

Environmental Principles Assessment Guide

Background

The Environment Act 2021 introduces a new legal duty to consider environmental effects of policies throughout their development, known as the Environmental Principles.

For full information and resources on the five principles, please visit [this page on the Policy Profession Hub](#).

Purpose of this document:

- This document is to guide policymakers in their thinking and their assessment of environmental considerations in line with our legal duty to give due regard to the Policy Statement on Environmental Principles (meaning that the duty must be exercised with rigour and with an open mind).
- The Environmental Principles Policy Statement is a statutory document that explains how to interpret and proportionally apply the five environmental principles. It helps policymakers to assess the environmental impact of the policy and understand which principles are relevant, before then considering what action is taken as a result.
- The principles are not rules and do not dictate policy outcomes. This document is therefore to be used to make it as easy as possible for policymakers to evidence how they have given the right considerations on the environment when developing policy, in order to then inform the relevant Minister accordingly.
- Policymakers are not expected to carry out a “deep-dive” assessment into all environmental effects, as these may not be known. Nor are policymakers required to replicate the environmental impact assessment process. Instead, the level of research into the environmental effect should be relative to the likely effect of the policy on the environment.
- This guide is not mandatory but is strongly recommended as best practice.
- **Once the duty is in force in 2023, it will be mandatory to demonstrate to Ministers that appropriate thought has been given to the Policy Statement [see Section 6: Informing Ministers].**

How to use this document:

- This document should be used for all policies which fall under the duty (all new or revised policies, but not individual decisions e.g. individual planning determinations). A useful way of thinking of it is if a Minister of the Crown is responsible for final agreement on a policy, then it is in scope of the policy statement.
 - Policy can be broadly understood as an intended course of action adopted to achieve an objective. Examples of policy include: proposals that lead to legislation; national policy statements, strategies and frameworks; Ministerial statements setting out the Government’s formal position on an issue; documents, strategies and frameworks prepared by public bodies that ministers are required by statute to approve; any other document that sets out a substantial change in approach to an established policy position.
 - Policy areas exempt from this duty are the armed forces, defence or national security and taxation, spending or the allocation of resources within government.

- This document **should be considered in conjunction with the Policy Statement** (found at the above link to the Hub).
- This consideration must take place at an **early stage in the policymaking process, and throughout as appropriate**, not as an afterthought at the end. If changes are made to a policy at a later stage, then the principles should be reconsidered. The initial application should make reconsidering at a later point easier. The document is divided into three phases. Policymakers should take an iterative approach by regularly reviewing opportunities to shape the policy and its effects as the policy develops. You might therefore want to revisit each phase and go back to previous questions as your policy develops and changes.
- The questions are to guide your thinking, so you can work through as many sections as is relevant and proportionate to your policy.
- Once you have completed this document, **please keep it as a record for future reference**. You should retain your thinking and refer to it as your policy develops.

PHASE 1

ENVIRONMENTAL CONSIDERATIONS

SECTION 1: Policy/Service

Provide a brief outline of (the changes to) the policy or service being considered, including the main rationale and aim(s), and any indicative timeframes for policy development.

The policy introduces a new provision in the statutory guidance, Approved Document B, which deals with Fire Safety, to the building regulations for all new care homes, irrespective of height to be provided with sprinklers. The new provision will enhance fire protection in care homes where residents may be vulnerable and may be reliant on others for evacuation.

The policy proposes a shift from the current approach that allows care homes developers to decide whether a care home is designed and built without sprinklers. The change aligns with the support outlined within the consultation responses and reflect current industry practice where sprinklers are included within the majority of new build care homes.

SECTION 2: Assessing Environmental Effects

1. Does your policy have an environmental effect? Please consider the example effects and metrics listed in **ANNEX A** to detail the type of effect.

If yes, please complete Qs 2-6 in this section.

If no, please skip to Q7 in this section.

Yes

Introducing sprinklers in all new care homes is a proactive safety measure. These systems effectively suppress fires, providing valuable time for evacuation, especially for residents who may need assistance. Beyond this, sprinklers also contribute to environmental safety in the long term by reducing fire spread and minimizing smoke production. However, it's essential to recognize that while sprinklers enhance safety, their installation can have an environmental impact. Design considerations include structural modifications and adjustments to water supplies. Furthermore, the manufacture, installation, and maintenance of sprinkler systems consume resources and energy, impacting the environment.

2. Is the environmental effect positive or negative?

- There is a positive environmental effect.
- There is a negative environmental effect.

Sprinkler systems offer efficient water usage compared to traditional firefighting methods. When a fire occurs, sprinklers activate promptly, targeting flames directly. This minimizes water wastage compared to broader fire brigade hose applications. Efficient water usage contributes positively to water conservation efforts and reduces strain on local water supplies.

The production and disposal of sprinkler components (such as pipes, heads, and valves) contribute to resource use and waste. Responsible recycling practices can mitigate this impact. Also energy consumption related to pumps and water supply systems would be addressed through energy-efficient designs and a transition to decarbonized energy networks.

3. Are there primary effects (an intended result or an effect directly attributed to the proposed action) or secondary effects (indirect or induced changes)?

- Yes, there are primary effects.
- Yes, there are secondary effects.

Primary Effect: The environmental impact associated with the manufacture, installation, and maintenance of the sprinkler systems, which involves the consumption of resources and energy.

Secondary Effects: The potential environmental implications of water consumption by the sprinkler systems, as well as the indirect environmental benefits associated with improved fire safety, such as reduced emissions from fires and decreased waste from fire damage.

4. Will the proposed policy cause environmental effects that occur once, repeatedly or cumulatively (a combined impact of various past, present and future activities/processes)?

- The environmental effects will occur once.
- The environmental effects will occur repeatedly.
- The environmental effects will occur cumulatively.

The environmental effects will occur repeatedly. The installation of sprinkler systems in new care homes will be an ongoing process as new buildings are constructed. Each installation will involve the consumption of resources and energy, leading to repeated environmental effects. Additionally, the operation of the sprinkler systems over time, including water consumption and maintenance activities, will also contribute to repeated environmental effects. These effects can be mitigated with the implementation of net zero strategies and the development of low carbon products.

5. Is the effect permanent or temporary? Is it short, medium, or long term?

- The effect is permanent.
- The effect is temporary.
 - The effect is short-term.
 - The effect is medium-term.
 - The effect is long-term.

The effect is long term. The installation of sprinkler systems in new care homes will be a permanent change to these buildings, but limited over time. Once installed, these systems will remain in place for the lifetime of the building, providing ongoing fire protection. This represents a long-term commitment to improving safety standards in these types of residential settings. The environmental effects associated with the manufacture, installation, and operation of these systems will also be long-term, as they will continue for as long as the systems are in place and in use. This includes the consumption of resources and energy for system maintenance and operation, as well as the potential environmental benefits of improved fire safety and reduced emissions..

6. Is the effect local, regional, national or transboundary?

- The effect is local.
- The effect is regional.
- The effect is national.
- The effect is transboundary.

The effect is national. The policy of introducing sprinklers into all new care homes applies to the whole nation. Therefore, the environmental effects, whether they are related to the resources used in the manufacture and installation of sprinkler systems, the energy consumed in their operation, or the potential environmental benefits of improved fire safety and reduce emissions if a fire occurs, will be experienced at a national level. It's important to note that while the policy applies nationally, the actual environmental effects may vary locally depending on factors such as the number and size of care homes in different regions, local building practices, and local environmental conditions.

7. If you answered 'no' to Q1, please state why there is no environmental effect, either positive or negative.

You can now go straight to sections 6 and 7 in phase 3 without completing sections 3, 4, and 5.

SECTION 3: Understanding which principles are relevant

This section only needs to be filled out if the policy has an environmental effect, positive or negative.

These questions explore which of the five Principles are relevant, and why this is/isn't the case. See 'The Five Environmental Principles' within the Policy Statement for more details.

1. Is there an opportunity to embed environmental protection in your policy? (Integration)

Yes

No

There is an opportunity to embed environmental protection in the policy. This could be achieved by considering environmentally friendly options in the manufacture, installation, and operation of the sprinkler systems and the use of energy from a decarbonised energy network. For example, using materials and manufacturing processes that minimize environmental impacts, designing systems for energy efficiency, and considering end-of-life disposal or recycling of the systems and managing embedded carbon. Additionally, the policy itself, by enhancing fire safety, can contribute to environmental protection by reducing the environmental impacts of fires and the release of greenhouse gases. Impact of energy use can be mitigated with a de-carbonised energy network.

2. If it is likely for environmental harm to result from your policy, is there an opportunity to prevent this environmental damage, either before it has occurred, or to contain existing damage? (Prevention)

If yes, see 4.1

Yes

No

There are opportunities to prevent potential environmental harm. For example, other government strategies include the provision for minimizing resource use and waste in the production, installation, and operation of sprinkler systems and promote the use of sustainable materials, implementing energy-efficient design practices, and encouraging recycling and waste reduction measures. A decarbonised energy network will also assist in reduce any damaged caused by this intervention.

3. If prevention of environmental harm is not possible or proportionate, can you address this damage at its origin to avoid remedying its effects at a later date or location? (Rectification at Source)

If yes, see 4.2

Yes

No

Both extraction of raw materials and production of construction products have a high carbon impact, but the impact of this policy is small in comparison to the construction industry as a whole.

4. If prevention of environmental harm is not possible or proportionate, can the costs be borne by those causing it, rather than the person who suffers the effects of the resulting environmental damage? (Polluter Pays)

If yes, see 4.3

Yes

No

Additional costs for materials and additional maintenance will be borne by the owners/operators of the care homes; they may choose to pass on the cost to the users of the services or facilities.

5. If none of the above mitigating measures are relevant, is there plausible evidence that your policy could cause serious damage to the environment (even if there is a lack of full scientific certainty)? (Precautionary)

If yes, see 4.4.

Yes

No

By introducing sprinklers into all new care homes, there is no evidence that this policy could cause serious or lasting damage to the environment. The policy primarily concerns the safety of residents in these facilities and does not involve activities that would significantly impact the environment due to the volume of buildings it would affect.

PHASE 2 FURTHER ANALYSIS

SECTION 4: Applying the principles

This section provides some further prompts for you to consider as part of your policy development based on the principle(s) in Section 3 found to be relevant to your policy.

General application options:

- *Amending policy options or including an additional policy option in the initial design of a policy, which reflects consideration of the environmental principles. In some cases, considering a principle may introduce a new option as a different solution to the policy problem. For example, one where the polluter may pay. This option would then be subject to the same policy evaluation as the existing options.*
- *Reframing the policy to accommodate the principles. In some cases, the policy design may need to be amended to ensure that a specific principle is applied. This could include the framing of the problem, the detail of how the policy option may work, or how it may be implemented.*
- *Embedding a principle in law or guidance. If policymakers want the principles to be used in decision-making or the implementation of a policy, this approach may be appropriate. This could be relevant where proposed legislation might include associated powers, duties or obligations that may have a significant effect on the environment.*
- *Postponing a policy until further evidence is gained. If a policymaker is unsure on whether action is appropriate, they should gather further evidence. Applying the precautionary principle may encourage policymakers to explore the potential environmental damage before moving forwards. Or, where the risk is serious, they may amend, postpone or discontinue the policy in rare cases.*

1. If the prevention principle applies:

- a. What is the scale of the likely damage: How widespread is the damage likely to be?
- b. What are the costs / benefits of preventing or not preventing the damage?

The environmental damage from manufacturing and installing sprinkler systems is not widespread. The primary environmental impact comes from the manufacturing process, which can contribute to greenhouse gas emissions. However, these emissions are likely to be significantly reduced than those produced with a fire in a building without a sprinkler system.

The costs associated with preventing the damage include the initial and ongoing investment to design, install, and maintain the fire protection systems. However, these costs are offset by benefits. Sprinklers can reduce property damage, improve life safety, provide increased business resilience, and limit environmental damage by reducing carbon emissions and the use of firefighting water. Therefore, the benefits of installing sprinkler systems, in terms of both human safety and environmental impact could outweigh the likely damage.

2. If rectification at source applies:
 - a. Where does the environmental damage originate from?
 - b. What is the feasibility of rectifying the issue at source versus other options, and the costs and benefits of doing so?

The environmental damage primarily originates from the manufacturing and installation process of the sprinkler systems. This includes the extraction and processing of raw materials, energy consumption during manufacturing, and waste generated from these processes.

Rectifying the issue at source could be achieved by adopting more sustainable manufacturing processes and reducing embodied carbon, such as using recycled materials or renewable energy sources. The benefits would be a reduction in the environmental impact, contributing to broader sustainability goals.

3. If the polluter pays principle applies:
 - a. Who is the polluter: what is the driver for the pollution being caused and who is responsible for this?
 - b. *It may be more efficient/fair to distribute the cost across a particular sector rather than an individual or a group. Also consider how the allocation of responsibility can cause the most environmental benefit. For example, it may be more effective to charge the consumer of a product associated with environmental harm than the producer. This has been illustrated by the introduction of the plastic bag charge which has successfully incentivised changes in consumer behaviour and a reduction in consumption.*
 - c. How much should the polluter pay?
This should be proportionate to the environmental damage and wider costs and benefits to society of the activity in question. In some cases, full cost recovery may not be possible or proportionate and in these cases, it may be reasonable that the cost is covered through other means.
 - d. How should the polluter pay?
Consider how the costs of environmental damage could be recovered as well as how polluters could be disincentivised from causing further environmental damage. The polluter can pay in a variety of different ways e.g. directly through fees or charges, or indirectly through regulatory or contractual requirements (which in turn require additional investment to fulfil). In the latter instance, fines or penalties for breaching these obligations may also be appropriate.

The owner or provider of the care home service is regarded as the polluter along with companies manufacturing and installing the sprinkler systems. These processes can lead to environmental pollution through the extraction and processing of raw materials, energy consumption, and waste generation. This policy is a relatively small change to a building and will be addressed at individual building level when whole life carbon assessment can be implemented nationally. It is possible that increased costs through any green taxes will be paid by the users of the care homes.

4. If the precautionary principle applies:

- a. What levels of evidence exist which indicate that there is a severe or irreversible risk to the environment as a result of this policy?
- b. What is the likelihood that inaction would increase the risk of the damage occurring, or would cause/worsen the potential damage?

If there is a lack of scientific certainty or gaps in the evidence base, this should not be used as a reason for inaction. Policymakers must take a holistic approach in applying this principle. In some cases, it may be that an alternative technology offers significant potential to reduce the risk associated with established practices. In that case, a policymaker might judge that the likely environmental, economic, or social harm or the opportunity cost of the established practices is greater than the risk of facilitating a cautious deployment of new technology and new innovations. Equally, it may be that there is inconclusive scientific evidence surrounding a particular activity, and a policymaker might judge that they should exercise caution, preventing or limiting the activity until sufficient evidence to support a decision becomes available.

This policy represents a minor modification to the construction process of a building. Although it may lead to a slight rise in greenhouse gas emissions, it is not anticipated to pose a severe or irreversible threat to the environment. The construction of individual buildings and their associated supply chains will be incorporated into the national Net Zero initiative, aligning with the implementation of The Industrial Decarbonisation Strategy and the Transport Decarbonisation Plan. This integration ensures that the environmental impact is managed and minimized.

SECTION 5: Other Considerations

1. Are there other legal commitments or relevant international commitments to which your policy must adhere?

- Yes
- No

The policy aims to enhance fire protection in residential buildings where residents are most vulnerable and reliant on others for evacuation.

2. Are there other specific social or economic considerations required of this policy that may conflict with environmental considerations, such as education, health or a financial cost-benefit analysis that outweighs environmental gains.? If yes, please outline your proposed approach to any such trade-offs.

- Yes
- No

Provide more information here...

PHASE 3

EVIDENCING COMPLIANCE

SECTION 6: Informing Ministers

Sections 2-5 are designed to guide a robust assessment of environmental factors within policymaking. Following this consideration, in order to comply with the duty, policymakers **must** provide an explanatory overview to Ministers, demonstrating that appropriate thought has been given to the Policy Statement, and to set out the outcome of such consideration in terms of how the policy is shaped i.e. What action has been taken in applying the principle(s)? What action has been taken as a consequence of the principle(s)? This is likely to be done in **the latter stages** of policy making, when the proposal is more fully developed.

