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Policy paper

19 August 2020: Environment Bill - environmental targets

Updated 21 October 2020

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Introduction

The Environment Bill brings about urgent and meaningful action to combat the environmental and climate crises we are facing and acts as a key vehicle for delivering the bold vision set out in the 25 Year Environment Plan (<https://www.gov.uk/government/publications/25-year-environment-plan>). It will support the country's desire to build back better after Covid-19 with measures that support both economic growth and the government's manifesto commitments to deliver the most ambitious environmental programme of any country on earth. It will help us emerge from this crisis and build a fairer, greener, more resilient future. It sets a new and ambitious domestic framework for environmental governance and includes commitments to secure improvement on air quality, biodiversity, water and resource efficiency.

An important aspect of the Environment Bill is the power to set long-term, legally-binding environmental targets. Setting targets will provide a strong mechanism to deliver long-term environmental outcomes. This will build upon progress towards achieving the long-term vision of the 25 Year Environment Plan and help tackle some of the serious challenges that remain. These are described in the 2020 progress report (<https://www.gov.uk/government/publications/25-year-environment-plan-progress-reports>) on the 25 Year Environment Plan and the Outcome Indicator Framework. Currently there are a range of environmental commitments, many which have driven improvements to our natural environment. These will remain in place, but there are gaps, and much more is needed to improve the state of our environment. Additional legally-binding targets, and a target setting process which uses a systems wide approach to the natural environment, will help us achieve that.

Environment Bill targets will help stimulate investments in green technology and innovative practices by providing long term certainty for business. They will help business to plan ahead, including how they rebuild from the Covid-19 crisis.

It is a major new step to set environmental goals, beyond climate change mitigation, in a way that legally binds this government and future governments, and we want to get it right. We believe that the best way to deliver targets is through a robust, evidence-led process that seeks independent expert advice, provides a role for stakeholders and the public, as well as scrutiny from Parliament. This paper provides an overview of how we intend to develop and bring forwards targets by October 2022, as envisaged in the Environment Bill. We are not yet able to commit to the specific targets we will set or the metrics we will use. It would be premature to do so without further evidence gathering and public consultation that will take place in later target setting steps (as explained in Part A). This paper describes our initial thinking on possible objectives for targets which will be explored over the coming months.

Who is this document for?

This document is for stakeholders who are interested in understanding how targets will be developed to fulfil the government's environmental ambitions. It provides a roadmap for methodically developing our evidence base, signalling how we will be engaging key stakeholder groups and how we will provide updates more widely along the way. Once proposed targets are developed, businesses, communities and civil society will have an opportunity to share their views in response to a public consultation that is expected in early 2022.

This document is divided into three parts:

- A. The process for developing targets under the Environment Bill Framework,
- B. Overview of the scope of targets that government is considering, and
- C. Sources of target information and how you can get involved.

Part A: process for developing targets under the Environment Bill framework

Target framework

The Environment Bill allows for long-term targets to be set in respect of any matter which relates to the natural environment, or people's enjoyment of it. It requires government to set at least one target in four priority areas: air quality, biodiversity, water, and resource efficiency and waste reduction, as well as a target for fine particulate

matter (PM_{2.5}). These targets need to be brought forward by 31 October 2022. Long-term targets will be supported by interim targets, which will set a five year trajectory towards meeting the long-term targets. This will allow for an ongoing assessment of whether the government is on track to meet its longer-term target ambitions.

The Environment Bill creates a new statutory cycle of monitoring, planning and reporting, including a long-term Environmental Improvement Plan. The 25 Year Environment Plan will be the first such Environmental Improvement Plan. Interim targets will be set out in the Environmental Improvement Plan, which will be reviewed at least every five years. The government will have to report annually on what it has done to implement the Environmental Improvement Plan and on whether the natural environment (or particular aspects of it) has improved. That report will also consider the progress that has been made towards meeting relevant targets. The new environmental watchdog, the Office for Environmental Protection, will also have to report annually on the progress that has been made in improving the natural environment in accordance with the Environmental Improvement Plan and on progress towards meeting targets. That report may also include recommendations to government about how it can improve progress, to which the government would have to respond.

The bill framework requires government to periodically review its targets, by carrying out a Significant Improvement Test at least every five years. This means that government must consider whether meeting its long-term targets and the PM_{2.5} target, alongside any other relevant statutory environmental targets, would significantly improve the natural environment in England. It must report to Parliament on its conclusions and, if it considers that the test is not met, set out how it plans to use its target-setting powers to close the gap.

The Bill allows for additional long-term targets to be set in the future. We expect any future long-term targets will be set in a similar way to the first suite, through expert advice, stakeholder engagement, and public consultation as part of the robust, evidence-led target-setting process. The natural environment is complex, and we see target-setting as an iterative process, built upon over time as our evidence base and understanding develops. We want to use targets to meaningfully drive the environmental outcomes that we need.

Criteria and principles for developing targets

We want to develop targets that are driven by taking action in areas that matter the most, rather than limiting our targets to areas that are easy to measure and improve. The targets should drive environmental outcomes that benefit future generations and respect nature's intrinsic value, independent of human use. We want to start by identifying indicators that will help measure the changes that we want to see in improving the environment.

All targets, both long-term and interim, must meet certain requirements that are set out in the Environment Bill. These requirements are reflected in the criteria for Bill targets below. Wider considerations will also inform the development of robust and credible targets and are reflected below as principles for target development. Together, these criteria and principles provide a robust framework for how we will develop evidence-based targets.

Criteria for bill targets

- we can set long-term targets in respect of matters that relate to the natural environment or people's enjoyment of it
- we must set at least one long-term target in each of the four priority areas (air quality, biodiversity, water, and resource efficiency and waste reduction) as well as a target for fine particulate matter (PM_{2.5}) expressed as an annual mean (the PM_{2.5} target may, but need not be, a long-term target). More than one target could be set within a given priority area
- a long-term target must have a minimum duration of 15 years
- we need to ensure that targets have a clearly defined level or quality standard to be achieved, which can be objectively measured. The method for objective measurement should be clear and repeatable, to allow results to be reproducible within reason
- we need to identify a specific date for achieving each target. This ensures targets are time-bound and there is a clear deadline to focus policy action

- when developing targets, we need to make sure that long-term targets can be met. In other words, we want to develop ambitious targets, but in doing so make sure that they are achievable. To inform this we will analyse the historic pace of change to the natural environment and consider future trends, including possible policy mechanisms and socio-economic drivers. We also expect innovation to play a role in helping achieve our environmental outcomes
- independent expert advice needs to be sought by government when developing long-term targets. A range of experts will play a role in informing the development of targets including academics, scientists or expert practitioners. To provide scrutiny of the evidence-based approach for targets, the government will set up appropriate processes for each priority area
- targets should be developed in a way that is consistent with the requirements of the policy statement on environmental principles, established under the Environment Bill. This requires policy-makers to have due regard to the Environmental Principles Policy Statement during the policymaking process

Principles in developing targets:

Targets should help to meet the key goals and outcomes set out in the 25 Year Environment Plan (or in future Environmental Improvement Plans) as well as wider government environmental policy ambitions. Our 25 Year Environment Plan is a living blueprint for the environment covering the next quarter of a century. It is an ambitious project and will continue to evolve and be updated as our policies develop to build on the original actions set out in 2018.

