

Clean air and the Environment Bill

Healthy Air Campaign position paper

The Environment Bill provides a key opportunity to introduce a new, improved and long-standing framework for reducing air pollution and the harmful impacts it has on human health and the environment.

This document sets out a summary of some of the key ingredients this framework should incorporate. This is not exhaustive, but is intended to prompt discussion and provide the priorities for more detailed drafting.

1. Establishing long-term ambition: An overarching objective for clean air

New legislation provides the opportunity to set a broad, legally-binding and overarching objective for clean air. This will give a clear and robust indication of how air quality needs to be improved in the long-term and provide a far-reaching goal towards which the rest of the Bill framework should operate.

Wording could include:

Air pollution has the lowest possible negative effect on human health and the environment. Emissions from human activity and ambient concentrations are minimised, and where possible eliminated, as quickly as possible, with ambient pollution below World Health Organisation guidelines by 2030 at the latest.

The Secretary of State should be under a duty to achieve the objective, with all other public bodies (including other central government departments) required to act compatibly with its achievement (see section 4 below).

2. Setting meaningful commitments: New binding targets for air quality

To serve as milestones towards the delivery of the objective and provide hard-edged and quantitative commitments against which public bodies can be held accountable, the Bill

should establish a mechanism by which binding air quality targets must be set within secondary legislation and periodically reviewed and updated in light of the latest scientific evidence.

Whilst binding targets already exist within domestic secondary legislation, these are in many cases too weak to protect human health and the environment and/or apply only for a finite period. For example:

- **Limit values:** A number of the existing limit values are less stringent than guideline levels set by the World Health Organisation (WHO). For example, the legal limit for annual average PM_{2.5}¹ concentrations is 2.5 times higher than the WHO guideline, and whilst the WHO guidelines include a 24 hour mean concentration for PM_{2.5} there is no such short-term limit value set out in existing legislation.
- **Emission reduction commitments:** The EU-derived emission reduction commitments set out in existing domestic legislation only extend to 2030. No binding commitments to further reduce national pollutant emissions apply beyond this date, nor is there an established mechanism by which future targets must be set going forward.
- **Exposure reduction targets:** There is an existing exposure reduction target for PM_{2.5}. However, it is not strong enough. It only extends to 2020 and equates to achieving average exposure in excess of WHO guidelines. The Government's Clean Air Strategy has recently committed to halving the number of people living in areas with PM_{2.5} concentrations above WHO guideline levels by 2025 but this remains a non-binding policy commitment and does not apply to the whole population. In recognition that there is no "safe" level of pollution, exposure reduction targets should be strengthened. This could provide a powerful driver for delivering wider pollution reductions across the whole country rather than only in areas where pollution is at its very worst.
- **Nitrogen deposition reduction targets:** The government's Clean Air Strategy commits to reducing damaging deposition of reactive forms of nitrogen by 17% over protected priority sensitive habitats by 2030. To date this is a non-binding policy commitment, and no legally binding target exists in current legislation.

In order to secure long-term ambition to protect human health and the environment, in addition to retaining existing duties to meet limit values for nitrogen dioxide under the Air Quality Standards Regulations 2010 and emission reduction commitments under the National Emission Ceilings Regulations 2018, the Bill should impose a duty on the Secretary of State to establish updated binding targets by secondary legislation, which in the first instance include:

- **Limit values** which reflect WHO guideline levels, with an attainment deadline for PM_{2.5} and PM₁₀² of 2030;
- **Emission reduction commitments** for 2035;

¹ Fine particulate matter pollution

² Coarse particulate matter

- **Exposure reduction targets** for 2025, 2030 and 2035, including a commitment to ensure that no schools, nurseries, playgrounds, care homes or hospitals in the UK are in areas with pollution levels above WHO guidelines levels by 2022; and
- **Nitrogen deposition reduction targets** for 2030 and 2035.

To ensure that the life of the Act extends beyond these dates, the Secretary of State should be obliged to set further emission reduction commitments, and exposure/deposition reduction targets for 2040 in 2025, and again every subsequent 5 years for consecutive 5-year periods until the overarching objective is fully achieved.

These binding targets must:

- set the trajectory for meeting the objective in the shortest possible time;
- be based on the best available scientific evidence and advice on the effects of air pollution on human health and the environment (including WHO guidelines); and
- be set according to the precautionary principle.

To avoid the risk of standards becoming out-dated and to make sure the law reacts to advances in scientific understanding and technology, binding targets must be reviewed by the Secretary of State at least every 4 years and updated by secondary legislation.

In carrying out this review, the Secretary of State must consult the public and must take into account any recommendation report published by the Clean Air Committee (see below) as well as the latest WHO guidelines existing at the time. The Secretary of State must report to Parliament on the outcome of the review.

Targets must be introduced or updated on a non-regressive basis. In other words, they cannot be relaxed but only strengthened over time. The framework should also allow for the introduction of targets for additional pollutants currently outside of the scope of existing regulation (e.g. ultrafine particles), on a precautionary basis.

3. Requiring concrete and coordinated action to deliver targets: National “Healthy Air Plans”

The legislation should establish clear duties to ensure that binding targets are not simply set but that coordinated action is taken to meet them. The focus should be on requiring action to prevent rather than just react to breaches of limit values, emission reduction commitments and exposure/deposition reduction targets.

Central government should be obliged to publish, publically consult on and implement a national “Healthy Air Plan”, which sets out concrete, impact-assessed measures to deliver the year-on-year pollution reductions necessary to achieve binding targets (including emission reductions, limit values, exposure reduction targets and deposition reduction targets) and work towards the overarching objective.

Other public bodies must also play their part. “Healthy Air Plans” must clearly establish which bodies are responsible for delivering identified measures, and set a timescale for when those measures must be put in place. Action should be focused on the most effective

spatial scales, with responsibility lying with those most able to deliver it. To this end, Healthy Air Plans must, at least:

- set out detailed time-bound commitments from each relevant central government department;
- only rely on local authority-lead action in the event that (a) this has been assessed to deliver achievement of the binding target in a shorter period of time than action nationally, and (b) sufficient central government funding and support has been committed;
- specify the financial resources to be committed by central government for the purpose of delivering individual measures;
- include measures to protect sensitive and vulnerable population groups (including children, older people, people with chronic illnesses and outdoor and transport workers) from the health impacts of air pollution – this should include action to reduce pollution in areas around schools, nurseries, playgrounds, care homes and hospitals as a priority;
- specify how measures and financial resources committed in other government strategies and programmes (e.g. the Cycling and Walking Investment Strategy) will maximise gains towards achieving binding targets and the overarching objective.

The Secretary of State must review, consult on and update the Healthy Air Plan at least every 2 years, and/or sooner in the event that any binding target is amended, projections suggest that binding targets will not be met by the relevant attainment deadline and/or the Clean Air Committee so advises.

4. Making sure all actors play their part: An overarching public body duty

There is currently no explicit, broad statutory duty on local authorities or wider public bodies to factor air pollution impacts or compliance with binding targets into decision-making, outside of the Environmental Impact Assessment/Strategic Environmental Assessment regime. Air quality considerations can be siloed to individual government or local authority departments and are often ignored or not given sufficient weight in broader policy decisions.

Whilst the overarching duty to deliver binding targets should remain with the Secretary of State, to prompt action being better concerted and coordinated, the Act should introduce a new transformative ‘clean air duty’ on public bodies to:

- act compatibly with the objective and binding targets;
- take steps within their powers towards the achievement of the objective and binding targets;
- act in accordance with Healthy Air Plans; and
- in doing so collaborate and coordinate with other relevant actors, both domestically and internationally.

A wide definition of “public body” would ensure that entities such as Highways England, Homes England and the Environment Agency, as well as local authorities and all

government departments and ministers would be captured. This should also incorporate decision-making relating to development control and planning.

The Secretary of State should be obliged to publish guidance to inform public bodies' compliance with this duty and to facilitate best practice.

5. Driving a better understanding of the problem: A comprehensive and coordinated system for monitoring

The legislation should address the current disjoint between national and local monitoring and modelling of the concentration of pollutants in the air around us. Currently monitoring data differs in quality and quantity across the country. Whilst some individual authorities collect more data than others and use this to inform their own local modelling, this is ad hoc and subject to varying accuracy. The Clean Air Strategy recognises the “fragmented” nature of the data landscape, but does not suggest how this will be addressed.

Responsibilities on local and national government need to be improved and clarified to ensure data on the quality of our air is more comprehensive and better coordinated. This is essential in order to inform a more detailed understanding of what action needs to be taken, where. This should be based on a framework which requires:

- the Secretary of State to ensure that a national monitoring network is maintained, subject to strengthened minimum data quality, density and siting requirements (established by secondary legislation), which includes a more comprehensive assessment of pollutants such as fine particulate matter;
- local authorities to play their part in the collection of information where a local understanding of the problem is important (e.g. in determining monitor locations and collecting local traffic data) particularly where schools, nurseries, playgrounds, care homes and hospitals are sited in areas of high pollution;
- locally-collected information on local conditions to be fed into a national database or model, managed and maintained by the Secretary of State, which provides a single, detailed and coherent picture of pollution problems experienced at a local and national level, and is used to assess compliance with limit values;
- a precautionary approach to be adopted where data which does not meet minimum quality requirements suggests there is a problem;
- monitoring and modelling outputs to be made easily publically available, easily comparable, accessible and interactive, and those most vulnerable to the effects of pollution to be actively alerted of pollution peaks;
- monitoring of additional pollutants currently outside of the scope of binding targets where there is emerging evidence relating to health and environmental impacts (e.g. for ultrafine and nanoparticles), to help build scientific understanding.

To ensure that this system is kept up to date, at least every 5 years (or sooner if so advised by the Clean Air Committee) the Secretary of State should review the minimum monitoring standards, the range of pollutants monitored as well as the methods and assumptions employed in the national model. In carrying out this review, the Secretary of State must consult the public and must take into account any recommendation report published by the Clean Air Committee (see below).

6. Improving transparency: Reporting obligations

To ensure that the government remains accountable against its air quality obligations following the UK's exit from the EU, the Secretary of State should be obliged to publish annual reports on progress made towards achieving the overarching objective and binding targets, as well as delivery of commitments set out in Healthy Air Plans. These reports should be laid before Parliament, made publically available and delivered to the Office for Environmental Protection.

To provide better transparency on the impacts of air pollution on human health and the environment, central government should also be required to monitor and report annually on additional metrics, including:

- the number of people living within areas with pollution levels above over legal limits or WHO guideline levels;
- how pollution exposure differs nationally, regionally and between local authority areas;
- the number of hospital visits, missed work days, and cases of morbidity and mortality associated with air pollution;
- hospital admissions for health conditions linked to air pollution (including the extent to which these can be attributed to air pollution);
- the number (and relative proportion) of children and adults with respiratory and heart conditions living in areas of pollution above legal limits or WHO guideline levels;
- the number of schools, nurseries, playgrounds, care homes and hospitals operating in areas above legal limits or WHO guideline levels;
- the proportion and extent of priority sensitive wildlife habitat damaged by air pollutants;
- the proportion and extent of protected wildlife sites with exceedance of critical loads of nutrient nitrogen and acidity for one or more features.

7. Tackling the issue at source: A register of pollutant sources and powers to control emissions

Delivery of ambitious emissions reduction targets will require rapid progress across many different sectors. To enable targeted action, the Act should require government to maintain a register of pollutant sources, which is publically available and updated on a yearly basis.

The Secretary of State should be empowered to incentivise or require uptake of emission-based standards for individual source types, by subsequent secondary legislation.

In recognition of the extent to which emissions from road transport and domestic fuel burning contribute to current pollution levels and the urgent need to address these sources, the Secretary of State should be obliged to consult on and pass secondary legislation to:

- establish a national vehicle labelling scheme, which is based on real world emissions and extends to the entire market (including second hand vehicles), in order to help guide consumers to buy the cleanest possible vehicles;

- impose minimum requirements on vehicle manufacturers for the sale of a minimum share of zero (at tail pipe) emission vehicles, towards a legally binding commitment to ban the sale and import of new internal combustion engine cars and vans by 2030;
- impose emission standards and restrictions for the sale and burning of domestic solid fuels, towards a legally binding commitment to phase out the sale and burning of coal-based fuels by 2021, and of all other solid fuels in order to achieve WHO guideline levels in the shortest possible time.

The Act should establish broad powers for the Secretary of State to set further standards for identified pollutant sources and/or the operators or manufacturers of those sources. Including (but not limited to):

- obligations on vehicle manufacturers to implement retrofit and upgrade (or recall and compensation) solutions to tackle the legacy of 7 million dirty Euro 5 and 6 diesel cars, prioritising small businesses and individuals on low incomes;
- minimum emissions standards for non-road mobile machinery and stand-by generators; and
- minimum standards to require farmers to reduce ammonia and methane emissions.

The setting of standards should be non-regressive and should be based on the latest evidence on best available techniques.

8. Applying sound and independent technical advice: A new Clean Air Committee

The setting and review of binding targets should be based on a sound evidence base. However, no independent body currently exists with the full suite of technical competence and resources necessary to advise on the health and environmental effects of air pollution, air pollution science and technology and to assess what emission abatement and exposure/deposition reductions are possible in practice.

A new Committee for Clean Air should be established. The Committee should be required to carry out a review of binding targets and alert thresholds (see below) at 4-yearly intervals (or sooner). That review should include an assessment of whether the binding targets set the path to achieving the objective in the shortest possible time and should consider, as a minimum:

- the best available and most up to date scientific evidence and advice regarding air pollution, its effects on human health and the environment and the technology relevant to reducing emissions;
- the latest WHO guidelines existing at the time;
- the impact of air pollution on sensitive population groups (e.g. children, older people and people with chronic illnesses), species and habitats;
- international commitments (including under the United Nations Economic Commission for Europe) and impacts;
- the precautionary principle; and
- the rectification at source principle.

The Committee should also be under an obligation to review and provide independent advice to government on Healthy Air Plans (at least every 2 years), monitoring standards and modelling techniques.

The advice provided by the Committee must be made publically available. It is important that the body is established and funded in a way that ensures its independence from government.

There may be scope for this Committee to exist as an additional arm of an existing entity, such as the Committee on Climate Change.

9. Ensuring public bodies can be held to account: Our right to clean air

Our right to clean air is well established in EU law. It relies on rulings from the Court of Justice of the European Union which clarify that concerned individuals and organisations have the right to go to national courts to require action when EU-derived air quality obligations are being breached.

The UK's exit from the EU puts our right to clean air at risk. As a result, people's access to justice where government is failing to address illegal air pollution has the potential to be severely constrained. To prevent this risk our right to clean air should be given clear statutory footing within domestic law.

The processes provided for must be timely and affordable, allow the substantive review of government air quality plans by the courts and provide the basis for effective judicial remedies to be granted where those plans are inadequate.

The public must be able to legally challenge the government of their own accord, off their own back and on their own terms, rather than being entirely reliant on a potentially overburdened OEP to fulfil this right.

10. Responding to pollution episodes: More effective action to protect people from acute health impacts

There is an ongoing need to protect the wider population from long-term exposure to air pollution. However, throughout the year the UK experiences peaks in pollution levels above the usual conditions. These pollution episodes can last for a number of days and can cause immediate acute health impacts, particularly for vulnerable groups including children, older people and people with chronic illnesses. This can lead to, for example, an increase use of medication (e.g. asthma inhalers), or a rise in GP visits or hospital admissions for respiratory and cardiovascular conditions.

The Secretary of State is under existing obligations to respond to peaks in pollution levels. It is under a duty to alert the public and draw up short-term action plans when threshold levels (known as "alert thresholds") are exceeded. However, there are weaknesses in current requirements, which are not sufficient to protect people's health:

- No alert threshold exists for PM10 or PM2.5. There is currently no obligation to draw up short-term action plans or alert the public during peaks in concentrations of these pollutants, despite them being among the most harmful to human health.
- Existing alert thresholds are not strong enough to protect people's health, and do not recognise the vulnerabilities of certain subgroups of the population (e.g. children, older people and people with chronic illnesses).
- Short-term action plans have not been effectively deployed in practice and no guidance exists as to the types of measures that these plans could or should include.
- Existing regulations provide too much leeway as to how the public must be informed of pollution episodes. In practice, alerts are published on Defra's air quality website and an Air Quality Information Bulletin, only after the thresholds have been exceeded. This does not represent a proactive method for alerting the public.
- There is no nationally co-ordinated real-time system to alert the general population or even vulnerable groups with health-guidance, especially during periods of heightened risk.

The Bill should address the above gaps. It should, as a minimum, include a duty on the Secretary of State to:

- set new alert thresholds for PM10 and PM2.5, and update existing alert thresholds for other pollutants, by secondary legislation. These must be based on the best available scientific evidence and advice on the effects of air pollution on human health and the environment, including sensitive population groups;
- consult on and establish binding minimum content requirements for short-term action plans. This must include actions aimed at reducing emissions and exposure to lower the impacts on vulnerable groups – including children, older people and people with chronic illnesses; and
- more proactively alert the public ahead of pollution episodes as well as during them, using a variety of media outlets (including social media) and public information signage. Particular emphasis should be placed on informing those most vulnerable (including children, older people and people with chronic illnesses). This should include information about health impacts, guidance on how individuals can protect themselves and/or those in their care, as well as direct advice to schools, care homes and hospitals.

To ensure that the law reacts to scientific understanding of the impacts of air pollution, as well as the solutions available to reduce it, Government should be required to review and update public information sharing mechanisms, alert thresholds and action plan guidance, at least every 2 years. In carrying out this review, the Secretary of State must consult the public, take into account the best available evidence (including the latest WHO guidelines that exist at the time), as well as any recommendation report published by the Clean Air Committee.

Alert thresholds should only be able to be strengthened over time. They must be set and reviewed in accordance with the precautionary principle.

11. Ensuring people are informed and empowered: Proactive public information on air quality

Improved awareness would allow people to reduce their exposure and also change their behaviour to reduce their contribution to the problem. It would also build public support for the measures that are needed.

The Secretary of State is under existing obligations to ensure that the public and appropriate organisations are adequately informed in good time about ambient air quality levels, the achievement of limit values, air quality plans and programmes and actions to reduce pollution and exposure. However:

- The provision of public information relies heavily on online communication channels, which are not well publicised and not always accessible to members of vulnerable groups, e.g. children, older people and people with chronic illnesses or physical disabilities.
- The information provided by local authorities is fragmented and varies greatly in quality and accessibility across the UK. In addition, the information provided by the UK Government is not adequate for use at a local level.
- There is little information provided on preventative action that people can take to reduce their contribution to pollution and information about reducing exposure is generalised and not accessible to all audiences.
- The UK's Daily Air Quality Index and air quality forecast are not easy to find or interpret by the general public, including children and young people or those who are not able to access the internet.

The Bill should address the above gaps. It should include a duty on the Secretary of State to proactively inform the public about air quality at a national and local level, including action taken by public bodies to achieve objectives. As above, this should require:

- the use of a variety of suitable communication channels (including online, press and broadcast, public information signage and direct communication channels);
- emphasis on informing those most vulnerable (including children, older people and people with chronic illnesses);
- information about health impacts, guidance on how individuals can protect themselves and/or those in their care, as well as direct advice to schools, nurseries, care homes and hospitals.

Government should be required to review and update public information sharing mechanisms at least every 2 years. In carrying out this review, the Secretary of State must consult the public, take into account the best available evidence (including the latest WHO guidelines that exist at the time), as well as any recommendation report published by the Clean Air Committee.

This briefing is supported by:

