

# Clean Air and the Environment Bill

## Lords Committee Stage Briefing: Clauses 2, 6 and 7 (updated)

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### Introduction

The Environment Bill provides an opportunity for the UK to become a world leader in the fight against air pollution. To improve the lives of people across the country and promote clean growth, we need wide-reaching and bold legislative and policy reforms. This Bill should provide the starting point for this. As it stands, the Bill instead opens the door to weakening existing legal protections and risks being a missed opportunity for clean air.

This briefing updates the previous Healthy Air Campaign briefing and explains why Peers should support the following amendments:

- Amendment 20 (Clause 2) to ensure that the new legal target for fine particulate matter (“PM<sub>2.5</sub>”) commits government to reducing this harmful pollutant to within existing World Health Organization (“WHO”) guidelines by 2030 at the latest;
- Amendment 49 (Clause 6) to ensure that the importance of protecting health is reflected in the target review process set out in the Bill; and
- Amendment 52 (Clause 7) to ensure that environmental improvement plans are as robust as possible.

### Health and Air Pollution

Air pollution is recognised by the UK Government to be the single largest environmental risk to public health in the UK. The Health Secretary has warned of a growing national health emergency and said that: *“[w]e cannot underestimate the very real impact that dirty air – this slow and deadly poison – is having on our lives, our health and our NHS.”*

Air pollution affects all of us, from the time that we are in the womb and through to old age. The biggest impact is through cardiovascular disease, “where damage to the heart and circulatory system caused by air pollution can contribute to heart attacks and strokes. Toxic air also exacerbates respiratory illnesses, such as Chronic Obstructive Pulmonary Disease (“COPD”), increases the risk that asthma attacks result in hospitalisation or worse, and can stunt the lung growth of children making them more susceptible to chronic illness as they grow up. It can cause cancer and there is increasing evidence suggesting impacts on cognitive development, including impairing children’s ability to learn and possible links to dementia. Initial studies are also suggesting that air pollution could increase vulnerability to the most severe impacts of Covid-19.

The inquest into the role that air pollution played in the death of nine-year-old Ella Adoo-Kissi-Debrah has further highlighted just how damaging toxic air is for individuals, their families and the communities in which they live. In April 2021, the coroner’s [Prevention of Future Deaths Report](#) said that to save lives, legal limits for particulate matter pollution should be in line with the WHO guidelines. Unfortunately, the UK Government’s [response](#) that it is waiting to consult on the target

in early 2022 is a missed opportunity – the Bill provides them with the opportunity to implement the coroner’s recommendations now.

Cleaning up our toxic air will not only protect the health of UK citizens but also makes sense for the financial health of the country too. The [Royal College of Physicians](#) has estimated that the social cost of air pollution to individuals and the health service is over £20bn annually in the UK. Similarly, the [Confederation of British Industry](#) estimates that a £1.6bn annual economic benefit to the UK could be realised by meeting WHO guidelines. This is made up of £1bn per year from 40,000 additional ‘working years’, as the number of people retiring early due to ill-health decreases, and £600m per year from reduced sickness-related absences.

As the UK moves to a post-pandemic green recovery and towards our net-zero carbon targets, action taken today to reduce air pollution will be crucial to ensuring a healthy, resilient nation that will have the additional economic benefits of increased productivity across our communities.

However, toxic air is also driving health inequalities, with the poorest communities often exposed to the highest levels whilst contributing less to the problem. They are also more likely to have a health condition that makes them highly susceptible to harm. Likewise, those with breathing challenges from long-Covid may now also go on to be more vulnerable to these pollutants in the air, as are children, older people and people with chronic illnesses. Air pollution also disproportionately affects people from ethnic minorities, and certain occupations like outdoor and transport workers.

To support Peers’ scrutiny of the air quality provisions in the Environment Bill, the following are key facts regarding the impact of toxic air pollution on health:

- Approximately 14 million people in the UK are living with heart and circulatory diseases and/or a lung condition, such as asthma or COPD. For these individuals, a spike in air pollution poses an immediate health threat, worsening their symptoms and increasing the risk of hospitalisation and death.
- Research from the British Heart Foundation has found:
  - A link between exposure to poor short-term air quality and increased hospitalisation rates and deaths due to heart failure and circulatory problems.
  - PM<sub>2.5</sub> pollution can enter the bloodstream from the lungs and remain there for several months, showing that the health risk continues long after initial exposure.
  - Nanoparticles can accumulate in fatty plaques in our arteries, potentially making them more unstable and likely to break off and cause a heart attack or stroke.
  - Air pollution can promote blood clotting and put the heart under additional stress, both of which could increase the risk of heart attack or stroke.
- Research from the British Lung Foundation has found:
  - Nine out of ten patients with lung conditions surveyed have reported air pollution affects their health and wellbeing, with 63% of people with a lung condition feeling out of breath on high air pollution days. As a result, there is a clear increase in the number of people admitted to hospitals and visiting GPs with breathing problems during these episodes.
  - In 2019 over 8,500 schools and almost 3,000 health centres were in areas with levels of PM<sub>2.5</sub> above that recommended by the WHO, putting at risk the health of millions of children, patients and health workers.

- Around a third of children in the UK are growing up in areas with unsafe levels of air pollution. Children living in highly polluted areas are four times more likely to have reduced lung function in adulthood.
- In the UK, 1.1 million children have asthma and one in five of us will be diagnosed with a respiratory condition at some point in our lives.

## Key amendments to ensure the Bill works to better protect people's health

### Clause 2 – Environmental targets: particulate matter

#### **Amendment 20**

*Clause 2(2), page 2, line 20, leave out subsection (2) and insert-*

*“(2) The PM<sub>2.5</sub> air quality target must-*

- (a) be less than or equal to 10 µg/m<sup>3</sup>;*
- (b) so far as practicable, follow World Health Organisation guidelines, and*
- (c) have an attainment deadline on or before 1 January 2030.”*

#### ***Member's explanatory statement***

*This amendment sets parameters on the face of the Bill to ensure that the PM<sub>2.5</sub> target will be at least as strict as the 2005 WHO guidelines, with an attainment deadline of 2030 at the latest.*

#### **Why do we need the amendment?**

The UK Government has already rightly identified the need to take action in this area to better protect people's health and has said it intends to set strong targets for air quality. As part of this, it has specifically committed to adopting a new binding target for PM<sub>2.5</sub> through the Bill.

This reflects the fact that existing legal limits for outdoor concentrations of PM<sub>2.5</sub> are not strong enough to protect people's health. They are over two times higher than current WHO guideline of 10 micrograms per cubic metre (“µg/m<sup>3</sup>”) established by health experts in 2005.

Indeed, in 2019, the then Environment Secretary, Michael Gove said that the Bill should introduce “*a legally binding commitment on particulate matter so that no part of the country exceeds the levels recommended by the WHO.*”

However, as it stands, the Bill does not set a minimum level of ambition or a deadline for its achievement and Defra's target setting process as currently drafted within the Bill would mean that the new PM<sub>2.5</sub> target would not be set until October 2022. This leaves space for a less robust target to be set further down the line, and a further delay in action to reduce this harmful pollutant in the meantime.

Given that the WHO has made it clear that there is no safe level of PM<sub>2.5</sub> for people to be exposed to, it is essential that this Bill guarantees better protection of people's health going forwards.

The proposed amendment to Clause 2 would deliver that strong target whilst sending a clear message that the UK wants to lead the world in efforts to clean up our air.

### **What does this amendment do?**

This amendment is intended to set minimum parameters on the face of the Bill to ensure that the PM<sub>2.5</sub> target will be *at least as* strict as the current WHO guideline of 10 µg/m<sup>3</sup>, with an attainment deadline of 2030 *at the latest*. The amendment recognises that the numerical target itself, and specifications for the means of assessing it, will be established by subsequent secondary legislation, but would ensure the right level of ambition is committed to in primary legislation to avoid stalling on ambition to act.

A similar amendment was tabled by the Chair of the Environment, Food and Rural Affairs, Neil Parish MP, in the House of Commons and received widespread cross-party support, as well as from health and air pollution experts and the public.

By amending the Bill in this way Peers can ensure that the UK has a world-leading legally binding target for tackling these tiny toxic particles.

### **Why would this help to make the UK a world leader?**

The UK already has a legal limit for PM<sub>2.5</sub>, with which it complies. However, this originates from an EU Directive and is not ambitious enough to adequately protect people's health. Now we have left the EU, we have a major opportunity to set more ambitious targets and better protect UK citizens from harm.

In addition, with the UK hosting COP26 in Glasgow this November it is vital that the UK demonstrates global leadership on tackling air pollution. However, when compared to air quality standards set in other countries outside of the EU, the UK already lags behind in terms of ambition. Our existing annual PM<sub>2.5</sub> limit value is weaker than the standards applied in other developed countries including the USA, Australia, Norway and Switzerland.

The Government has said it intends to set strong targets, and this amendment would deliver that whilst sending a clear message that we want to lead the world in efforts to clean up our air. This in turn will set a path for British industry and innovators to develop the clean growth technologies and services that we and other countries need.

## **Clause 6 – Environmental targets: review**

### **Amendment 49**

Page 4, line 23, at end insert “and minimise, or where possible eliminate, the harmful impacts of air pollution on human health and the environment as quickly as possible.

(3A) The review of any air quality targets set under section 1 and the PM<sub>2.5</sub> air quality target set under section 2 must include an assessment of the targets against the latest relevant air quality guidelines published by the World Health Organization at the time of the review.

(3B) If any air quality targets set under section 1 and the PM<sub>2.5</sub> air quality target set under section 2 are weaker than the latest relevant air quality guidelines published by the World Health Organization at the time of the review, the report required by subsection (4) must—

(a) set out the steps the Secretary of State intends to take to ensure that those targets are at least in line with the latest relevant World Health Organization guidelines; or

(b) explain the public interest reasons why the Secretary of State considers that those targets should continue to diverge from the latest relevant World Health Organization guidelines.”

### **Member’s explanatory statement**

*This amendment strengthens the significant improvement test outlined earlier in Clause 6 by requiring explicit consideration of the extent to which air quality targets under section 1 and the PM<sub>2.5</sub> air quality target under section 2 are compatible with WHO guidelines. In the event of divergence, the Secretary of State must outline why they believe this is in the public interest.*

### **Why do we need this amendment?**

As the medical and scientific evidence on the impacts that air pollution has on people’s health develops, it is vital that there are mechanisms to keep the legislation up to date and drive further government ambition. Whilst Amendment 20 is intended to set out an initial minimum level of ambition in the Bill, Amendment 49 is needed to ensure that the law reacts to advances in scientific understanding to ensure that targets keep up with the latest evidence as much as possible.

The WHO brings together global experts, including many from the UK, to produce what is considered the gold standard in terms of an evidence base and guidelines to help governments set legal standards to protect people’s health from what is the single biggest environmental health risk across the world.

### **What does the amendment do?**

This amendment complements Amendment 20, which seeks to set minimum parameters on the face of the Bill to ensure that the PM<sub>2.5</sub> target will be *at least as* strict as the current WHO guideline of 10 micrograms per cubic metre (“µg/m<sup>3</sup>”), with an attainment deadline of 2030 *at the latest*.

This particular amendment serves to strengthen the test against which any air quality targets set under the Bill are subsequently reviewed.

Under the current provisions of the Bill, the Secretary of State is obliged to carry out an initial review of all environmental targets by 31 January 2023, and then periodically at least every five years after that. As it stands the ‘significant environmental improvement’ test against which that review must be carried out makes no reference to the need to consider the human health impacts of air pollution. Amendment 49 would ensure that human health considerations form a central part of the target review process, with the aim of minimising, or where possible eliminating, the harmful effects of air pollution. The amendment would also require consideration of the most recent WHO guidelines as part of that review process.

This amendment would not tie the government to following any future changes to the WHO guidelines. The government could choose to set new targets that match any changes or set targets that are weaker or stronger. The amendment would simply require that, where the Secretary of State takes the decision not to follow the latest guidelines set by the WHO, they must explain why. This allows the Secretary of State to retain control over the review of the target but provides a

transparent process whereby the government must at least set out the reasoning behind not ensuring that UK citizens benefit from legal protections that are in line with the latest guidelines produced by global experts.

## Clause 7 – Environmental improvement plans

### **Amendment 52**

Page 5, line 11, leave out subsection (4) and insert —

“(4) The “environmental improvement plan” must include, as a minimum —

- a) measures which, taken together, are likely to achieve any targets set under sections 1 or 2 and will ensure that the next interim targets included in the plan are met;
- b) measures that each relevant central government department must carry out;
- c) 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;
- d) a timetable for adoption, implementation and review of the chosen measures, and the authorities responsible for their delivery;
- e) an analysis of the options considered and their estimated impact on delivering progress against the relevant targets; and
- f) measures to minimise, or where possible eliminate, the harmful impacts of pollution on human health and the environment.”

### ***Member’s explanatory statement***

*This amendment strengthens environmental improvement plans by introducing a number of minimum requirements, including (but not limited to) ensuring a link between proposed measures and targets established under this Bill.*

### **Why is this amendment necessary?**

The environmental improvement plans required under the Bill should provide a robust tool by which government plans for and secures the achievement of new environmental targets. This is key to ensure that once targets are set, the necessary work is done to ensure that they are met. As it stands, the provisions of the Bill fail to achieve this.

Clause 7 currently requires that environmental improvement plans need only set out steps government “*intends to take to improve the natural environment*”. There is no requirement to include measures sufficient to deliver the binding targets committed to. Nor does the Bill require plans to include steps to protect human health. This risks a too-little-too-late approach, which leaves too much to the discretion of ministers, makes it difficult to ensure the government is doing all it can to deliver on its air quality commitments, and creates uncertainty for people, communities and businesses.

The Bill needs to be strengthened if it is to avoid replicating the delays and uncertainties that have plagued government plans for achieving existing binding targets for air quality. Legal limits for the

level of harmful nitrogen dioxide (“NO<sub>2</sub>”) pollution should have been met in 2010. Over a decade later, 75% of reporting zones in the UK still exceed legal limits and plans to tackle illegal pollution levels in many of these areas are yet to be finalised by the government and local authorities.

Plans for ambitious measures in cities such as Bristol, Leeds, Sheffield and Greater Manchester have been pushed back, weakened and/or scrapped, most recently due to the Covid-19 pandemic, but previously due to a lack of resources and political leadership at both a national and/or local level, leaving little certainty as to what action will be taken and how people’s health will be prioritised. Highways England are also still yet to publish any plan to show how it will ensure that pollution along its road network will be brought within legal limits. The Bill should not allow for any delay when it comes to action to protect people’s health, particularly under the current strain caused by Covid-19.

### **What does the amendment do?**

To provide a true plan for delivery and set a clear path for action, this amendment would require that government produces and implements plans that include timetabled, impact-assessed measures which ensure binding targets are likely to be met. To ensure coordination and avoid action becoming siloed, this amendment would also require plans to include commitments from each relevant central government department.

Tackling the air pollution crisis, as well as other pressing environmental issues, will require action from across many different sectors of industry and society. A plan that commits to a clear way forward would provide businesses with much needed certainty; enabling them to plan for a cleaner future with confidence and play their part in securing a healthy, green recovery.

Given that the predominant negative impact of air pollution is upon human health, it is essential that plans include measures to protect people, alongside steps to improve the natural environment. But as it stands the Bill is silent in this respect. Amendment 52 would require plans to contain measures to minimise the harmful impacts of pollution on human health, as well as measures to protect the health of those most vulnerable, such as children, older people, people with chronic illnesses and from disadvantaged backgrounds, as well as outdoor and transport workers.

## APPENDIX

### FAQs on the WHO air quality guidelines and government ambition

#### ***Has the UK Government not already shown world-leading ambition through its 2019 Clean Air Strategy?***

In May 2020, the WHO's Director in Public Health and the Environment, Dr Maria Neira, confirmed that the WHO were supportive of the UK's Clean Air Strategy, but she said that with the Environment Bill the Government needs to "raise the level of ambition".

#### ***Does the WHO intend their guidelines to be legal targets?***

The WHO's Director in Public Health and the Environment has confirmed that the guidelines should be the minimum goal for leaders who want to get serious about tackling air pollution.

The WHO also recommends that all governments "try to move as soon as possible" to their guidelines, and has stressed that by taking quick and ambitious action leaders "will be accountable for an important health benefit for [their] citizens".

#### ***As there is no safe level for pollution, is adopting the WHO guideline for PM<sub>2.5</sub> too simplistic?***

The WHO have said that no threshold has been identified below which no damage to health is observed. However, this amendment does not stop the Government from going further on PM<sub>2.5</sub> or setting other targets to tackle other forms of air pollution, rather, it sets a minimum, evidence-based threshold to drive reductions in air pollution across the country.

Adopting the WHO guideline for PM<sub>2.5</sub> would guarantee a better level of health protection for everyone including those disproportionately affected by toxic air such as children and older people. The recent inquest into the death of nine year-old Ella Adoo-Kissi-Debrah have put a name and a face to the very real harm that air pollution has - not only on individuals but also on their families. In the inquest, the coroner explicitly highlighted Ella's exposure to levels of air pollution above WHO guidelines and existing legal limits and concluded that this "excessive" pollution contributed to her death.

#### ***The Government has proposed a "dual approach" to tackling PM<sub>2.5</sub> pollution so is Amendment 20 necessary?***

We welcome the Government's commitment to also adopting a new exposure reduction target as this would help to drive improvements in areas that may already be below WHO guideline levels. However, this needs to sit alongside an ambitious ambient concentration target that provides a minimum basic level of protection for everybody based on the scientific evidence and delivered within this decade. A legal framework that drives down average exposure, but allows very high levels of pollution to remain in those areas that are worst affected, would not be a fair one. People should not be condemned to poor health based on where they live, work or study.

#### ***Do we need more time to work out the technicalities of this new target?***

The UK already monitors and assesses against existing legal limits that set the maximum concentration for PM<sub>2.5</sub>, and so already has a framework to work within.



In terms of setting a safer concentration for PM<sub>2.5</sub>, this work has already been done by world experts, including some from the UK, at the WHO. The need for improvements to the monitoring and assessment regimes should not be used as a reason to avoid setting the direction of travel now and start driving much needed action as quickly as possible. The need is urgent and real - according to the [British Heart Foundation](#), around 15 million people in the UK live in areas where average levels of these tiny toxic particles in the air exceed WHO guidelines. [Asthma UK and the British Lung Foundation](#) have further identified 8,549 schools and colleges situated in these same areas.

### ***Is it achievable?***

In 2019, [Defra commissioned technical analysis](#) by leading scientists that concluded that achieving WHO guidelines for PM<sub>2.5</sub> across the country is technically feasible, and that the measures we're already committed to could take us 95% of the way to the WHO's recommendation for what should be the basic level of protection. The Greater London Authority also published [further analysis by King's College London](#) that showed that achieving WHO by 2030 is feasible in what is the most polluted city in the country.

In order to meet the ambition set out in the 2019 Conservative manifesto for the Bill to be the "lodestar" by which the Prime Minister himself has said "we will guide our country to a cleaner and greener future", the Government must commit to bold targets to ensure action is taken.

The UK currently complies with the less ambitious existing legal limit for PM<sub>2.5</sub>, but reductions in this pollutant have stagnated over recent years and particularly since compliance was achieved. More ambitious targets will help drive action to better protect people's health. It is clear that adopting the WHO's guideline for PM<sub>2.5</sub> will achieve this much needed outcome.

## Why this matters to people across the country

*“My daughter, Ruby, has a heart condition and although I can’t quantify the damage being done to her by air pollution, I worry about her health. She talks about tasting the air pollution on the walk to school where we live in Bath and says she feels sick and tries not to breathe.*

*“It doesn’t seem fair that my children’s generation is bearing the brunt of the slow progress in tackling air pollution. I really wish this had been sorted out ten years ago when the law required it so I didn’t have to worry about the impact on my children’s health. It’s not doing their hearts and lungs any good and I’m worried about how their health will be affected in the future.*

*“I would ask the government to please commit to stronger clean air laws in the Environment Bill for our children’s sake. It’s such a shame that Bath, which should be a beautiful city to live in, is made so unpleasant and unhealthy by the dirty air. Stronger laws are needed to ensure that effective action is taken to protect my children’s health.”*

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Sally, Bath

*“I first became concerned about air pollution during my first pregnancy when I got a surprise high reading from a routine carbon monoxide test at a midwife appointment. As I didn’t smoke or have any faulty appliances the midwife suggested it might be because of air pollution.*

*“I felt so helpless. If I smoked I could have stopped, if the gas boiler was leaking poison I could have fixed it, but how could I protect my unborn child from the very air that I breathe! The more I learned about the life-long problems poor air can cause, the more I realised that I had to make changes in my own life. We chose not to buy a car when our baby was born, and now we walk and cycle everywhere. We avoid main roads and stand back from the kerbside on busy roads. But the most important changes need to be made by the government who could drive more ambitious action by all by introducing stronger legally binding air pollution limits!”*

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Celeste, London

*“I live in Derby, on a busy rat run between two major roads heading into the city. The poor air quality really concerns me. We have young families living on my street and my grandchildren come and stay. This is not a healthy street to live on. My community desperately needs the government to adopt stronger laws that will drive pollution down to the healthier levels recommended by the World Health Organization.”*

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Dave, Derby

*“We spent a great deal of time last year in King’s College Hospital with our baby son struggling to breathe. There were many other babies in A&E and the children’s ward with the same issue. The doctor thought it was due to high levels of pollution.*

*“Watching your baby struggle to breathe and in a lot of distress is something parents should not see. Being driven at speed through the night to A&E is not something I will ever forget.*

*“For the sake of all children, please improve our air quality. We need to see the laws and action to address this public health emergency urgently.”*

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Laura, London

*“I am concerned about the long term impacts of air pollution on my family’s health. The village we live in has, like so many others, seen massive amounts of house building in the last few years with a commensurate increase in traffic and seemingly little consideration to encourage walking or cycling through the new estates that have been created.*

*“I am concerned about my son’s exposure on his daily bus ride into Maidstone to school, as I know the town has such poor air quality and often, because of a lack of a capacity on the buses, is forced to wait for extended periods on the roadside on the way home for a bus. Maidstone has also been really slow on the uptake with the provision of electric vehicle charging points.*

*“I think stronger air pollution laws would protect not just me and my family but the whole country, saving NHS resources for other less preventable ailments, which is very important to me.”*

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Merowyn, Headcorn, Kent

*“I am a GP and parent of three young children so I have a professional and personal stake in wanting clean air. I simply feel so angry at work when I see patients with diseases that might have been caused by air pollution that they have no choice but to breathe.*

*“As a doctor I understand that current legal limits for air pollution are not strong enough to protect people’s health, including that of my family. I would like to see the government adopt the stricter WHO guidelines especially for fine particulate matter which is known to be very harmful to people’s health and commit to meeting these by 2030 at the latest.”*

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Rebecca, London

This briefing is supported by:

