wishes to respond to the aims of in the chemicals strategy, which is being developed under the 25 Year Environment Plan.

The provisions being introduced within the Bill are enabling powers, which would enable articles of REACH to continue to be amended. They will be exercised by means of Statutory Instrument(s) following consultation and with the consent of the Devolved Administrations where devolved matters are involved.

The policy issue and rationale for Government intervention
Chemicals and manufactured chemical goods exist everywhere in our daily lives and are essential to modern day living, from the manufacture of industrial goods to everyday household products. However, chemical substances also present a range of hazards and potential risks to human health and the environment. They can affect human health directly or enter our water, soil, and air through production, use or disposal. As such, they can cause long lasting damage in the natural environment. These are negative externalities (external costs) which provide the rationale for Government intervention.

The UK REACH statutory instrument under the European Union (Withdrawal) Act converts existing EU REACH regulation into national law, with powers to amend the annexes only. The provision in the Environment Bill will ensure that regulation, including its articles, can be amended. This will provide flexibility to respond to changes in chemicals policy or regulatory needs, thus limiting the risk of institutional failure.

**Policy objectives and intended effects**

The Government must prepare to put in place domestic arrangements to regulate chemicals now that the UK has left the European Union, specifically to provide continuity and stability for businesses while maintaining standards of protection of human health and the environment by converting European Union law into UK law.

This national regulatory regime including the enabling provisions in the Environment Bill would continue to support the government’s objectives for chemicals policy. The aims and principles of REACH reflect these objectives.

- To ensure a high level of protection of human health and the environment;
- To enhance the competitiveness and innovation of UK business;
- To give businesses the duty to understand the hazards and potential risks of the chemicals they produce, place on the market and use, and to identify and apply appropriate risk management measures;
- To ensure that UK government can respond to new and emerging risks from chemicals and that regulatory decisions are proportionate and based on scientific assessment of hazard and risk.
- To allow for future development of the REACH framework and give ministers the powers to make necessary changes to the law

**Taking powers in the Bill** will enable us to deliver the chemical policy objectives and maintain an effective chemicals management policy going forward.

**Policy options considered, including alternatives to regulation**

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Placing the enabling powers for amendments to UK REACH in the Environment Bill fits with the goals of environmental protection. For example, chemicals and the way they are managed can have impacts on a range of other environmental policy concerns including waste management and the circular economy, water quality and biodiversity. When the previous Secretary of State gave evidence to the Environment Audit Committee (EAC) about the Environment Bill, there was a significant focus on why the Bill contained no provision for chemicals, so placing powers in the Bill would satisfy this question.

Powers under the European Union (Withdrawal) Act have been used to date to correct deficiencies in EU REACH for UK regulatory purposes. However, those powers will no longer be available after the end of the transition period on 31 December 2020 where, in circumstances like the existing transitional arrangements, the deficiencies have already been fixed.

**Expected level of business and wider impacts**

This proposed measure is an enabling power to be exercised by Statutory Instrument(s) subject to consultation and Devolved Administration consent, where devolved matters are involved.

The REACH provisions in the Environment Bill are enabling powers to amend the articles of REACH, which when exercised could result in additional costs, avoided costs, or be cost neutral to businesses, depending on the proposed amendments. It would, therefore, be misleading to assess and present impacts which will depend on the scope and timing of any future regulatory proposals. Any proposed future changes as a result of applying the enabling powers in the Bill would be appropriately assessed with either an RTA or an IA.

*Background on the sector*

The UK chemicals sector is highly diverse, including the manufacture of commodity/bulk chemicals, speciality chemicals, polymers (plastics) and consumer chemicals (e.g. personal care and cleaning products). The chemicals they manufacture and use are an essential building block for manufacturing and other industry and business sectors, even though many downstream users may not be aware of their dependence on chemicals. Any regulatory changes for chemicals could affect both the chemical manufacturing sector itself and its downstream users.

The UK chemicals manufacturing sector directly accounted for £13.3 billion of the UK economy’s Gross Value Added (GVA)\(^{206}\) and 95,000 direct jobs in 2018, with a further 177,000 indirect.\(^{207}\) It is one of the largest UK manufacturing export sectors.

\(^{206}\) GDP(O) Low Level Aggregates National Accounts, ONS

\(^{207}\) ‘Employee Jobs by Industry’, ONS
by value with around £30.1bn of exports in 2018\textsuperscript{208}. There are approximately 2,900 chemical businesses, of which 98% are Small and Medium Enterprises (SMEs) and microbusinesses.\textsuperscript{209}

There are around 9,300 UK registrations in (EU) REACH, from 1,350 companies\textsuperscript{210}.

Potential future small business impacts. The chemicals sector is comprised of ~2,500 small and micro businesses (87% of the total). Any future proposals for SIs to amend UK REACH would consider and assess the impacts on these businesses.

Potential future regional impacts. Any future changes could have regional impacts as the chemicals sector is a significant employer in regions with higher levels of economic deprivation. Chemical production is concentrated in four main clusters – Hull, Teesside, Runcorn and Grangemouth.

Potential future health and environmental impacts. Objectives of the UK REACH regulatory regime include ensuring a high level of protection of human health and the environment, and ensuring that UK Government can respond to new and emerging risks. Changes could be made to the regulation in future to enable improved delivery on these objectives, with potential to increase benefits to health and the environment.

\textsuperscript{208} ONS Trade in Goods by Industry
\textsuperscript{209} UK Business; activity, size and location, ONS
\textsuperscript{210} This figure includes those from UK-based Only Representatives, registering on behalf of third country companies. Source: ECHA infographic, accessed 10/09/2019: https://echa.europa.eu/registration-statistics-infograph#