Where possible, targets should be based on environmental outcomes. By “outcomes” we mean the intended final results or benefits to the environment. An example of this is the carbon budgets that set the pathway to making progress to the UK’s net-zero emissions targets, without describing how to get there. This approach allows flexibility and innovative ways of meeting targets. We recognise that this may not always be possible, so in some cases an action-based target, alleviating a specific environmental pressure, may be more suitable. This is particularly the case if environmental outcomes cannot easily be measured, are unpredictable or depend on factors outside of government control.

A system-based approach to the natural environment should be taken, as far as possible, so that we consider the targets collectively and understand their interdependencies with the wider environment. This is a joined up way to achieve our environmental ambitions that has not been done before. We want to pursue targets that have mutual benefits, for example, setting water quality targets that also help deliver biodiversity objectives.

When we are developing targets, we will consider how they will inform the Significant Improvement Test, as set out in the Environment Bill. The Significant Improvement Test will be conducted for the first time by January 2023, three months after the October 2022 deadline for targets to be brought forwards.

When developing targets, we will consider any relevant international best practice and commitments, such as new international biodiversity targets to be developed under the Convention on Biological Diversity, and their relevance to our domestic environmental agenda.

Overview of the target setting process

This section provides a summary of the target setting process government intends to adopt for the first suite of targets. It is a roadmap for our programme of work with experts, umbrella organisation groups, the public and Parliament. As our evidence base and understanding continues to improve over time, we will consider if further suites of targets will strengthen action needed to improve the natural environment.

Developing a comprehensive suite of targets across the natural environment is novel and not something developed at an EU level. Our process will be informed by a number of sources of evidence including scientific data and models, historical datasets, and assessment of what is feasible from a socio-economic perspective. It will be an iterative process and rely on input, expertise and scrutiny from others.

We have identified four steps which will enable us to systematically develop this evidence and meet the criteria and principles (as considered in the previous section) so that we can set strong and meaningful targets. Input from experts, stakeholders, the public and Parliament will all play a role in making sure we have robust targets that drive environmental outcomes. The steps are as follows:

Step 1: Setting the scope of the targets

This step will set the overall direction and focus for target setting. Part B of this document provides an overview of the government's proposed scope for targets. This is a starting point from which specific targets will be developed by government to meet the criteria and principles (as referenced above).

Step 2: Developing fully evidenced targets

This step is focused on developing the detail of the targets, for example an achievable level of improvement to the environment, over a given time period and how this will be measured. It will involve detailed analysis of scientific evidence. Government and its statutory advisors (such as Environment Agency, Natural England and the Joint Nature Conservation Committee), as well as other evidence partners, will provide evidence to inform target proposals.

During this step, the government will also identify potential measures that could drive action and help achieve environmental outcomes. Socio-economic analysis will assess the costs, benefits and distributional impacts of any such measures on businesses and wider society. These considerations will help ensure that proposed targets are achievable and affordable whilst still driving the ambitious changes we need to the environment.

The principles in developing targets (in the section above) will guide target development so that they are robust and meaningful, and support wider environmental aims across government, such as reaching the Net Zero climate target by 2050.

Target development will be supported and scrutinised by independent experts for each priority area. This will include assessment of the evidence and scrutiny of Defra's analysis on the deliverability and impacts of proposed targets. Experts will be asked to publish their views at appropriate points during this step of the target development process.

By the end of this step we will have developed objectively measurable metrics as well as proposals for target standards, dates to be achieved and first interim milestones for targets (see essential criteria and principles in the section above).

Step 3: Public consultation on target proposals

Alongside iterative engagement with key umbrella organisations throughout the target setting process, and any wider engagement (such as through digital tools), we will consult stakeholders and ask for written responses on the proposed targets within each priority area. This will provide an opportunity to hear a range of views on the ambition, evidence and achievability of target proposals. An Impact Assessment will accompany the consultation and consider the environmental and socio-economic considerations associated with each target. This step will provide time for written contributions to be made.

We expect parliamentary Select Committees will wish to scrutinise target proposals, so this could be an opportune time to carry this out.

Step 4: Drafting target legislation

Once the government has collated responses from the public consultation, responses will be summarised and considered in a published government response. Government will then decide the targets to be set. Statutory Instruments setting out the targets will be brought forwards by 31 October 2022 and will come into force once approved by Parliament.

A diagram depicting the target setting steps can be found in annex 1 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/910149/annex1-environmental-target-setting-steps.pdf).

Part B: an overview of the scope of targets

This section provides an overview of objectives for targets which we consider could strengthen our delivery and help us meet the ambitions of the 25 Year Environment Plan. Objectives considered within this section seek to tackle some of the biggest current environmental challenges that we face. We recognise that developing targets is an iterative process where we should seek continuous improvement to strengthen their outcomes, as both evidence and knowledge improves. We will periodically review our targets to consider whether we have the right set to deliver a significant improvement to the natural environment in England.

Some areas considered in this scoping section have a stronger existing evidence base to support target development than others. The target setting process is designed to methodically develop evidence. At the end of the process we will set targets that meet criteria and principles (in Part A) and are best suited to drive the environmental outcomes we need to meet our ambitions. Ultimately, it will be for the Secretary of State to decide which targets to set.

To avoid unintended consequences, we have designed a target setting process which will ensure that the suite of targets we set will work together to drive effective action. We intend to use a system-based approach to consider the targets collectively and understand their interdependencies with the wider environment. We will also assess the costs, benefits and distributional impacts of the potential measures to achieve targets on businesses and wider society. This analysis will inform an Impact Assessment which will accompany a public consultation in 2022. In satisfying the legal requirements for the targets framework, target development will furthermore be supported and scrutinised by independent experts (academics, scientists and expert practitioners) for each priority area. This process will include quality assurance and assessment of the evidence and analysis of the deliverability and impacts of proposed targets.

Scope of air quality targets

Policy aim, existing measures and progress

The 25 Year Environment Plan sets out our goal of achieving cleaner air, to reduce the environmental and health impacts of air pollution. Whilst air pollution has improved significantly in recent decades, we recognise it is the single most significant environmental public health concern.

The UK has ambitious, legally-binding international and domestic targets to reduce anthropogenic emissions from a broad array of air pollutants stemming from different sources and activities. The National Emission Ceilings Regulations 2018 establishes the “national emissions ceilings” for five of the most damaging air pollutants, namely fine particulate matter (PM_{2.5}), ammonia (NH₃), nitrogen oxides (NO_x), sulphur dioxide (SO₂), and non-methane volatile organic compounds (NMVOCs), and creates the duty to set out measures to meet the 2020 and 2030 emission reduction targets for these five pollutants. The Air Quality Standards Regulations 2010 define legally binding air quality standards to control human exposure to certain pollutants in outdoor air, by establishing maximum allowable concentrations of air pollutants in zones and agglomerations nationwide. In the event of exceedances, the publication of Air Quality Plans is required to ensure levels are reduced and these standards are met.

The Clean Air Strategy (2019) outlined comprehensive action for dealing with all sources of pollution across government and society for the achievement of the national emission ceilings and for the reduction of the impact of air pollution on health and the environment. Furthermore, we are already taking action and introducing new England-wide powers to control major sources of air pollution, as well as tackling local issues, for example through the creation of Clean Air Zones and other non-charging measures.

In order to drive the action needed to clean up our air and further reduce the impacts of air pollution it is important that we have the right set of targets and standards in place. These targets will be in addition to our emission reduction commitments, as well as our existing air quality standards for all currently regulated pollutants, that will continue to ensure a minimum quality of air for all and ensure we are able to take targeted action where those standards are not met.

Objectives for targets under consideration

- reducing the annual mean level of fine particulate matter (PM_{2.5}) in ambient air (as required by the Environment Bill)
- in the long-term, reducing population exposure to PM_{2.5}

Rationale for proposed target scope

The UK currently meets all legally binding concentration limits for fine particulate matter (PM_{2.5}) but we recognise that it is still one of the most damaging air pollutants to human health. PM_{2.5} can penetrate deep into the lungs and get into the bloodstream and has both short term and long-term impacts on human health. Short-term exposure to elevated levels is known to exacerbate the impact of pre-existing respiratory and cardiovascular health conditions, with elderly people and children the most vulnerable groups, whilst long-term exposure is linked to a number of health impacts including respiratory and cardiovascular disease, cancer and dementia.

The World Health Organisation (WHO) publish Air Quality Guidelines to inform the setting of air quality standards based on the impacts five key air pollutants have on human health. These guidelines are not standards as no consideration is given to whether the levels can be reached in any country or region, or indeed how levels could be achieved and at what cost. The WHO Air Quality Guidelines recommend a considerably lower level for annual mean PM_{2.5} than the legal limit in the UK and across Europe (25 µg/m³ in 2019). There is consensus amongst health experts that reducing people's exposure to PM_{2.5} is a key priority for future policy direction.

Reducing the annual mean level of fine particulate matter (PM_{2.5}) in ambient air (as required by the Environment Bill).

By introducing a new concentration-based target we will improve the 'minimum' level of air quality across the country. We have considered the progress our actions to meet our emission reduction commitments will deliver in terms of reducing PM_{2.5} levels across the country and how levels will compare to WHO guideline levels. This was outlined in our evidence paper (<https://www.gov.uk/government/publications/air-quality-assessing-progress-towards-who-guideline-levels-of-pm25-in-the-uk>) published in July 2019. The work stated that whilst it was technically feasible to reach WHO guidelines levels, additional action will be needed in order to reduce levels towards WHO guideline levels most notably in London and other large urban areas. Professor Alistair Lewis (Chair of the Air Quality Expert Group in the UK) outlined during committee stage of the Environment Bill ([https://hansard.parliament.uk/commons/2020-03-12/debates/71fddc61-6807-4b85-941d-3cfbb0ffdca3/EnvironmentBill\(ThirdSitting\)](https://hansard.parliament.uk/commons/2020-03-12/debates/71fddc61-6807-4b85-941d-3cfbb0ffdca3/EnvironmentBill(ThirdSitting))) that it may not be possible to reach those levels everywhere. More work is required in order to establish what an ambitious but achievable target should be (setting a level and a date for achievement).

Whilst a new concentration 'threshold' target will be challenging to meet in certain parts of the country (especially in densely populated urban areas), it will not drive action to improve air quality in parts of the country which already achieve the threshold value. Such a target will also not drive action once that threshold level has been achieved. Therefore, a concentration 'threshold' target alone is unlikely to result in the greatest public health benefit. To put it in context, Public Health England estimate that just a 1µg/m³ reduction in PM_{2.5} concentrations this year could prevent 50,000 new cases of coronary heart disease and 9,000 new cases of asthma by 2035.

In the long term, reducing population exposure to PM_{2.5}

In addition to the concentration target, we are considering introducing a target aimed at reducing average population exposure to PM_{2.5} across England. This target would be aimed at driving continuous improvement across all areas of the country and ensuring action taken is effective in maximising public health benefit. Population exposure reduction is an established regulatory approach for PM_{2.5}, with an existing UK obligation to reduce a measure of average exposure by 15% (from 2010 levels) by the end of 2020. As there is no further commitment beyond 2020, we want to continue to drive action in a similar way given the public health benefits. Population exposure targets are complex, and more work is needed to develop a viable methodology.

The two proposed targets would meet the legal requirement for being objectively measurable. Whilst PM_{2.5} is a complex pollutant, ambient concentrations are an established annual statistic which is used to monitor compliance with existing air quality standards and measure progress towards meeting the existing population exposure target. The evidence base is currently being compiled and developed to consider how both targets would be observed and assessed and how they could be applied and how they could work together to drive effective action. Further analysis is required to set the level of ambition as well as to understand how they can be achieved, and such analysis must consider the full economic impact, affordability, and practical deliverability. In particular, we need to consider what levels of PM_{2.5} are achievable across the country and what actions will be required. This needs to take into account regional differences in part due to factors out of our control (i.e. geography, weather) that result in very different PM_{2.5} levels and challenges across the country. We will involve independent experts in developing these targets and the analysis that will inform them as well as publishing evidence to facilitate that engagement.

Scope of resource efficiency and waste reduction targets

Policy aim, existing measures and progress

We want to achieve sustained improvement across the whole resources and waste system, in line with 25 Year Environment Plan goals to use resources from nature more sustainably and minimise waste.

The Resources and Waste Strategy for England (<https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>) sets our path to drive these improvements. It combines actions we will take now, with firm commitments for the coming years, to meet a clear longer-term policy direction. This includes major reforms to the way resources and waste are managed such as extended producer responsibility schemes, consistent recycling collections and a deposit return scheme for drinks containers. Shifting to a circular economy will spur innovation needed for a more productive and sustainable economy.

Since the 1990s, England has shifted away from a waste management system reliant on landfilling. This has been achieved through our recycling and landfilling targets, as well as the landfill tax ^[footnote 1]. Today, we manage our waste through recycling, composting, anaerobic digestion, energy recovery via incineration and controlled landfilling.

But despite these improvements, we continue to deal with a large amount of waste at the lower rungs of the waste hierarchy ^[footnote 2]. In addition, material resource use in England has continued to grow over this period. The extraction, production and disposal of material resources together exert significant pressure on the environment. All of which can play a systemic role in contributing to biodiversity loss, water stress and greenhouse gas emissions.

Objectives for targets under consideration

We want to explore as a priority how targets can help:

- increase resource productivity
- reduce the volume of ‘residual’ waste we generate

To develop robust, evidence-based targets under the Environment Bill, we will need to meet the criteria and principles set out in Part A of this document. Some targets may take longer to develop and may not be ready for the first suite of targets set by October 2022, or ultimately fall short of the required standard. We will review this as we progress through the target-setting process, but this paper sets our ambition.

Rationale for proposed target scope

Material resources are at the heart of our economy and we consume them in large quantities. They are essential for meeting our basic human needs, supporting economic activity and creating social value. Global resource use is more than three times higher today than in 1970 and continues to grow. Currently, we discard

too many products and materials before their useful life is over. This drives additional resource use and associated greenhouse gas emissions. Although increasing amounts of waste are collected for recycling, much of our waste still ends up being incinerated to generate energy or sent to landfill.

Resource use and waste is a complex system and environmental impacts exist at every stage of a material's lifecycle. It is important to consider how targets can drive long term action across the whole resources and waste system, as changes in one part may impact on others.

Increasing resource productivity

Between 2001 and 2017, England's material footprint (excluding fossil fuels) increased by almost a fifth (16%). Resource productivity measures the economic value per unit of raw material use. Increasing resource productivity through stabilising or reducing our material use, can help us avoid resource depletion and reduce environmental impacts. In addition, resource productivity can build the economy's resilience to price volatility, increase resource security, and enhance our international competitiveness. We want to explore measuring resource productivity as a ratio of national economic output e.g. Gross Domestic Product (GDP), to raw material consumption. Raw material consumption estimates the weight of materials extracted within England to produce goods and services consumed. It also considers the full upstream raw materials required to produce the goods and services that we import. We will need to take account of potential increases in absolute material use when developing a target on resource productivity. Understanding how policies can work to decouple economic growth from raw materials use will be key to developing an effective target.

The Resources and Waste Strategy for England re-affirmed commitments in the Industrial Strategy and 25 Year Environment Plan to double resource productivity by 2050. The target setting process will review the level of this ambition based on the evidence to establish what a legislative target could be.

Reducing residual waste

Residual waste generally refers to the waste collected from households or businesses in a black bag or wheelie bin. This is usually sent for incineration at an energy recovery plant or to landfill. Some is also sent overseas as refuse derived fuel. Reducing residual waste would help address the environmental impacts of treatment, which can include air (including greenhouse gases), soil and water pollution. Reducing residual waste can be achieved by preventing waste from occurring in the first place, or by recycling the waste we do generate into secondary materials (a more sustainable alternative to extracting and processing raw materials).

Through the landfill tax and landfill and recycling targets, we have significantly reduced the amount of residual waste that reaches landfill over the last two decades ^[footnote 3]. Nevertheless, in 2018, more than 11 million tonnes of municipal waste still went to landfill in England and over 50 million tonnes of total waste combined ^[footnote 4] went to landfill or incineration. In the same year, we also sent approximately 3 million tonnes of waste for treatment overseas as refuse derived fuel.

We will explore whether a reduction in the per capita tonnage of residual waste could be the basis for a robust, meaningful target whilst continuing to support frequent and comprehensive household waste and recycling collections. The target would also need to consider whether to incorporate inert mineral waste into the scope of the target as well as how to account for residual waste sent overseas.

The targets developed under the Environment Bill framework will be set at an England level and will not directly pose requirements onto Local Authorities or any other institutions or organisations. Other resources and waste powers sought in the Environment Bill will support attainment of long-term targets. These focus around waste prevention measures and achieving high recycling, for which frequent and high-quality household kerbside collections are an essential component. Early interim targets for residual waste would be based on implementation of existing policy commitments including improving consistent municipal recycling collections utilising powers in the Environment Bill.

Scope of biodiversity targets

Policy aim, existing measures and progress

We want to see nature conserved and enhanced for the good of our ecosystems and the species within them, and for the benefits that they deliver to society, including our economic prosperity. This includes tackling climate change, reducing flood risk, providing recreational opportunities and improving wellbeing. At the global level, the strategic plan for the Convention on Biological Diversity (CBD) provides a framework of goals and targets for halting biodiversity loss. The UK is committed to playing a leading role in developing a new international framework, due to be agreed in 2021, and to making sure that international goals are ambitious and result in real change; and to delivering a credible response to this framework in England.

In our 25 Year Environment Plan we committed to protecting and enhancing England's biodiversity on land, in freshwater and at sea. This includes restoring 75% of our one million hectares of terrestrial and freshwater protected sites to favourable condition; creating or restoring 500,000 hectares of wildlife-rich habitat outside protected sites as part of a Nature Recovery Network; taking action to recover threatened, iconic or economically important species; and increasing the proportion of protected and well-managed seas by implementing effective management measures in our network of Marine Protected Areas – all by 2042.

Reversing the loss of biodiversity is complex and significant action will be needed. This was reflected in the 2020 progress report (<https://www.gov.uk/government/publications/25-year-environment-plan-progress-reports>) on the 25 Year Environment Plan and the Outcome Indicator Framework . There is no single measure of 'biodiversity'; different ecosystems, habitats and species are changing in different ways. Much of England's wildlife-rich habitat has been lost over the last century, and whilst progress has been made in recent decades many habitats are in poor condition and getting worse, and there has been widespread species loss. The main drivers of biodiversity decline are habitat loss and land use change, pollution, invasive species, unsustainable use of our resources, and climate change. Climate change and biodiversity loss are interlinked problems, and nature-based solutions to tackle climate change will be important for reducing pressures on biodiversity and increasing investment in habitats.

To help us meet the CBD's new global targets, and the biodiversity goals in our 25 Year Environment Plan, we have an extensive programme of action. This includes developing a new Nature Strategy that will set out plans in England over the next ten years and link to related strategies, including those for Trees, Peat and Pollinators. Elements of the Nature Strategy, such as establishing the Nature Recovery Network, are underway and will be supported by measures in the Environment Bill ^[footnote 5]. Framed and informed by these commitments and expert consultation, the targets we set under the Environment Bill will create a legally binding means to drive and hold us to account on specific, measurable changes to key components of biodiversity, including for species and habitats.

Objectives for targets under consideration

- improve the quality of habitat on land, including freshwater and coastal sites, expressed through the condition of our protected sites (SSSIs)
- improve the quality of our marine habitat, expressed through the condition of Marine Protected Areas
- improve the overall status of species populations on land and in freshwaters
- restore and create wildlife-rich habitat outside protected sites through appropriate management

Rationale for proposed target scope

Biodiversity targets will create clear legally binding goals and deadlines to make sure we take action to improve the quality of our most important areas for biodiversity, expand habitats to create a bigger, better and more connected network outside of those areas; and improve species status as an indicator of ecologically functioning and resilient habitats. We want targets, informed by robust evidence, to work together to create lasting change for both habitats and species. These, together with other Environment Bill targets, will collectively improve the natural environment by tackling the drivers of biodiversity loss such as poor air and water quality, resource pressures, and waste.

Whilst the UK has some of the best biodiversity data in the world, there are gaps in both our data and our knowledge. Right now, these limit our ability to comprehensively measure changes and to make accurate predictions of the future of habitats and species. We want to improve this over time. The 25 Year Environment

Plan Outcome Indicator Framework provides a robust starting point and includes a set of indicators to track environmental change. We will use these indicators, as well as exploring other sources of evidence, to help us develop the range of targets we think are needed.

Condition of our protected sites (~~SSSIs~~) on land

Sites of special scientific interest (~~SSSIs~~) are our best wildlife sites, containing rare and characteristic habitats. They provide a range of ecosystem services and benefits including improving water quality; regulation of climate; recreation; as well as scope for research and education. Making sure more of our sites (and the special features within them) are in favourable condition will increase their conservation benefits and the ecosystem services they offer.

Improving the condition of protected sites has been a long-standing goal. It was included in the Biodiversity 2020 plan to meet ~~CBD~~ targets and the 25 Year Environment Plan included a goal of 'restoring 75% of the total area of our million hectares of terrestrial and freshwater protected sites to favourable condition'. Setting a target that legally supports that commitment could help drive action by landowners and others and attract investment. Healthy ecosystems within protected sites and restored habitats in the wider countryside will support our ambitions for species recovery.

Natural England is currently working on a programme to improve monitoring of our protected sites. This work, over two years, will help us establish an accurate baseline. As it will not be completed in time for target setting, we will model trajectories for improvement of our sites based on existing data and baselines. This will be challenging as we are still developing our understanding of how these sites will change over time, and recovery of some features can take decades.

Condition of marine protected areas

In accordance with our commitments in the 25 Year Environment Plan we have recently established an ecologically-coherent network of Marine Protected Areas in our seas, which now covers 40% of English waters. We are working towards better management of these sites to improve marine biodiversity. Sites have been designated to protect some of the best examples of our marine biodiversity by protecting specific features, habitats or species, which are listed at the time of designation for each site. Broad conservation objectives, set at the site level, are supplemented by more detailed information describing the condition that features should achieve, and activities and pressures that may have an impact.

In considering the condition of ~~MPAs~~, the aim is to ensure human activities do not result in deterioration from favourable condition ^[footnote 6]. The biological communities within protected habitats are intrinsic elements of ~~MPAs~~ and it is those communities that are vital to conservation success.

This protection confers a legal duty on regulators to make sure that the activities they manage do not damage the species and habitats protected in the sites. The evidence shows that when damaging activities are prevented areas begin to recover, relatively quickly in some cases while slower for others (such as where there are slow growing species with slow reproduction rates). If activities are properly managed, we expect that sites will achieve their conservation objectives.

A legally binding target for Marine Protected Areas could complement and bolster this on-going work and legal obligation to further established conservation objectives, by providing focus for the ambitions with clear aims and a deadline. This could reinforce the existing legal duties of regulators, creating an even stronger framework for us to deliver the 25 Year Environment Plan.

Status of species populations

In the 25 Year Environment Plan we said we would take action to recover threatened, iconic or economically important species of animals, plants and fungi and, where possible, to prevent human induced extinction or loss of known threatened species. We want to provide statutory underpinning to this goal by targeting species abundance throughout the country, not just in protected sites.

Trends show that overall, species populations have declined over the last 40 years. Whilst these losses have slowed down, there is still work to do. People feel an affinity for iconic species, such as birds of prey or butterflies. Our interest in these connects us with nature. Developing a target to support species will help us to engage people about wildlife and galvanise public support for recovery of biodiversity.

How well species are doing also gives us information about wider ecosystem health. Good quality connected habitats support a greater abundance of species. That means a species target will not only help us to prioritise species or groups of species for recovery but also help to support and prioritise actions to improve habitats and the ecosystem services they provide. This will attract investment and action from NGOs, landowners and others including the wider public.

There are different ways to monitor how well species populations are doing, including their extinction risk, their distribution and their abundance. Targets that focus on species abundance and extinction risk may be the most effective in demonstrating progress towards species recovery.

Our most comprehensive species data is about the abundance of species. Using this, we could set a target covering a wide range of species across different habitats, including farmland birds, woodland butterflies and priority species under Section 41 of the Natural Environment and Rural Communities Act. This would require us to take further action towards species recovery and provide information about how well ecosystems are functioning. We would need to carefully consider how to capture changes in populations of very rare species or those with limited distributions, making sure they are not masked by larger changes in populations of more widespread abundant species.

We also want to consider how a target could focus action to reduce species extinction risk, in particular whether this could track the change in the number of species within each International Union for the Conservation of Nature (IUCN) ^[footnote 7] Red List category. This presents challenges in establishing trends and being able to show meaningful change over a defined time period. We would like to measure progress over at least 15 years but recognise that extinction is a very slow process (taking decades to confirm) and there are limits to how frequently the huge number of species within the IUCN indicator can be monitored.

It will be difficult to predict how species populations will change over time – including as a result of implementing new policies – as we consider whether to develop a target or targets for species. We will work closely with experts to model possible trajectories and make sure target development is guided by the best available evidence.

Habitats restored, created and brought into management for biodiversity on land and in freshwaters

We want to increase the amount of good-quality habitat for wildlife in England. Many of our wetlands, woodlands, grasslands and coastal habitats have been lost. While losses have slowed, many natural and semi-natural habitats are in poor condition and getting worse due to past land use and ongoing pressures such as grazing, burning, and poor water and air quality. Patches of habitat are also often very fragmented, isolated and too small to sustain thriving communities of species into the future. The historical data we have on species abundance and distribution consistently link species loss with habitat loss or degradation. Where habitat is restored, species respond, and the flow of wider ecosystem services increases.

In the 25 Year Environment Plan we committed to create or restore 500,000 hectares of wildlife-rich habitat outside of protected sites, as part of a Nature Recovery Network, to complement and connect our best wildlife sites. We said that recovering biodiversity will require more habitat, in better condition, in bigger patches that are more closely connected, in line with Lawton principles ^[footnote 8]. As noted above, the Environment Bill lays the foundation for the Nature Recovery Network that will complement plans for a new Environmental Land Management scheme. However, there is more to do to restore and create habitats, outside protected sites, to help meet our 25 Year Environment Plan commitment.

We are currently developing an indicator to directly monitor the quantity, quality and connectivity of habitats. In time, we want to be able to monitor changes in our hedgerows, hay-meadows and woodlands and set a broad target on the quality of these habitats. This is a huge endeavour, requiring substantial fieldwork to ground-truth our indicator: it will not be available for 3-5 years. We should not wait to take action on habitat loss, so propose

first to consider developing targets that focus on actions to restore and create habitats and bring habitat into appropriate management. This will be an important first step before developing a more complete, outcome-based target or policy measure when advanced data is available.

Other potential target objectives:

We recognise that there are other areas that could be candidates for targets and continue to explore them.

Improving soil health

Soil is a rich ecosystem and one of our greatest natural assets. It underpins food production and provides an essential role for biodiversity, nature restoration, carbon storage and flood protection. Soil is less able to perform these functions when it is degraded. As a priority, we want to work to promote and increase the health of our soils in ways that deliver greater public benefits. We are currently undertaking the following steps to explore how we can improve the health of our soils:

- developing a healthy soils indicator as part of the 25 Year Environment Plan Outcome Indicator Framework. We have established the 5 broad groups of soil types (peat, chalky and limestone, heavy soils (clay dominated), medium soils (mix of clay and sand), and light soils (sand dominated)) which represent over 700 types of soils across England. We are working towards a future soil indicator. This should identify the key biological, physical and chemical soil health variables (e.g. earthworm counts, pH, organic matter etc.) which best inform the condition of each of the 5 broad groups of soil types
- working with stakeholders and experts to further improve understanding of the current picture of soil health and how land management practices impact soils ability to deliver environmental benefits
- the work outlined in the first two bullets would feed into the development of an evidence base that could inform a long-term soil target and our understanding of soil health

These are important first steps we need to take. Only when they are completed can we consider whether this advanced data could inform the development of outcome based targets (if the criteria and principles set out in Part A of this document are met) or any relevant policy measures.

Improving woodland cover

Trees and woodland are critical to supporting our national commitment to reach net zero emissions by 2050, as one of the most cost-effective nature based solutions to climate change. Trees and woodlands also have a critical role to play in recovering nature and promoting biodiversity, supporting our long-term vision set out in the 25 Year Environment Plan.

Government is therefore committed to expanding and managing our woodlands to deliver the multiple environmental, social and economic benefits trees can offer, including a manifesto commitment to increase tree planting across the UK to 30,000 hectares of trees per year by 2025.

We are currently undertaking the following steps to increase planting in England:

- developing a new England Tree Strategy to set out policy changes and proposals to increase tree planting, including riparian planting, protect and improve our existing trees and woodlands, connect people with nature and support the economy
- developing plans to deploy the £640 million Nature for Climate Fund to increase tree-planting in England over this parliament in line with the government's manifesto commitment

As we progress this vital work in the short term, we would also like to develop our evidence and assumptions of whether statutory long-term targets for trees would be appropriate to drive this change.

Scope of water targets

Policy aim, existing measures and progress

A healthy water environment is essential for people, nature, farming and industry. The UK already has a rich regulatory framework for water to protect human health, the environment and the resilience of our water supply.

We committed in our 25 Year Environment Plan to achieve clean and plentiful water by improving at least three quarters of our waters to be as close to their natural state as soon as is practicable. We have made progress in protecting the water environment. We have successfully managed risks from pollution to human health by achieving high standards for drinking water and bathing waters. Furthermore, we have made commitments to protect the resilience of water supply. The 2017 Water Abstraction Plan sets out the government's commitment and actions to protect our water environment. The Environment Bill includes measures to widen the circumstances in which the Environment Agency can manage abstraction sustainably without the payment of compensation. We have taken action on leakage to reduce demand on water.

Substantial investment has been made to improve the water environment and improvements in sewage treatment since 1995 have secured significant environmental benefits. The 2015 River Basin Management Plans confirmed £3 billion investment to improve the water environment over the period to 2021. Water companies have also committed to making an investment of £4.6 billion (2020-25) towards environmental improvements. Despite the significant investment made, progress has flat lined in recent years. In addition, the scale of the challenge is growing as we face increasing pressures, namely climate change, increasing water consumption and population growth. The government is committed to delivering a step change improvement in the water environment, and this will mean taking new and innovative approaches.

River Basin Management Plans establish goals for our waters (rivers, lakes, estuaries, coastal and groundwaters) and set out the steps required to meet them. The Environment Agency is currently consulting on the challenges facing the water environment and how these should be addressed as part of the process of reviewing and updating River Basin Management Plans. Stakeholders may wish to refer to that consultation,¹ which has been extended until 24 September 2020, for a broader analysis of the issues facing the water environment and for an opportunity to comment on how these should be managed.

Target scope currently under consideration

To determine whether a particular river, lake, estuary, nearshore coastal water or groundwater is close to natural conditions we look at a number of measurements. These are designed to assess the overall health and consist of:

- chemistry, including naturally occurring chemicals and chemical pollutants
- biology, including fish, invertebrates and plants present (apart from in groundwaters)
- other conditions, such as amount of water, flow and temperature

We will continue to take action to improve the water environment against all of these measures. To provide a strong focus on action which will help us to make the greatest and fastest progress, we propose to develop new targets which focus on specific pressures that are known to be major causes of environmental degradation, focusing on specific pollutants and on water use, which affects quantity of water and flow. These new targets will help drive action and make progress in key areas to support ecological recovery.

Objectives for targets under consideration

We will develop new targets that reduce significant pressures on the ecological health of the water environment. They will:

- reduce pollution from agriculture, in particular phosphorus and nitrate
- reduce pollution from wastewater, in particular phosphorus and nitrate
- reduce water demand

Rationale for proposed target scope

Despite water quality improving in recent decades, progress has stalled in recent years in the face of continuing pressure on the water environment from human activity. Improvement needs to accelerate again.

The latest Environment Agency analysis (2019) has shown that the two of the most significant pressures on the water environment are rural pollution and wastewater. Latest data (2019) suggests that 40% of water bodies are affected by pollution from rural areas and 36% are affected by pollution from wastewater. Currently 16% of water bodies in England are affected by changes to the natural flow and levels of water, and these effects can be particularly acute in specific areas of the country, where they can have serious effects on rare habitats such as chalk streams. This pressure is expected to increase as the population grows and through the effects of climate change.

Within these pressures, phosphorus is the most significant pollutant in terms of water bodies failing to return to close to a natural state (also known as good ecological status), with over half of rivers failing to meet standards for phosphorus. Nitrate is a significant issue for coastal areas and estuaries. Both phosphorus and nitrate cause eutrophication, which has adverse impacts on aquatic life, water quality and water uses. To achieve the most progress on reducing phosphorus and nitrate, we propose developing specific targets to reduce this pollution from wastewater and agriculture.

Human activity and the needs of the natural environment are placing competing demands on water quantity and flow. Using less water is key to managing the impact on the water environment and ensuring that we have a resilient supply of water. There will be greater pressure on water quantity as our population increases and climate changes. The Environment Agency reported that in England we over abstract from around 20% of rivers and 26% of groundwater bodies. A reduction in water levels means less space for wildlife to live, feed and reproduce. As water levels are reduced, pollutants entering the water environment inflict greater damage as they are less diluted. The result is that rivers cannot provide a healthy environment for fish, insects and plants, and the number and health of species is reduced.

Creating a sustainable balance between agriculture and the water environment

Farmland accounts for 69% of our land in England. Farmers are vital stewards of that land, and the agricultural sector is essential for food production. Despite many positive examples of farmers and farming contributing to the natural environment, many common agricultural practices are harming our environment. This includes impacts on the water environment. This can be caused by agricultural pollutants such as phosphorus, nitrates and sediment entering the water environment. We need to implement better and more innovative ways to prevent agricultural pollutants damaging waterbodies, whilst maintaining a competitive agricultural sector.

Reducing the impact of wastewater on ecology

The water industry is responsible for the vital process of collecting and treating wastewater (water from residential premises, industrial wastewater and contaminated rainwater). Wastewater treatment can cause pollution through day to day discharges of treated wastewater from sewage treatment works and through intermittent overflows into rivers at times when the sewage network becomes overloaded. This can lead to pollutants entering the water environment. These include organic material that depletes the dissolved oxygen in the water, and other pollutants such as phosphorus, nitrates, ammonia, pathogens, and manmade toxic chemicals. 36% of water bodies are being impacted by pollution from wastewater.

Given the significance of phosphorus and nitrate in damaging the ecology of many of our waters, we are initially proposing a wastewater target which focuses on these pollutants in order to ensure that rapid progress is made in reducing their environmental impact.

As our evidence base increases, we will also consider developing targets focused on the other pollutants found in wastewater and on specific issues, such as the impact of Combined Sewer Overflows.

Reducing demand for water to manage the impact on the water environment

Using less water is key to managing the impact on the water environment, especially in light of increasing pressures such as climate change and a growing population. The government has committed to set an ambitious personal water consumption target in the 25 Year Environment Plan. On average, a person in England currently uses 141 litres of water per day. Recognising that 21% of public water supply is also lost in

leakage, and a further 21% is non-household use we are considering an Environment Bill target on overall demand for water: the volume of water distributed or abstracted by water companies. This could reflect both water lost in leakage and a new target on per capita consumption. We continue to look at different ways to protect the resilience and supply of water and are exploring the value that a target may provide to improving the water environment.

We consulted on a range of measures to reduce personal water use in 2019. These included the amendment of existing building regulations and water efficiency labelling. Through the Price Review process, Ofwat can ensure appropriate safeguards are in place to protect low income and other vulnerable customers, and that their water and sewerage services remain affordable. All water companies have existing arrangements in place to assist customers who may struggle to pay their bills through WaterSure, social tariffs and other affordability schemes as payment holidays and payment matching. We will continue to work with water companies to ensure that they can effectively deliver support to those that need it.

We have already set a government target for a 50% reduction in leakage by 2050, and endorsed the industry's commitment to this reduction. A demand target would encourage water companies to go further in this and also reduce non-household water use in conjunction with the retail market.

Other potential target objectives:

We recognise that there are other areas that could be candidates for targets and continue to explore them.

Reducing the impact of chemicals on the water environment

A further pressure is that of chemical pollution. Redoubling our efforts to tackle pollution from wastewater and agriculture can and will help to reduce some of the impact on our surface and ground waters. However, addressing some of the more persistent chemical substances already present in the environment is a far more difficult problem which will take much longer to achieve. We need to think long-term and deploy sustainable solutions. We have demonstrated that this is possible through our ground-breaking programme to tackle the legacy pollution arising from abandoned metal mines. This joint partnership involving Defra, the Environment Agency and the Coal Authority is achieving excellent results, deploying innovative and sustainable techniques and working with others to deliver shared outcomes.

Reducing the impact of pollution from abandoned metal mines on the water environment

Mining in this country has been occurring for centuries and as a result there are thousands of former mines across our landscape today. Most metal mines were abandoned over 100 years ago, but discharges from them continue to pollute over 1,500 km (3%) of our rivers and harm fish, river insects and habitats; they can also have an adverse impact on economic activity. The percentage of rivers impacted is smaller than affected by some other pressures, but the impact is severe. Up to half of the metals such as cadmium, zinc, lead and copper found in our rivers come from these mines, as much as from all other industrial sources combined. We are considering if a target in this area would be beneficial, accelerating the improvements achieved to date.

Reducing the impact of physical modification on the water environment

Physical modification refers to man-made changes that affect the natural characteristics of water bodies, including measures to allow navigation, reduce flood risk or enable farming. This can include straightening of channels, construction of artificial banks or introduction of weirs, sluices and locks. This is a significant pressure upon the water environment. Government has funded £68 million in works to remove and improve modifications between 2009 and 2015, with enhancements impacting on over 4,000 km of water bodies.

Addressing modifications is a complex issue because in many cases they provide important benefits which we want to protect and mitigating their impacts on the water environment needs cooperation from a range of landowners, users and beneficiaries.

We will continue to develop our understanding of this pressure and the possible options for addressing it. We recognise that restoration and improvement of coastal and estuarine water and habitats is an area of particular importance to biodiversity and that these habitats have been significantly impacted by historic physical

modifications. We are interested in exploring this area further with stakeholders to determine whether a target could be developed over the longer term.

Part C: sources of target information and how you can get involved

As Ministers indicated during passage of the Environment Bill, experts, stakeholders and the public have a role in helping us to develop targets.

Experts will be critical in providing us with scientific, economic and practitioner insight. We expect a range of experts to play a role in informing the development of targets including academics, scientists or expert practitioners. As we have referred to earlier in this document, we expect experts to also play a scrutiny role in the evidence-based approach we will be implementing.

A number of external stakeholder specialists, covering a range of interests, will continue to play an important role to inform target development within priority areas. For example, the Air Quality target the Committee on the Medical Effects of Air Pollutants and Air Quality Expert Group represent key expert interests in developing the Air Quality target.

We recognise that environmental targets are of wide interest to a number of you and want to keep you informed whilst we progress through this ambitious programme of work. We want to find the best ways of keeping you abreast of target development. This may include newsletters to communicate our progress or invitations to contribute your views on particular topics (e.g. via online surveys). If you would like to receive such information, please go to our Citizen Space page (<https://consult.defra.gov.uk/natural-environment-policy/environmental-targets-newsletter>) to provide your contact details and signal the target areas of interest to you. We will be carrying out a public consultation on proposed targets, which is likely to commence in early 2022 (this is step 3 of the process as referred to in Part A above). The consultation is expected to be carried out over a three month period. When seeking public views, we will make sure that our proposals reach civil society networks, including youth networks.

Glossary

25 Year Environment Plan

The 25 Year Environment Plan is the document “A Green Future: Our 25 Year Plan to Improve the Environment” which was published in January 2018. It sets out the government’s ten goals for improving the environment within a generation and leaving it in a better state than we found it. It details how we in government will work with communities and businesses to do this. The Environment Bill will see the 25 Year Environment Plan become the first Environmental Improvement Plan.

Environmental Improvement Plan

Environment Improvement Plans are the government’s plans for significantly improving the natural environment. The Environment Bill will require the government to always have an Environmental Improvement Plan in place and that they must each span a period of at least 15 years. The government must review the Environmental Improvement Plan at least every five years. The Environment Bill will provide for the 25 Year Environment Plan to become the first Environmental Improvement Plan.

Environmental Principles

The Environment Bill requires Ministers of the Crown to have due regard to the Environmental Principles Policy Statement when developing policy. Environmental principles are not strict or rigid rules to prescribe a set action, but rather direct the policy-maker towards opportunities to prevent environmental damage. The five environmental principles are the integration, prevention, precautionary, polluter pays, and rectification at source principles.

Interim target

Each long-term target will be accompanied by interim targets, of up to 5 years in duration, that will help set the trajectory for progress. The Bill will require government to set interim targets in the Environmental Improvement Plan. This will ensure that there is always a shorter-term goal the government is working towards, as well as the long-term target.

Long-term target

Long-term targets are the legally-binding targets that will be set in legislation and which span at least 15 years. The Environment Bill will give the Secretary of State the power to set long-term targets relating to matters across the breadth of the natural environment. It will specifically require the government to set at least one long-term target each in four priority areas: air quality, biodiversity, water, and waste reduction and resource efficiency.

Objectively measurable

We want it to be clear when a target has or has not been met. Targets must specify a standard to be achieved, which must be capable of being objectively measured. Measuring targets should be clearly defined and repeatable.

PM_{2.5}

Stands for fine particulate matter that has an aerodynamic diameter of 2.5 micrometres. It is considered the most damaging air pollutant to human health.

Residual waste

Residual waste here refers to waste that has not been reused or recycled. It is usually collected from households or businesses in a black bag or wheelie bin to ultimately end up at an energy recovery plant or landfill.

Significant Improvement Test

The Environment Bill framework requires government to periodically review its targets, by carrying out the Significant Improvement Test at least every five years. The Secretary of State must consider whether meeting the long-term targets and the PM_{2.5} target set under the Environment Bill, together with any other relevant statutory environmental targets, would significantly improve the natural environment in England. The Secretary of State must report to Parliament on its conclusions and, if it considers that the test is not met, set out how it plans to use its target-setting powers to close the gap.

Socio-economic impacts

These are the impacts of the targets including the costs, benefits and distributional effects. These considerations will help inform whether the proposed targets are achievable and affordable whilst still driving the ambitious changes we need to the environment.

Target metric

Target metrics are the measure of a target that show whether its standard has been achieved. For example, for particulate matter PM_{2.5} concentrations, the current legal limit in the UK (and across Europe) is 25 µg/m³. The metric in this case is the amount of PM_{2.5} in a volume of air (m³).

Target standard

Targets must specify a standard to be achieved. The standard refers to a defined level which is either a quantifiable level or quality to be reached.

Umbrella organisations

These are organisations formed of multiple individual interests that have united for a shared goal as one collective group. For example, Greener UK is an umbrella group of 13 different environmental groups (for example RSPB and WWF) or the National Farmers Union represents the interests of thousands of farmers and growers.

1. The landfill tax was established in 1996
2. The waste hierarchy ranks waste management options according to what is best for the environment
3. For instance, local authority collected waste sent to landfill in England fell by over 87% between 2000/01 and 2018/19
4. 29 million tonnes when excluding inert mineral wastes such as sand and gravel
5. These include spatial mapping and planning tools that inform nature recovery; and duties and incentives, like biodiversity net gain.
6. For habitats, favourable condition means that their natural extent is stable or increasing and associated structures, functions, quality and composition of characteristic biological communities/component species are also in a favourable condition and not deteriorating. For species, favourable condition means that the population is supported in numbers which enable it to thrive, by maintaining the quality and quantity of its habitat and the number, age and sex ratio of its population.
7. ~~UNION~~ IUCN is the International Union for the Conservation of Nature. It is a body of thousands of experts and organisations that pool resources and knowledge to monitor the natural world.
8. Lawton, J.H., Brotherton, P.N.M., Brown, V.K., Elphick, C., Fitter, A.H., Forshaw, J., Haddow, R.W., Hilborne, S., Leafe, R.N., Mace, G.M., Southgate, M.P., Sutherland, W.J., Tew, T.E., Varley, J., & Wynne, G.R. (2010). Making Space for Nature: a review of England's wildlife sites and ecological network. Report to Defra.

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