Structure of the explanatory overview, **to be included in relevant submissions when seeking a policy decision**:

When developing this policy proposal, environmental considerations were taken into account in line with the Environmental Principles Policy Statement. The assessment of environmental effects found that the policy is likely to result in a relatively small increase in greenhouse gases and embodied carbon from construction of buildings after introduction of the policy, compared to the planned construction of the entire building in line with the current policy position. Some of the impact can be mitigated with the use of new materials or changes considered at the planning stage of the building and the continued progress toward Net Zero.

There is also the benefit that with the use of sprinklers there is a reduced risk of air pollution from large fires and reduced water usage by fire services which would have a positive impact.

Based on this, the following principles were found to be relevant; integration, rectification and polluter pays

On this basis, we are proposing to implement the policy as intended to safeguard lives and integrate with the other interventions designed to improve building safety on an evolving basis.

The principles must be applied proportionately. This means that ministers should balance social, economic, and environmental considerations in making policy. They should consider the environmental effects of a policy and the value of any mitigating actions. They should consider this in the context of the associated costs and benefits to society of the policy's primary objectives, as well as the financial and economic costs and benefits. This includes the potential costs of effects on the environment, and any related ecosystem services

Where there is a substantial risk to the environment, the weight given by Ministers to the policy statement increases. If this is the case, you may wish to annex relevant pieces of your assessment in order to support your explanatory overview. Equally, if the potential environmental impact is limited, then a lighter-touch action may be appropriate and in some cases no change to the policy will be appropriate.

SECTION 7: Support & Sign-off

1. Have you consulted with your work area's Environmental Principles Policy Champion, or the Climate Change and Net Zero Team?

Contact the Climate Change and Net Zero Team on ClimateChangeNZ@levellingup.gov.uk

DLUHC policy champions:

- *Guy Skelton (Planning Infrastructure)*
- *Ashley Nye & Matt Spencer (Planning Reform)*
- *Sirdeep Singh (Planning Design Quality)*
- *Lewis Sullivan (Housing Markets & Strategy)*
- *Jonny Fitzpatrick (Housing Delivery)*
- *Polly Lord (Local Government Communities)*
- *Kirsti Johnson & Jacob Hull (CLGU Policy)*
- *Luke Spanton (PRS)*
- *Isobel Ames (SRS)*
- *Mark Sykes (Building Remediation)*

DLUHC coordination leads:

- *Emma Simpson (emma.simpson@levellingup.gov.uk)*
- *Nele De Doncker (nele.dedoncker@levellingup.gov.uk)*

ANNEX A: Example environmental effects and metrics

	Indicator	Metric/measurement
Energy efficiency	Reduction / increase in CO ₂ emissions	Ton CO ₂ per year
	Reduction / increase in energy consumption	kWh per year
	Production of renewable energy	kWh per year
	Impact on EPC rating	# of dwellings
Adaptation	Higher / lower climate resilience	e.g. impacts of flooding, coastal erosion, drought
	Reduction / improvement of summer thermal comfort	# of residential units or non-residential floor area that do / do not suffer from overheating in summer
	Reduction / improvement of winter thermal comfort	# of residential units or non-residential floor area that are / are not underheated and draughty in winter
	Reduction / improvement of (indoor) air quality	# of residential units or non-residential floor area, signs of damp or mould, Concentrations of fine particulate matter
Natural environment	Enhancing more / less the beauty, heritage and engagement with the natural environment	people having access to and caring for the natural environment, landscapes, waterscapes
	Reduction / improvement of water quality	Quality from water tests
	More / less efficient and sustainable use of natural resources	farming productivity, soil health
	Enhancing / damaging biosecurity / biodiversity	Impacts of exotic pets, diseases and invasive non-native species / Abatement of the number of invasive non-native species entering and establishing against a baseline / Distribution and spread of non-native invasive species and plant pests and diseases
	Waste production / reduction	raw material consumption
	Exposure to chemicals	Emissions of nationally significant substances to the environment / Exposure of wildlife to chemicals in the environment, including marine
Socio-economic	Support for green jobs	# Jobs created
	Reduction / increase of risk of energy poverty	% of households
	Reduction / increase in energy bills	£