



Department  
for Environment  
Food & Rural Affairs

# Consultation on environmental targets

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Updated to reflect evidence pack and impact assessment publication:

# Introduction

Nature is in decline worldwide, with this decline projected to continue or worsen. We need to take urgent action to halt biodiversity loss to meet our commitment to leave the environment in a better state than we inherited it. Our future target to halt the decline in species by 2030 embodies that commitment.

To support this, we need actions that support our marine environment, improve the water quality of our rivers and freshwater habitats as well as increase our woodland cover. We also need to use natural resources more sustainably and minimise the waste we produce. It is also critical to tackle one of our most pressing environmental risks to public health by taking urgent action to deliver clean air. This work will support the delivery of many of the government's priorities, including those set out in our 25 Year Environment Plan, to reach net zero by 2050, to build resilience against the impacts of a changing climate, and to level up all corners of the country. Enhancing natural capital will also support our food security, health and wellbeing, and economic prosperity.

Legally binding long-term environmental targets will drive action by successive governments to protect and enhance our natural world. They allow for objective scrutiny and accountability of government's progress to society. The duty to achieve targets rests with central government, but delivery will require action across the economy, including a step change in investment flows from the private sector. This is reflected by the government's aim to raise at least £500m in private finance for nature's recovery every year by 2027, rising to more than £1bn a year by 2030. This provides clear signals that investors need to be able to mobilise capital at scale, stimulating innovation and economic growth. In turn this will create and support green jobs.

We are seeking views on the first suite of Environment Act 2021 targets. The Act requires that at least one target in each of four priority areas is set in: air, water, biodiversity, and resource efficiency and waste reduction. It also requires targets to be set for fine particulate matter (PM<sub>2.5</sub>) and species abundance. These targets need to be laid as draft Statutory Instruments by 31 October 2022 and will come into force once approved by Parliament. We are proposing targets that we consider will lead to action in areas that drive environmental outcomes where we face some of greatest threats and pressures. This is why we are considering targets over and above the minimum required; with additional proposals in biodiversity, water, marine and tree planting.

The Environment Act requires the government to always have an Environmental Improvement Plan (EIP) in place. This sets out the steps the government intends to take to improve the natural environment, including measures needed to meet its targets. The first review of the EIP will be completed by January 2023. As part of that review, it will be updated to include at least one interim target for each long-term target that has been set. Once we have finalised the development of long-term targets, we will be able to determine

the contribution that interim targets will make towards meeting the relevant long-term target.

## Part 1: Developing target proposals

We are using a four-step process to systematically develop evidence to inform target proposals and are now commencing Step 3.

**Step 1: Setting the scope of the targets:** Our [August 2020 Targets Policy Paper](#) set out our overall approach to developing target proposals working with experts, as well as how we would involve stakeholders and Parliament. It also described the proposed scope for targets. See the Annex to this consultation for the criteria and principles that have been applied in developing target proposals.

**Step 2: Developing evidence based target proposals:** We have taken a systems approach to consider how targets will collectively drive improvements to our natural environment. For example, we have considered how setting ambitious water quality targets could promote action needed to support wider ecosystems and biodiversity. This is the first time we have been able to take a holistic, evidence led approach to target setting which takes into account our domestic context, rather than acting in a reactive and piecemeal fashion to meet a patchwork of EU and international obligations.

Since August 2020 we have been working with our statutory advisors and wider evidence partners to develop scientific evidence to underpin proposed targets. This has informed how they will deliver an achievable level of improvement to the environment over a given time period, and how this will be measured. Evidence reports<sup>1</sup> for each target proposal have been published alongside this consultation.

Expert groups have been invaluable in helping inform target development. They have provided bespoke guidance on evidence processes and best available evidence. Their insight has informed considerations about the scope and achievability of target options. More detail on their steers can be found in our evidence reports. The terms of reference for expert groups, membership details and minutes have been published<sup>2</sup>.

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<sup>1</sup> Evidence reports for all target areas are published at <https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets>

<sup>2</sup> Target Expert Group details are as follows

Biodiversity Target Advisory Group at: <https://www.gov.uk/government/groups/defras-science-advisory-council>

Resources and Waste Targets Expert Group at: <https://www.gov.uk/government/groups/resources-and-waste-targets-expert-group#minutes>

We have also been identifying potential measures to deliver proposed targets. Impact Assessments for each target area analyse potential delivery measures. The analytical approach is summarised in an overarching Impact Assessment<sup>3</sup>. This analysis has informed our assessment of target achievability and affordability.

**Step 3: Public consultation on target proposals:** Consultation views will help inform and finalise target proposals.

**Step 4: Drafting target legislation, to be laid before Parliament by 31 October 2022:** Target Statutory Instruments will come into force once approved by Parliament.

## Part 2: Responding to this consultation

A wide range of stakeholders have a role in helping us to develop targets. This consultation starts on 16 March 2022 and closes on 27 June 2022. We strongly encourage responses via an online survey on Citizen Space, an online consultation tool. Consultations receive a high level of interest across many sectors and using the online tool assists our analysis of responses, enabling more efficient and effective consideration of issues. However, responses can be sent by email or post. In your response please state:

- Your name
- Your email address (If you are providing a second response following the publication of the supporting evidence documents, please use the same email address as used in your first response. This will help with our consultation analysis.)
- Your organisation (if applicable)
- Whether you would like your response to be confidential (if yes, please state your reasons)

Enquiries and responses should be directed:

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Trees and Woodland Scientific Advisory Group at: <https://www.gov.uk/government/groups/trees-and-woodlands-scientific-advisory-group#minutes>

Water Targets Expert Advisory Group: <https://www.gov.uk/government/groups/water-targets-expert-advisory-group#minutes>

Committee on the Medical Effects of Air Pollutants at: <https://www.gov.uk/government/groups/committee-on-the-medical-effects-of-air-pollutants-comeap#minutes>

Air Quality Expert Group do not upload their minutes however they are available upon request and contact details can be found at: <https://uk-air.defra.gov.uk/research/aqeg/>

<sup>3</sup> Impact Assessments for all target areas have been published at <https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets>

The government will publish a biomass strategy in 2022 which will review the amount of sustainable biomass available to the UK and how this resource could be best utilised across the economy to help achieve our net zero target by 2050.

#### Questions:

- Do you agree or disagree that short rotation coppice and short rotation forestry plantations should be initially excluded from a woodland cover target? [Agree/Disagree/Don't know]
- Do you agree or disagree with the proposed inclusion of trees in woodlands, as well as trees in hedgerows, orchards, in fields, and in towns and cities? [Agree/Disagree/Don't know]

### Why we are proposing it at this level

The target to increase tree and woodland cover in England from 14.5% to 17.5% by 2050, would represent a step-change in woodland creation which would mean 420,000 more hectares of tree cover in England. This is significantly higher than the 25 Year Environment Plan ambition, it represents an unprecedented increase in afforestation for England and could sequester a total of 170 million tonnes carbon dioxide by the end of the century, equivalent to around half the UK's CO2 emissions in 2020. Although this target is challenging, the actions the Government is currently taking to deliver the England Trees Action Plan, kickstarted by the Nature for Climate Fund, will get more trees planted to meet this target. Investment in enablers will be critical such as ensuring sufficient supply of saplings and a skilled workforce to deliver woodland creation.

#### Questions:

- Do you agree or disagree with our proposed level of ambition for a tree and woodland cover target? [Agree/Disagree/Don't know]
  - [If disagree] What reasons can you provide for why the government should consider a different level of ambition?

## Target proposals for resource efficiency and waste reduction

### The problem

Since the 1990s, England has successfully shifted away from a waste management system reliant on landfilling. Today, we manage our waste through treatment options such as recycling, composting, anaerobic digestion, incineration (including with energy

recovery) and controlled landfilling. But we continue to send large amounts of waste to treatment processes which have more harmful impacts on the environment. Simultaneously, material resource use in England continues to grow. The extraction, production and disposal of material resources produces significant environmental pressure.

In 2019, 29 million tonnes of waste (excluding major mineral wastes) were sent to landfill, energy recovery or incinerated, with nearly half landfilled<sup>22</sup>. In the same year, approximately 3 million tonnes of waste were sent for energy recovery treatment overseas<sup>23</sup>.

## Proposed target to address it

- Reduce residual waste (excluding major mineral wastes) kg per capita by 50% by 2042 from 2019 levels. It is proposed that this will be measured as a reduction from the 2019 level, which is estimated to be approximately 560 kg per capita<sup>24</sup>.

Residual waste originates from a range of sectors, including households, (“black bag waste”) commercial and industrial, and construction, demolition and excavation sources. It is usually sent for incineration at an energy recovery plant or to landfill. Tackling residual waste reduces the environmental impacts of treatment, including air, soil, and water pollution, and unnecessary energy use. It is more sustainable to prevent waste completely and, where waste is unavoidable, to recycle it.

Our proposed target includes all residual waste, excluding major mineral wastes. These are largely inert waste categories from construction and demolition, and excavation and mining activities. This focus will ensure attention on where the environmental impact is greatest, and where our evidence is strongest. The large tonnages associated with major mineral wastes would also risk perverse outcomes if they were included, because the target could be achieved more easily by focussing on these wastes rather than those we believe have greater environmental impact.

The proposed target ensures that a holistic view of waste is taken, which avoids potentially perversely incentivising material substitution with potentially worse environmental impacts through material specific targets. To address the significant public concern towards plastic

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<sup>22</sup> [Environment Agency. Waste Data Interrogator; 2019](#)

<sup>23</sup> [Environment Agency. International Waste Shipments exported from England; 2022](#)

<sup>24</sup> Derived from ‘Waste Data interrogator’ and International Waste Shipments data; see Resource efficiency and residual waste Evidence Report; Methodology; Evidence to inform ambition level published at <https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets>

waste, there is a separate, existing government commitment within the 25 YEP to eliminate avoidable plastic waste by 2042.

**Questions:**

- **Do you agree or disagree with the proposed scope of the residual waste target being ‘all residual waste excluding major mineral wastes’?**  
**[Agree/Disagree/Don’t know]**
  - **[If disagree] What reasons can you provide for why the government should consider a different target scope?**

The proposed target can drive both waste minimisation and recycling of unavoidable waste. Measuring in relation to population size ensures a target remains comparable over time and isn’t affected by impacts beyond our control. This is described in Figure 1 below.

**Figure 1: Proposed metric for reducing residual waste**

$$\text{Residual waste (excl. major mineral waste) per capita (kg)} = \frac{(\text{Tonnes of waste sent to landfill + put through incineration + sent overseas for energy recovery + used in energy recovery for transport fuel excl. major mineral waste}) * 1000}{\text{Population}}$$

We propose to measure at the end-point of waste management to include the treatments that are typically associated with mixed residual waste, covering waste that is sent to landfill, put through incineration (including energy from waste incineration), sent overseas for energy recovery or used in energy recovery for transport fuel. The government will continue to review which treatments are appropriate to include as new technologies and treatment options emerge. Environment Agency data on permitted waste site activities and international waste shipments will be used to report on the metric. This will provide a robust approach, recognising that there is limited data availability at the point waste is collected.

Incineration with energy recovery is preferable to disposal of waste via landfill or incineration without energy recovery. However, it is important to include all of these treatment options to:

- a. provide the best proxy measure for waste that isn’t separately collected;
- b. help drive real improvement via waste minimisation and increased recycling, rather than simply diverting waste from landfill to incineration with energy recovery.

The proposed target excludes waste sent for anaerobic digestion (AD), which treats separately collected food waste. AD is one of the least detrimental end of life treatment options for food waste, when considering climate change impacts and depletion of natural

resources<sup>25</sup>. It recycles food into digestate fertiliser and recovers energy from biogas. We are exploring how AD may be used in the future to generate carbon dioxide from waste.

Data will be required to develop robust indicators to monitor progress towards a target related to residual waste, future recycling targets and landfill reduction targets. Until recently, there was a legal requirement on Local Authorities (LAs) to provide data on waste, which would assist in this monitoring<sup>26</sup>. To ensure such data will be available, we propose reinstating a similar obligation for LAs in England to provide it.

#### Questions:

- **Do you agree or disagree that our proposed method of measuring the target metric is appropriate? [Agree/Disagree/Don't know]**
  - **[If disagree] What reasons or potential unintended consequences can you provide or foresee for why the government should consider a different method?**
- **Do you agree or disagree that local authorities should have a legal requirement to report this waste data, similar to the previous legal requirement they had until 2020? [Agree/Disagree/Don't know]**

### Why we are setting it at this level

The proposed target level is based on modelling the collective impacts of the planned Collection and Packaging Reforms (CPR) on residual waste, as well as considering potential future pathways. These could include policies to separate more waste materials for recycling and to divert waste from residual waste treatment. The Government believes it is important that local authorities continue to support comprehensive and frequent rubbish and recycling collections to households. Our consistent collection proposals have included consulting on expanding food waste collections, supporting garden waste collections, and introducing a minimum collective frequency for residual waste. Such reforms would help ensure households continue to have access to a comprehensive and frequent service, whilst improving environmental outcomes.

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<sup>25</sup> WRAP. *Environmental Benefits of Recycling: 2010 Update*. Available from:

<sup>26</sup> Detailed in Resource efficiency and waste reduction Evidence Report; Methodology; Evidence to inform baseline published at <https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets>



This target is ambitious, with the major changes set out in CPR only expected to get us halfway towards our target. Meeting the target will require progress beyond the current commitment to achieve a 65% municipal recycling rate by 2035, and would represent a municipal recycling rate of around 70-75% by 2042. This pathway assumes sufficient private investment in necessary infrastructure and significant behavioural change.

#### Questions:

- Do you agree or disagree with the level of ambition proposed for a waste reduction target? [Agree/Disagree/Don't know]
  - [If disagree] What reasons can you provide for why the government should consider a different level of ambition?

## Resource productivity

In the Resources and Waste Strategy (RWS)<sup>27</sup>, we set a strategic ambition to at least double resource productivity by 2050. Resource productivity measures the economic value per unit of raw material use. Given the complexity of the resource productivity target, more time is needed to develop the evidence base and assess policies. We seek views now to inform future work on developing this target.

Between 2001 and 2018, England's material footprint (excluding fossil fuels) decreased by 15%<sup>28</sup>. Increasing resource productivity through further 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 are exploring how we might measure this as a ratio of economic output (gross domestic product) in money value to raw material consumption (excluding fossil energy carriers) estimated by material weight (i.e. gross domestic product divided by raw material consumption). This indicator is published on an annual basis by Defra as part of the RWS 'monitoring progress' publication. The evidence report<sup>29</sup> sets out further details of the development of this target area.

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<sup>27</sup> HM Government. Resources and Waste Strategy for England. Available from:

<https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>

<sup>28</sup> HM Government. [England's Material Footprint: 2021](#)

<sup>29</sup> Detailed in the Resources and Waste Evidence Report: Introduction; Context published at

<https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets>