

Why the government's 'significant environment improvement' test misses the mark

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Background

Using its powers under the Environment Act 2021, the government has set a suite of legally binding targets across four priority areas of air quality, water, biodiversity and resource efficiency and waste reduction, as well as a target to halt the decline in species populations by 2030.

These targets were due to be published by 31 October 2022, but were delayed until [16 December 2022](#), eventually entering into law on 31 January 2023. On the same day, the government published the first [Environmental Improvement Plan](#), which updates the 25 year environment plan.

The Environment Act requires the Secretary of State to review the suite of environmental targets set under sections 1 to 3 at least every 5 years, on a similar cycle to the refresh of the Environmental Improvement Plan. The [first review](#) of the targets in relation to the "significant improvement test" (SIT) as required under section 7 of the Environment Act, was carried out on 31 January 2023.

In [response](#) (see page 2) to stakeholder views, Defra stated that "The approach used for the first SIT review may be built upon in future tests as our evidence base and analytical capability continues to improve. We will be interested to hear expert stakeholders' views on the first SIT review and how it could be developed in the future."

This note sets out views from Greener UK and Wildlife and Countryside Link on the test and how it might be strengthened in future reviews.

The significant improvement test

The significant improvement test considers statutory targets collectively. These can include other targets in addition to those set under the Environment Act, provided they meet certain criteria, such as being contained in legislation, objectively measurable and with an end date. It is a subjective test and is met if, in the Secretary of State's view, meeting these targets would significantly improve the natural environment in England. There is no detail in the Environment Act or its explanatory notes on what is meant by "significant" nor on how the test is to be conducted, requiring only that the review is laid before Parliament and published.

During the parliamentary passage of the Environment Bill, Minister Pow gave some detail on how the government envisaged the test would work. She [said](#) that "it will be for the Government, in carrying out all the reviews and procedures that happen, to determine what "significantly" means. There is no single, overarching metric for the environment...so creating an objective test here is impossible. However, we take "significantly" to mean that only small, marginal or fractional improvement of the whole environment, or dramatic improvement in just a few narrow areas of the natural environment, would not be acceptable. We could not fudge it and get away with doing a few small things or one or two dramatic things and say, "That's it." That just would not work."

According to the [first review](#), the purpose is to “assess whether meeting our statutory targets would significantly improve the natural environment in England”. It is therefore based on an assumption that may or may not prove to be correct and is not an assessment of progress towards the targets.

In the absence of a definition of “significant” in the Act, Defra has taken it to be a meaningful step forward, not merely marginal or small improvements. The improvement needs to be spread across the whole environment and not confined to a few limited areas, and it must move us significantly closer to the key outcomes specified in the Environmental Improvement Plan.

Defra published a [brief document](#) setting out the overall outcome, scope and methodology of the test, and then the assessment itself. Annex A contains a list of around 40 statutory targets included in the significant improvement test review, a large proportion of which (more than half) relate to air quality. The environment is broken down into 6 components: air, water, species & habitats, marine, land & soil, resources & waste, and each was assessed as to whether meeting relevant targets would result in significant improvement. Little detail was provided to support the conclusions.

For the process itself, the Secretary of State did not seek advice from external stakeholders, and there was no public consultation.

The result of the significant improvement test review

The discretionary nature of the review does mean that, in practice, the Secretary of State is marking her own homework. In the absence of external engagement or advice, this raises concerns about whether the review is sufficiently objective or accurate.

The assessment concludes that meeting the targets would lead to a significant improvement in all six components of England’s natural environment “based on the breadth and degree of improvement to our natural environment that would be achieved by meeting statutory targets”.

Given the subjective nature and hypothetical framing of the test, it is not surprising that the Secretary of State has concluded that the test has been met.

