Department for Environment, Food and Rural Affairs Consultation: Draft Policy Statement on Environmental Principles

Written submission of the Institution of Environmental Sciences (IES), May 2021

Question 1. Would you like your response to be confidential? (If you answered Yes to this question please give your reason)

No

Question 2. What is your name?

Joseph Lewis

Question 3. Are you responding:

On behalf of an organisation

Question 4. What type of organisation are you responding on behalf of?

Non-governmental organisation

Please provide your organisation's name.

Institution of Environmental Sciences

Question 5. Do you think the overview section provides an adequate foundation for policy makers to apply the environmental principles in policy-making? (Yes/No/Other – Please provide any additional information in support of your answer)

Other.

The IES has two concerns with the draft overview section's ability to provide a foundation for policy-makers to correctly apply the environmental principles.

First, the overview may be inadequately limiting the proper application of the environmental principles by speaking exclusively in terms of "the natural environment". This is partially addressed within our organisation's response to Question 6, however if the definitions provided within step one are not supplemented, the overview will also be failing to provide an adequate foundation for applying the principles, as policy-makers will not be equipped to appreciate the full scope their policies may have for affecting the environment.

Second, the definition of sustainable development provided would benefit from a more explicit contextualisation of what the trade-offs are likely to mean. This will help policy makers understand how the application of the principles interacts with this objective. This could be easily achieved with reference to the Sustainable Development Goals as an

example, which are an internationally-accepted framework for creating sustainable, fair, and resilient communities.

Question 6. Do you think step one allows policy-makers to correctly assess the potential environmental effects of their policy? (Yes/No/Other - Please provide any additional information in support of your answer)

No.

The IES has two concerns with step one's ability to allow for correct assessments of environmental effects of policies.

Firstly, the overview may be inadequately limiting the proper application of the environmental principles by speaking exclusively in terms of "the natural environment". The policy statement should clarify what should be understood as being the "natural environment" beyond the wording of the Environment Bill's definitions.

In order to correctly make assessments about environmental effects of policies, it is crucial that all relevant policy-makers have shared understandings of what is meant by the natural environment. A definition should be comprehensive and explicit to avoid excluding potential environmental impacts.

A useful example of a more nuanced explanation of the natural environment is given in Natural England's Action Plan, which goes beyond general descriptions to explain that "*nature encompasses not only the natural beauty, wildlife and geology that underpins landscape character and the habitats on which our most precious species depend but also our historic and cultural connections with nature - for example through art and literature - and the opportunities we have to connect with the environment. Our understanding of nature covers the whole natural world on earth and at sea, and encompasses the natural environment in our towns and cities as well as the countryside*."

The IES would recommend providing these types of supplementary details to support the Environment Bill's definition, as policy-makers will often be operating without expert knowledge of the environment.

Secondly, step one, as currently formulated, is not likely to be sufficient to allow policy-makers to correctly assess the environmental effects of their policy at a system level. As the proportionality criteria suggests policy-makers should only consider issues which are likely to occur with significant impact, there is a high likelihood that the effects of policies on natural systems will rarely be fully considered.

The policy statement rightly recognises the importance of natural systems, however these systems can be affected in complex and non-immediate ways by policies. Where the impact of individual policies on a given natural system may be small or limited, leaving out considerations which have a smaller impact may lead to multiple policies cumulatively increasing pressures on systems to the point that they become significant.

These concerns may be exacerbated by the reference to "lighter-touch" approaches, which are suggested "where appropriate". Without an explicit definition of the circumstances where this approach would be appropriate, there is considerable scope that it could be interpreted loosely by policy-makers as a justification to minimise environmental considerations beyond immediate and obvious effects.

As the policy statement rightly recognises the importance of safeguarding the environment as a whole, the current construction of step one provides too much scope for a form of interpretation which would lead policy-makers away from correct assessment of potential environmental effects of policy. This approach also appears to be in conflict with the precautionary principle, potentially requiring explicit and clear evidence of environmental impacts before policy-makers should even consider the environmental effects of their policies, even where there is plausible reason to believe that negative impacts should be expected from a policy.

Question 7. Do you think step one ensures that policy-making will address the most important environmental effects? (Yes/No/Other - Please provide any additional information in support of your answer)

Other.

While step one provides a useful framework for ensuring the most significant environmental effects are likely to be addressed, some of the most important considerations which should be addressed through these principles may not be adequately addressed. Specifically, the effects of some policies on natural systems may not be adequately addressed through step one, as noted in our response to question 6.

The reason this will also make it more challenging to address the most important environmental effects is that often the effects with the biggest consequences are those related to natural systems being influenced over time by multiple pressures from different causes. For example, soil systems may be subject to diverse pressures from agricultural policy, water regulations, chemical regulations, forestry, and construction. Within each policy decision in each of these areas, it is possible that the immediate effects on soil systems would not meet the proportionality criteria set out in step one. However, the overall consequence of not considering these effects would be a significant negative effect on the overall state of soil systems, which may have serious negative consequences for the natural environment as a whole.

Consequences for natural systems are also some of the most important environmental effects for the environmental principles in particular to address, as many of the more immediate environmental effects of policy are already addressed to some extent by existing processes. These systems are crucial to safeguarding the environment as a whole and an approach which only considers atomistic pressures once they cross a threshold of significance is unlikely to adequately protect against the most important negative effects on the environment.

Question 8. Will step two assist policy-makers in selecting the appropriate environmental principles? (Yes/No/Other - Please provide any additional information in support of your answer)

Yes.

Step two does provide a useful summary of the principles and their application, though many of the explicit explanations for when a given principle should be selected are not given until step three. These explanations are useful even though they are not explicitly given in this step.

It should also be noted that policy-makers will need to be able to understand the wider relevance of the principles in order to appropriately select them. For example, when choosing between the prevention principle and the rectification at source principle, policy-makers need to be able to answer the question of whether environmental damage can be prevented, which will require them to have understanding of the effects policies will have on entire natural systems.

Appropriate environmental expertise must be available to policy-makers to ensure the correct principle is selected. As a worked example, a policy-maker may realise that their policy will require that an area of land is built in, leading to the sealing of a large area of soil. They might identify that this has likely consequences for the risk of flooding in the local river catchment, with significant environmental and social consequences. In order to address this, the policy-maker could apply the rectification at source principle, integrating some form of flood defence into their policy design.

However, this would not recognise the additional pressure placed on ecosystems; either in terms of the original policy affecting land-based ecosystems, or from the new flood defences on river ecosystems. Increasing that pressure, particularly where multiple pressures arise from different policies, could lead to a significantly rising pressure on nature and ecology.

Taking a systems approach would more immediately recognise the need to apply not just the rectification at source principle, but also another principle, such as prevention, to address the effects on ecosystems and biodiversity. Currently, there is no way to ensure that policy-makers will have these scientific understandings available to them. Additionally, the need to consider multiple principles and the inadvertent consequences of selecting one principle are not effectively recognised in step two of the policy statement.

Question 9. Do you think step three provides a robust and sufficient framework for the application of each individual environmental principle? (Please provide your reasons where you have answered No or Other)

a. Integration (Yes/No/Other)

Other.

The integration principle is conceptually vital for ensuring a unified and consistent approach to environmental protection. However, in order to gain the benefits of this approach, the

current details in step three are insufficient. This principle should be the means by which natural systems are properly considered. As the principle seeks to ensure that all policies approach the environment with holistic considerations which avoid unintended consequences, policies cannot be said to have been properly integrated without considering how the policy fits into the natural systems it affects as a whole.

To ensure that the principle is sufficiently able to ensure robust environmental protections, step three should represent these system considerations, ideally with reference to how sound environmental science and understandings can support a systems framework for approaching the ways that policies could affect the environment.

b. Prevention (Yes/No/Other)

Other.

The prevention principle will sufficiently allow for the prevention of some environmental harms, however step three may lead to insufficiencies in addressing some policies and their effects. There are two potential challenges presented by the current formulation of step three.

First, footnote 7 concedes that this principle will only serve as a general driver of preventing environmental harm, and that some environmental harms will not be prevented. The footnote is correct in recognising that some forms of environmental harm will not always be able to be prevented, though its inclusion in its current form could be seen as a license for policy-makers to take passive approaches to the application of the principle, leading to environmental harms which could have been prevented. To be sufficiently effective, the expectation under the principle should explicitly be that the majority of environmental harms can be prevented.

The IES would recommend making it explicitly clear within the footnote that in these rare and inevitable situations where environmental harm cannot be prevented, one of the other principles should be selected. Although this is clear from the document in general, the absence of reference to other principles within this caveat may lead to undesirable outcomes which undermine the scope of the prevention principle.

The second concern with the prevention principle as described in step three is that the scope only applies to the ways that policies can cause active harms to the environment. There are many scenarios where the selection of one policy instrument over another causes harm not through the instrument selected, but by omission where the design of a policy would be able to secure crucial environmental benefits.

As a worked example, when putting in place the rules surrounding an urban development, the selection of conventional drainage systems may not necessarily lead to active environmental harms in all cases, but would preclude the ability to implement Sustainable Drainage Systems (SuDS) which are often necessary for preventing environmental (and socio-economic) harms taking place in adjacent natural spheres, and which may have additional environmental benefits for buffering against environmental harms to ecosystems and the climate.

If the intention of the prevention principle is to ensure that policy-makers make choices which prevent environmental harm overall, there should be no distinction between a policy choice which actively causes that harm and one where the harm is caused by avoiding a policy choice which could prevent that harm occurring elsewhere. By encouraging policy-makers to select the prevention principle where their policy itself is likely to cause environmental harm, step three currently does not consider the inherent trade-offs being made by some policy decisions.

c. Rectification (Yes/No/Other)

Yes.

The rectification at source principle is useful and is sufficiently constructed in step three to address environmental harms. To enhance it further, it is important to ensure that policy-makers are able to properly understand what the "source" of a given harm is, particularly in the context of complex natural systems where a single harm may be caused by multiple inputs or pressures.

This could easily be reflected in the second step under 'the application of the rectification at source principle'. The rectification at source principle would also benefit from ensuring policy-makers have access to sound environmental expertise to support their decision-making.

d. Polluter pays (Yes/No/Other)

Yes.

The polluter pays principle is a good example of a detailed and nuanced approach which correctly involves evidence and insights from the environmental sciences. The use of worked examples such as the plastic bag charge has helped to make this principle clear and sufficiently robust. Similarly, the inclusion of the Farm Inspection and Regulation Review as further guidance for how to apply the principle in practice gives a clear insight into how policy-makers should approach the principle. The framework for applying the other principles in step three would benefit from including the same supporting examples and guidance.

e. Precautionary (Yes/No/Other)

Yes.

It is important that the precautionary principle is properly reflected in decision-making around the environment, and its inclusion among the environmental principles is reassuring. This should be seen as a good example of why the same recognition of the importance of scientific maxims should be applied to the other principles and how they are enacted.

Question 10. Do you think the process for applying the policy statement (the three steps) provides a robust and sufficient framework for the application of the

environmental principles as a whole? (Yes/No/Other - Please provide any additional information in support of your answer)

No.

The overall process is currently insufficient as a framework for supporting policy-makers in properly applying the environmental principles. Some of the concerns identified in response to earlier questions also represent general challenges in the approach taken by the policy statement as a whole. The IES has three connected concerns with the strength of the statement.

First, throughout all three steps and across the principles, there is an assumption that policy-makers across Departments and contexts will have appropriate information available to establish the potential effects of their policies. In order for the principles to serve as a robust framework, there needs to be a much greater availability of sound environmental science to policy-makers. In the absence of that evidence being embedded in decision-making, the policy statement should make consideration of that evidence a much more embedded element of the process.

There is a second, linked challenge posed by the focus on proportionality and 'lighter-touch' approaches, which may lead to the exclusion of important considerations of non-immediate harms and the cumulative effects of multiple policies. Policy-makers and Government departments should be evaluating potential policy at more than an atomistic level.

Ideally, a strategic sustainability assessment across policy development would support that goal. However, in the absence of that, consideration of the principles will be ineffective if it is not correctly supported by an awareness of the wider context of sustainability and how cross-departmental systems are affecting the environment.

The third challenge for the policy statement overall is that the scope for considerations when applying the principles is limited to active environmental harms when implementing a policy, even though there are scenarios where a policy may lead to environmental harms even when it does not actively cause them. In particular, the cumulative and compound effects of policies on natural systems may be missed where individual pressures from policies are not themselves 'significant' enough to warrant a response.

Evidence strongly suggests that this kind of systems approach is essential to preventing environmental harm, with the UN Environment Programme's 6th Global Environment Outlook making clear that "*the driving forces of environmental degradation are strongly intertwined [and] complex*" and that "*solutions to the degradation of natural systems … should take account of the complex interactions between the planet and human health, consider 'environment-health' as a complex system, seeking co-benefits and, where practicable, avoid trade-offs, win-lose situations and unintended adverse consequences*."

Similarly, the European Environment Agency's 'European environment —state and outlook 2020' report notes that "*there are benefits from complementing a sectoral focus and environmental integration approach with a broader systems perspective … improving our understanding of interactions and enabling more coherent and effective policy interventions*

to reduce environmental pressures along whole value chains, thereby realising potential co-benefits for human health and well-being."

By limiting considerations around the principles to when apparently 'significant' effects are likely to result from the policy, the likelihood of this systems approach to environmental effects is considerably less likely. Additionally, by looking at policies in an atomistic manner, there is less scope for considering where alternative policies could have contributed to environmental improvement. In these cases, the state of the environment would have been harmed by the policy decision, compared to its state if a different decision had been made.

These considerations are especially important when considering that the policy statement already recognises that some environmental harms will not be able to be prevented, so to maintain the overall health and quality of natural systems, there will need to be some potential for environmental improvement under the principles. Where these considerations are not made likely by the principles, they are unlikely to be sufficiently able to meet their stated goal of protecting the environment.

Question 11. Do you have any other comments on the draft policy statement which are not covered by the previous questions? (Yes/No - Please provide any additional information in support of your answer)

Yes.

The policy statement would also benefit from clear context about the objectives of securing environmental protection. Many of the challenges the IES has identified for the policy statement to serve as a robust and effective tool come from a limited conception of the goal being the prevention of specific instances of harm, rather than a deeper holistic approach to sustainability.

Specifically, the importance of environmental protection is twofold: to safeguard the natural environment as a good by itself, but also to create a sustainable and resilient environment for future generations, where many of those who will be worst affected by long-term environmental damage are poorly placed to address it.

In light of the COVID-19 pandemic, it is increasingly clear how important the natural environment is to human health and wellbeing. The dual context of why environmental protection is so important, for both nature and humanity, is crucial and should be clear throughout the policy statement.