Key questions

The key questions that arise at this stage are:

- **Whether the correct targets have been identified and if any relevant targets are missing from the Secretary of State’s assessment.**
- **The degree of certainty that the identified targets will all remain in place, and in particular the impact of the Retained EU Law (Revocation and Reform) Bill.**
- **If the targets collectively amount to a significant improvement in England’s natural environment (based on the assumption that they will be met).**

The question about the appropriateness of the statutory targets that have been relied on is bound up with the timing of the review itself. With a series of end dates for the targets set under sections 1 to 3 (including 2030, 2038, 2042 and 2050) we expect that the assessment would have to be based on a notional future time from which to draw the conclusions, although it is unclear what date Defra has relied on for this.

Depending on what date is chosen, the breadth and degree of improvement could vary, according to what target legislation is extant at that moment in time. It is therefore hard to ascertain whether the test has been meaningfully carried out as there is no detail about this element in the methodology, apart from a brief mention that the Secretary of State had to “look forward” at what is expected to be achieved.

There is no clarity on the fate of some of the earlier target end dates. For example, it is not known what the government will decide regarding the 2027 target condition in the Water Environment (Water Framework Directive) Regulations 2017. Will this be rolled forward, replaced with something more/less ambitious or a gap created? Given that the River Basin Management Plans illustrate the government’s “low confidence” in the measures set out for achieving the targets for 2027 and because the narrow Environment Act targets for water do not bite for another decade, there is a real risk of little or no improvement over this period, or river health going backwards. Thus, again the date chosen as the basis for the test is very important.

There is a large degree of uncertainty about the legal basis for most of the targets in Annex A. Apart from the targets in the Environment Act 2021 and Climate Change Act 2008, all of the other air and water quality targets are retained EU law (REUL). As such, targets derived from the Water Environment (Water Framework Directive) Regulations 2017, the National Emission Ceilings Regulations 2018 and the Air Quality Standards Regulations 2010 could be readily changed under the powers of the REUL Bill if that receives Royal Assent in its current form. They are also at potential risk of automatically disappearing from the statute book unless they are purposely retained in law before the ‘sunset’ date.

The wide powers of the REUL Bill would allow future Secretaries of State to change these targets at their discretion. Clause 15 would place a significant blocker on the introduction of additional or more ambitious statutory targets, because of its stipulation that any replacement legislation must not increase regulatory burdens.

Further uncertainty stems from the Environmental Improvement Plan, which states on water policy, for example, that Defra will “reform the current framework and rationalise the number of regulatory plans to create a more efficient system...” but gives no indication of what this might involve.

While we recognise it would be unreasonable to expect precision about the future legislative targets landscape, the veracity of the significant improvement test review is undermined by both its reliance on legislation whose targets will have expired in the relatively near future and the failure to acknowledge the uncertainty created by the REUL process.

Assessing the conclusions

In terms of whether the targets themselves are sufficient to drive a significant improvement, consultation responses from [Wildlife and Countryside Link](#) and the [RSPB](#) on the proposed biodiversity targets, and [submissions](#) to the House of Lords Secondary Legislation Scrutiny Committee to inform its scrutiny of the targets statutory instruments, raised a number of concerns about the scope and ambition of the targets.

Biodiversity

For species and habitats, the overall conclusion that significant improvement would result from their being met is difficult to justify. The biodiversity targets suite has weak ambition, casting doubt on whether they would collectively deliver a significant improvement.

The long term species abundance target does not require the increase to be statistically significant, meaning that the 2042 value could be greater than the 2022 value by an infinitesimally small amount and the target would be met.

The species extinction risk target only calls for a reduction in the risk of extinction by 2042, with no qualifier of “significant” or quantification of the reduction that would qualify as such (notably the Kunming-Montreal Global biodiversity framework requires extinction risk to reduce tenfold by 2050). Presumably this is why the review makes no mention of the species extinction risk target in its brief analysis, although the target was listed in Annex A as having been considered. It also allows 20 years to elapse before any improvement is required which is not commensurate with the scale of the nature crisis.

The target for the creation and restoration of 500,000 ha of wildlife rich habitat by 2042 was relied upon, despite this being a gross target that does not properly account for habitat that is lost or damaged over this period. It is therefore unclear what net habitat creation there will be, lending uncertainty to any conclusion that there will be significant improvement.

Water

For water, as mentioned above, the Water Framework Directive Regulations are relied on for the period to 2027, but no comment is made about what mechanism would maintain or drive forward progress once this target lapses or whether it will be replaced. The Environment Act targets aiming to reduce specific pollutants lack ambition and rely too heavily on modelling and self-reporting. They also represent a siloed approach – progress could be made against these individual targets while the overall health of water bodies fails to improve. The water demand target is based on a per capita figure and so any increase in the population could permit additional abstraction and therefore reduce water availability for the natural environment and undermine the test.

Marine

For the marine environment, the target is only concerned with the condition of features in England’s Marine Protected Areas, which although amounting to coverage of around 40 per cent of England’s waters, still leaves 60 per cent without the benefit of a target. In addition, within Marine Protected Areas the target is not focused on the overall quality of the ecosystem, but on a subset of 150 species and habitats.

Air quality

For air quality, the PM2.5 targets set under the Environment Act lack significant ambition and are of narrow scope. The target to reduce annual mean concentrations of PM2.5 pollution to below 10ug/m³ by 2040 appears unlikely to deliver a significant improvement beyond the “business as usual” scenario in most areas of the country.

While the second target to reduce exposure to PM2.5 by 35 per cent by 2040 could help to drive improvements in lower pollution “background” areas, it excludes from its scope measurements from hotspot sites such as roadside locations, and would therefore provide no significant benefit to the many people living, working and learning in those areas, and risks widening (rather than improving) disparities in health related to air quality.

No new targets have been set for any of the other harmful air pollutants, most notably nitrogen dioxide/NO₂, a toxic gas which remains at concentrations above WHO guidelines in all reporting zones across the UK. Although the Air Quality Standards Regulations 2010 contain a concentration limit value for this pollutant, this is four times weaker than WHO guidelines.

Moreover, the limit values contained in this piece of legislation alongside the NOx emissions reductions commitments set out in the National Emission Ceilings (NEC) Regulations 2018 are under threat from the REUL Bill, with no clear government commitment on whether or how these protections will be maintained. There is therefore a risk that relying on existing legislative protections could result in the deterioration (rather than the significant improvement) of air quality in relation to these pollutants.

Finally, we note that the significant improvement test review relies upon the emission reduction commitment for ammonia under the NEC Regulations 2018. However, it fails to reflect the fact that the government has recently changed its accounting methodology for ammonia emissions, excluding a large and growing emissions source for the purposes of assessing compliance. This accounting change severely undermines the ambition of the existing ammonia emission reduction commitments, and reduces the incentive on the government to take tough action to reduce ammonia emissions. It therefore seriously calls into question whether the existing ammonia emission reduction commitment in the NEC Regulations will in fact deliver a significant improvement in air quality.

Resources and waste

By failing to set a target for resource use or efficiency, the government is not supporting a significant improvement to the resources component. This is the more important component of resources and waste, as extraction and processing of materials is where the bulk of carbon and other impacts arise. Moreover, the target for reducing residual waste excludes the majority of waste produced in England, so, in only addressing a minority of waste, it is difficult to justify that it will result in a significant improvement. The 50 per cent reduction target excludes major mineral wastes created from construction, demolition and excavation (CD&E) activities, which account for 62 per cent of England's waste. This provides little incentive for change in the construction industry, which uses more resources than any other sector in the UK as well as producing the most waste.

Conclusion

It therefore cannot be said with any degree of confidence or certainty that the existing targets, if met, would be likely to significantly improve the natural environment in England. We recommend that Defra provides more information about how the conclusions in the review were reached, acknowledges the uncertainty presented by the REUL Bill and commits to preserving all the existing targets in REUL that are relied on in the review.

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