

# MAYOR OF LONDON

## Consultation response on new Government environmental targets.

*Please note that, where targets do not relate to London or the Mayor's functions, we have not answered questions specific to those targets.*

### Confidentiality question:

Q: Would you like your response to be confidential?

No

### Biodiversity:

*Targets: Increase species abundance by at least 10% by 2042, compared to 2030 levels.*

*Improve the England-level GB Red List Index for species extinction risk by 2042 compared to 2022 levels.*

*To create or restore in excess of 500,000 hectares of a range of wildlife-rich habitat outside protected sites by 2042, compared to 2022 levels.*

Q: Do you agree or disagree that the proposed combination of biodiversity targets will be a good measure of changes in the health of our 'biodiversity'?

Disagree

Q: What additional indicators do you think may be necessary?

As well as a numerical target for habitat creation there must be a spatial element to the target. The habitat creation should mainly be happening in strategically important areas identified in Local Nature Recovery Strategies (LNRS) and the Nature Recovery Network (NRN). We would want to see this broken down to targets informed by and linked to each LNRS, that government will commit to supporting delivery of.

In addition to the forthcoming protected sites target there should also be a target for the condition of non-statutory sites and core sites in LNRS/the NRN. The Lawton Review was clear that improving the management of protected sites alone will not reverse declines in nature. Developing a broad measure of the condition of land outside of protected areas is essential to understand where different approaches and further investment is needed.

Q: Do you agree or disagree with the level of ambition of a 10% increase proposed for the long-term species abundance target?

Disagree

Q: What reasons can you provide for why the government should consider a different level of ambition?

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We welcome a commitment to monitoring long-term species abundance in a systematic way. This will be a crucial indicator of the success of Government's commitment to recover nature. As well as a national target, we would like to see this data made available at the LNRS level. It would be a valuable resource to support the delivery and monitoring of the strategies, especially in an urban area such as London where national-level trend analysis tends not to be as relevant.

However, the proposal to measure this target from a 2030 baseline is not ambitious enough. We know that many species have already experienced significant declines in both distribution and abundance over the previous decades and that this decline continues. Measuring from a starting point in 8 years' time means that even if the target is met, England could have a lower level of biodiversity in 2042 than there is today.

*Q: Do you agree or disagree with the level of ambition of 'in excess of 500,000 hectares' proposed for the long-term wider habitats target?*

Disagree.

*Q: What reasons can you provide for why the government should consider a different level of ambition?*

This must be a net target to take account of habitat loss.

## **Water Quality and availability:**

*Target: Reduce phosphorus loadings from treated wastewater by 80% by 2037 (against a 2020 baseline).*

*Q: The target needs to allow flexibility for water companies to use best available strategies to reduce phosphorus pollution, including the use of nature-based and catchment-based solutions. Do you agree or disagree that the proposed target provides this flexibility?*

We support the flexibility proposed. In line with the Government's Strategic Policy Statement for Ofwat, the preferred method should be to significantly increase the use of nature and catchment-based solutions to achieve multiple benefits for the environment and the public.

More information should be published to help understand what the scope is for using nature-based solutions to strip Phosphate from sewerage treatment works in urban areas where land is at a premium and the sewerage treatment works tend to be large with high volume discharges.

*Q: Do you agree or disagree with the level of ambition proposed for the nutrient targets?*

We support the phosphorus in treated wastewater target. However, there needs to be more clarity on how the new targets would intersect with existing river basin management plans.

The mechanism to deliver the wastewater phosphorus target would be the existing system of discharge permits. Anecdotally we understand that discharge permits are slow

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to be revised where a decision has been taken to reduce the permitted discharge – timeframes for revising discharge permits need to be clear with ambitious timeframes for action.

We also question the proposal for the target to be self-monitored by water companies given previous breaches of water quality. As a minimum, the Environment Agency, should undertake random spot checks of results to verify self-reports.

*Target: Reduce the use of public water supply in England per head of population by 20% by 2037.*

*Q: Do you agree or disagree with the level of ambition proposed for a water demand target?*

While the ambition to reduce water demand is welcomed it is not clear how the target would work in practice. In many cases the issue is related to the consumption of a few very high water users which skew per-capita consumption and it is not clear how the proposed target would address these cases.

In addition, leakage remains too high and while water efficiency is important, too much water is still lost to leakage. We would like to see an additional statutory leakage target for water companies which contributes to demand management.

The proposed target does not cover demands from non-public water supplies e.g. businesses, agriculture – action to reduce water demand from these sectors must keep pace with the public water supply reduction target.

## **Woodland Cover:**

*Target: Increase tree canopy and woodland cover from 14.5% to 17.5% of total land area in England by 2050.*

*Q: Do you agree or disagree with our proposed level of ambition for a tree and woodland cover target?*

London will only have a small part to play in being able to contribute to the delivery of these targets (for context the whole of Greater London has an area of around 157,000 hectares, about 1.2 per cent of England's area).

- More detail is needed on how the targets will be met, specifically what funding and new powers will be deployed to enable delivery, including details of the approaches to support delivery of Local Nature Recovery Strategies (LNRS) relevant to peri-urban and urban areas.
- Regional breakdowns should be provided (linked to LNRS) to ensure expectations are clear and appropriate.
- More detail is required on how progress against these targets will be monitored e.g. will it be linked to, or via, LNRS, or some other means. Defra should be clearer on how monitoring will be resourced.

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## Resource efficiency and waste reduction:

*Target: Reduce residual waste (excluding major mineral wastes) kg per capita by 50% by 2042 from 2019 levels. It is proposed that this will be measured as a reduction from the 2019 level, which is estimated to be approximately 560 kg per capita.*

*Q: Do you agree or disagree with the proposed scope of the residual waste target being 'all residual waste excluding major mineral wastes'?*

The scope of the waste reduction target is too limited: it should cover all waste and not just residual waste. The focus solely on residual waste means that there is little incentive to reduce the overall amount of recyclable waste produced and limits the potential to reduce associated carbon emissions.

We cannot simply recycle our way out of the waste problem. The Mayor, through the London Environment Strategy, is working to reduce waste overall as well as to increase recycling rates in London.

*Q: Do you agree or disagree with the level of ambition proposed for a waste reduction target?*

The Mayor believes that the target to reduce residual waste kg per capita by 50% by 2042 and to double resource efficiency by 2050 are unambitious in their timing and in the context of the climate emergency, will need to be delivered much sooner. In fact, the Mayor has set a goal for London to be net zero carbon by 2030 and to be a zero waste city.

The proposal to focus on reduction of residual waste only is too limited in its scope. The Mayor believes that the target should aim to reduce waste across all waste types including materials that can be recycled and not limited to residual waste. While recycling is better than incineration or landfill, it is still resource intensive and results in the gradual degrading of materials. A key focus in London has been to reduce common single-use items including plastic drinks bottles through the Mayor's water fountains and refill programmes, having installed over 100 drinking fountains and set up 4,400 refill points through Refill London.

City Hall has successfully phased out single-use plastic items from the catering outlet and staff welfare facilities such as single-use plastic bottles, cutlery, drink cups and straws. The Mayor is also working with the rest of the GLA Group to reduce the unnecessary use of single-use products. This includes a requirement for all Functional Bodies to develop action plans to demonstrate how they are planning to cut unnecessary use of single-use plastic and disposables within their estate, including plastic bottles, disposable coffee cups, plastic cutlery, and micro plastics in cleaning products. The Mayor has called on food delivery companies to stop using plastic cutlery and has asked them to join his efforts to reduce single-use plastic.

In addition to these initiatives, the Mayor also supports (through both ReLondon and his Green New Deal fund) a number of SMEs who aim to offer Londoners products to replace single-use plastics. These include Shellworks who produce Chitan from crustacean shells to replace single-use plastic, Homethings who offer home cleaning products in tablet form to avoid the need for plastic packaging and Cauli Box who offer reusable takeaway food boxes.

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The target for waste reduction appears to focus on waste reduction from households, however, targets should also be focusing further up the supply chain with the producers of waste such as product packaging. The waste reduction target and Resource Productivity targets need to be closely linked to the government's Extended Producer Responsibility (EPR) scheme and plastics tax. Government has unfortunately both delayed and reduced EPR in scope, significantly limiting its impact.

The Mayor agrees that real improvement is needed via waste minimisation and increased recycling (albeit with the focus on reduction), rather than simply diverting to landfill or incineration. However, this position is at odds with the National Policy Statement for Renewable Energy ("NPS EN-3") which states that the recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs, and that the recovery of energy from the combustion of waste forms an important element of waste management strategies in both England and Wales. In London, despite the Mayor of London's opposition since 2018, government's approval of additional energy from waste capacity will result in surplus capacity of over 1m tonnes per annum. This capacity is not needed to manage the London's non-recyclable waste and will create a disincentive to diverting waste higher up the hierarchy.

*Q: Do you agree or disagree with our proposed metric for considering resource productivity?*

The Mayor also believes that the resource productivity target needs to recognise the difference between virgin raw materials and secondary raw materials, with a differential weighting to ensure the focus is on reducing use of virgin materials and supporting a circular economy where materials are captured for beneficial use before becoming waste. A zero-waste circular economy is key to tackling climate change, as well as achieving both waste reduction and resource productivity, so requires greater consideration in relation to these targets. In addition, these targets will be difficult to implement regionally due to flow of resources and materials across local and regional boundaries, therefore these should be national targets.

## **Air Quality:**

The consultation notably fails to ask the critical question about the scope of the targets. In the absence of the accompanying evidence document there is no justification provided for the introduction of two new targets for just a single pollutant (PM<sub>2.5</sub>). Based on the latest WHO evidence, and taking into account its role as a pre-cursor to PM<sub>2.5</sub>, at the very least an additional target on nitrogen dioxide should be set.

*Our question: Is the scope of the new air quality targets sufficient to protect health and protect the environment?*

The consultation states that the Air Quality Standards Regulations 2010 (as amended) will remain in force without amendment, the question is effectively "are the existing UK Air Quality standards (excluding for PM<sub>2.5</sub>) still fit for purpose?" We believe that they are not.

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Taking Nitrogen Dioxide as an example the answer is clearly no: the health evidence has moved on since the targets were last set, and the Nitrogen Dioxide target is now four times the limit recommended for health.

Similarly, although not a significant issue in London, a brief comparison of existing UK limits for Sulphur Dioxide and the WHO guidelines shows that the government is well behind the evidence on this pollutant too.

Not only are these pollutants important in themselves they are critical in the production of secondary particulate matter, which is in turn a significant component of PM<sub>2.5</sub> in the UK. Further reduction of these two gas pollutants is therefore critical to setting and meeting an appropriately ambitious PM<sub>2.5</sub> target.

In a similar vein proper consideration needs to be given to other precursor substances, in particular Ammonia and Non-Methane Volatile Organic Compounds. It is worth noting that the importance of the role of ammonia as a precursor for PM<sub>2.5</sub> has been included in the current Defra consultation on Local Air Quality Management Guidance. This is a clear lack of joined up thinking (see page 23 here [https://consult.defra.gov.uk/air-quality-and-industrial-emissions/consultation-on-the-review-of-the-local-air-quality/supporting\\_documents/Consultation%20Document%20%20LAQM%20PG22.pdf](https://consult.defra.gov.uk/air-quality-and-industrial-emissions/consultation-on-the-review-of-the-local-air-quality/supporting_documents/Consultation%20Document%20%20LAQM%20PG22.pdf))

The detailed evidence accompanying the consultation acknowledges the significance of these pollutants in the overall PM<sub>2.5</sub> mass. Whilst some reduction in emissions of precursor substances has been included in the modelling it does not appear that consideration to the benefits of accelerating reductions in these emissions, both for their own sake and for reducing PM<sub>2.5</sub>.

The narrow focus on a single pollutant thus fails to meet at least three of the legal requirements for new targets:

- That targets should “use a system-based approach...”
- That targets should “consider relevant international best practice...”, and
- That targets are “resilient and future proofed”

We note also the advice received by Defra from the Committee on the Medical Effects of Air Pollution (COMEAP) that:

*“...This means that the associations [with health effects] likely reflect the effect of other pollutants to some extent. COMEAP’s previous consideration of this issue suggests that there would be greater benefits from reducing exposure to multiple pollutants than a single pollutant, as the available evidence reflects the effects of a pollutant mixture.”<sup>1</sup>*

The targets must also consider the UK’s international commitments. In the context of air pollution this means the targets should support the National Emission Reduction Commitments (and regulations). The Government’s Clean Air Strategy 2019 was clear that, without action to further reduce emissions of NO<sub>x</sub>, SO<sub>2</sub>, NMVOCs, PM<sub>2.5</sub> and NH<sub>3</sub>,

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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1060744/COMEAP\\_WHO\\_AQG\\_-\\_Defra\\_PM2.5\\_targets\\_advice\\_2\\_.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1060744/COMEAP_WHO_AQG_-_Defra_PM2.5_targets_advice_2_.pdf)

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the UK is not on track to meet these commitments. Much of the action set out in the Strategy has yet to emerge.

We note also that a scenario where the UK meets its legally binding commitment to achieving reductions of emissions of these pollutants was only included as a “sensitivity test” for action *above and beyond* the preferred “high” action scenario. That is Government is assuming failure to meet this legally binding commitment<sup>2</sup>, a poor choice of starting point in any target setting exercise let alone one creating new legal obligations.

Meeting our existing legal obligations really should be the starting point, failure to do so potentially leaves the targets open to the challenge that they will not result in a “significant improvement” (which is required in the Environment Act).

In summary, even if existing limits set out in the Air Quality Standards Regulations 2010 (as amended) are retained the new targets do not appear to be sufficient or ambitious enough in scope, either for the protection of health, to meet existing legal obligations or on their own terms to reduce PM<sub>2.5</sub>.

*Target: Annual Mean Concentration Target (‘concentration target’) – a target of 10 micrograms per cubic metre (µg/m<sup>3</sup>) [of PM<sub>2.5</sub>] to be met across England by 2040.*

Q: Do you agree or disagree with the level of ambition proposed for a PM<sub>2.5</sub> concentration target?

Disagree.

Q: What reasons can you provide for why the government should consider a different level of ambition

We disagree with both the time frame for compliance and the level of the target.

A child born this year will have their 18<sup>th</sup> birthday in 2040. A target set this far into the future consigns yet another generation of children to the lifelong health effects of early exposure to excess air pollution.

Historically we have seen how delay built into targets can be extended and the impacts on health and the environment prolonged, the obvious example being the use of derogations from the Nitrogen Dioxide targets which delayed the achievement date by 5 years (and even then, the later date was not met). We have previously challenged the provisions in the Environment Act for lowering targets or postponing the achievement date. Setting a target so far into the future with a built-in mechanism for further delay is a potential recipe for inaction when the Government has promised ambition.

As shown in the map included in the consultation London, as a result of both the location and size of the city, is among the areas with the largest change to make to achieve the proposed limit level for PM<sub>2.5</sub>. In 2019 we published a study showing that an annual mean concentration of 10 µg/m<sup>3</sup> of PM<sub>2.5</sub> by 2030<sup>3</sup> was achievable with sufficient additional powers and resources for the Mayor. While we have presented this evidence to

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<sup>2</sup> The National Emissions Ceilings regulation 2018,

<https://www.legislation.gov.uk/uksi/2018/129/introduction/made>

<sup>3</sup> [https://www.london.gov.uk/sites/default/files/pm2.5\\_in\\_london\\_october19.pdf](https://www.london.gov.uk/sites/default/files/pm2.5_in_london_october19.pdf)

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Defra and their advisory groups such as AQEG several times, including during the call for evidence for this target setting process.

Unlike the other targets in the Environment Act the PM<sub>2.5</sub> target is not required to be “long-term”, that is it does not need to be at least 15 years distant so it would be legally possible to set a legal limit for 2030.

We have shown that practical action in London does deliver rapid improvements in practice: the London Atmospheric Inventory 2019<sup>4</sup> (LAEI) shows that in 2019 parts of London were already meeting 10 µg/m<sup>3</sup> annual mean PM<sub>2.5</sub>. The LAEI also shows that average concentrations of PM<sub>2.5</sub> are approximately 19% lower than in 2016 – this includes measurements at background and roadside locations. The LAEI also shows that the overwhelming majority of the reduction in PM<sub>2.5</sub> emissions came from locally controlled traffic sources and were not due to changes in background or nationally controlled sources.

Against this level of change in one of the hardest to treat areas of the country, a limit value that has the effect of delaying improvements by another generation is inexcusable.

By contrast to our evidence Defra’s evidence accompanying the consultation goes to some lengths to argue that delaying the target date from 2030 to 2040 is a consequence of the difficulties posed by London. Given the evidence we supplied prior to the consultation, and Defra’s own evidence that a concentration of 10 µg/m<sup>3</sup> is achievable by 2030, we contest these elements of the evidence base.

Figure 33 in the “Air quality targets – Detailed evidence pack” shows how “achievable” an annual mean PM<sub>2.5</sub> concentration of 10 µg/m<sup>3</sup> is by 2030 and 2040. This table shows that a scenario where the UK meets its legal obligations on emission reductions is one where it is possible to achieve 10 µg/m<sup>3</sup> PM<sub>2.5</sub> by 2030.

The tables also consider “hybrid” scenarios, where London takes additional and/or more rapid action to reduce emissions, in all but one of these scenarios it is considered possible or likely that 10 µg/m<sup>3</sup> PM<sub>2.5</sub> be achieved by 2030. We have shown in recent years that the Mayor and Londoners are willing to take action above and beyond the rest of the country, indeed we have consistently lobbied for the powers and funding needed to do so.

Overall, the Government’s own evidence shows that 10 µg/m<sup>3</sup> PM<sub>2.5</sub> by 2030 is possible or likely to be achievable in more scenarios than scenarios where it is unlikely to be achievable. In this context it is hard to comprehend why the level of the target has been set with so little ambition. The World Health Organization is clear, as is the Government’s own Committee on the Medical Effects of Air Pollution, that there is unlikely to be a lower threshold where PM<sub>2.5</sub> does not damage health.<sup>5</sup>

The international comparison is also instructive. Our neighbours in the European Union are currently consulting on revisions to the ambient air quality directive. Although the EU consultation is unlikely to result in new targets before the October deadline for UK targets a clear direction of travel is emerging from the published consultation materials<sup>6</sup>:

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<sup>4</sup> <https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory--laei--2019>

<sup>5</sup> See for instance the COMEAP “Advice on health evidence relevant to setting PM<sub>2.5</sub> targets – update” here <https://www.gov.uk/government/publications/fine-particulate-air-pollution-pm25-setting-targets>

<sup>6</sup> See for example the materials published here:

[https://ec.europa.eu/environment/air/quality/revision\\_of\\_the\\_aaq\\_directives.htm](https://ec.europa.eu/environment/air/quality/revision_of_the_aaq_directives.htm)



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- The protection of health is being taken as the guiding principle for defining air pollution targets.
- The European Union has therefore taken the revised 2021 World Health Organization guidelines for all pollutants as a starting point for defining the level of ambition.
- Despite many member states being in a more challenging starting position than the UK, 10  $\mu\text{g}/\text{m}^3$   $\text{PM}_{2.5}$  by 2030 is described as a medium ambition target. Getting to 5  $\mu\text{g}/\text{m}^3$   $\text{PM}_{2.5}$  by 2030 is a high ambition scenario.

The two key points here are that the UK, and England specifically, therefore risks falling behind our neighbours in terms of environmental protection. Britain was dubbed the “dirty man of Europe” when we joined the EU in 1973, it would be a tragedy if post-Brexit regulatory divergence was used to regain that reputation and not to aspire to leadership on the Environment.

Secondly, we should expect long range transboundary pollution, particularly import of  $\text{PM}_{2.5}$  and precursor substances, to fall over the timescales of the UK targets. This likely reduction in background should be taken into account in understand what ambition should set in the Environment Act targets. The graphs in the evidence pack, although hard to read and not accompanied by numbers, do not appear to show any reduction is assumed in the transboundary contribution.

There is simply no excuse for not setting an ultimate limit at the level recommended in the WHO guidelines, of 5  $\mu\text{g}/\text{m}^3$  annual mean  $\text{PM}_{2.5}$ . The supporting evidence shows that Defra have even considered this possibility.

That said we do acknowledge that achieving the WHO guideline value is challenging, but a target that is not set will never be achieved.

Bearing in mind that (1) there is no maximum number of targets that can be set under the Environment Act, (2) we have shown that the WHO interim target 4 for  $\text{PM}_{2.5}$  can be met by 2030 in the most difficult parts of England and (3) the final WHO guideline for  $\text{PM}_{2.5}$  is more challenging we would recommend that three concentration targets are set. The first setting a target of 10 micrograms per cubic metre ( $\mu\text{g}/\text{m}^3$ ) annual mean  $\text{PM}_{2.5}$  to be met across England by 2030. The second a longer-term target of meeting 5 micrograms per cubic metre ( $\mu\text{g}/\text{m}^3$ ) annual mean  $\text{PM}_{2.5}$  to be met across England, with the date set as soon as possible. Finally, a third target for nitrogen dioxide based on meeting the 10 micrograms per cubic metre annual mean, with the date informed by the yet as unseen Defra evidence. The necessary powers and funding would need to be devolved to effective local actors to achieve these targets, starting with the large amount of unfinished business in the Government’s own 2019 Clean Air Strategy.

*Target: Population Exposure Reduction Target (“exposure reduction target”) – a 35% reduction in population exposure by 2040 (compared to a base year of 2018)*

Q: Do you agree or disagree with the level of ambition proposed for a population exposure reduction target?

Disagree.

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Q: What reasons can you provide for why the government should consider a different level of ambition?

The proposed “national indicator based on the average of representative monitoring sites across the country” is similar in concept to the European “Average Exposure Indicator” (AEI), which set sequential legal targets to be met in the UK between 2010 and 2020. The “representative monitoring sites” will be at background or urban background locations and the average will be an unweighted arithmetic (3 year) mean of the measured concentrations in  $\mu\text{g}/\text{m}^3$ . We note that The AEI, at least in the UK, has not provided a significant incentive for action to reduce  $\text{PM}_{2.5}$  over the decade that it was in force, and in practice relatively little national action was taken in that period to achieve the target.

The UK’s reference year (2010) AEI was  $13 \mu\text{g}/\text{m}^3$ ; on this basis, the Air Quality Standards Regulations set an exposure reduction target of 15% to be met by 2020. This equated to reducing the AEI to  $11 \mu\text{g}/\text{m}^3$  by 2020. In the event the indicator was  $8 \mu\text{g}/\text{m}^3$  in 2020 and  $10 \mu\text{g}/\text{m}^3$  in the two preceding years. It is likely that the significant drop in 2020 was in part due to the impact of the pandemic.

Nevertheless, between 2010 and 2020 England achieved slightly more than a 15% reduction in the indicator. The proposed target is for a 35% reduction in the 22-year period from 2018 to 2040.

Not only does the proposed metric therefore effectively double count the gains already made in the last 4 years it simply embeds the current rate of reduction. This is not ambition in any meaningful sense.

As the proposed measure is effectively a measure of background concentration it is also not clear if there is any additional value in this target beyond the concentration target. The evidence document is clear that Defra want the reduction target to deliver additional benefit, especially in those areas of the country where the annual mean target is already achieved and that the mechanism is likely to be through changes to the Local Air Quality Management (LAQM) framework.

The current consultation on the LAQM does not appear to take this additional role properly into account. Although the LAQM consultation does propose that areas that already comply with legal limits should be encouraged to have a non-statutory air quality strategy, this proposal is far too weak to redress the flaws in a purely national exposure reduction indicator.

It is also the case that the modelling assessment does not consider separate scenarios for the population exposure target as distinct from the annual mean target. That is to say no additional action is considered as a result of the additional target, indicating that it is simply a different way of counting the same end point rather than an additional effective goal.

A more effective approach would be to adopt a 5 micrograms annual average target for  $\text{PM}_{2.5}$  as set out above.

A second issue with this type of target is the chilling effect of averaging over such a broad geographical scope, especially when combined with a concentration target that should already drive action in the most polluted areas.

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Defra's evidence document seeks to show how this target will incentivise action across England, but in reality the process of averaging gives little incentive to those areas with already relatively lower background concentrations to act, and especially so as areas with relatively higher concentrations are working toward reducing them, bringing an improvement to the national average even in the absence of action elsewhere.

This type of structure could also have the perverse effect of making it harder in those areas that are struggling to meet the concentration limit as the background they inherit from their neighbours is less likely to be improved.

Although rejected in Defra's evidence document we believe a parallel or subsidiary set of regional "exposure reduction" targets would repair this deficiency in a national average approach by incentivising each region to improve background concentrations locally and providing an effective structure to activate the Local Air Quality Management framework in the service of exposure reduction.

## **Monitoring and compliance assessments for air quality.**

Although no explicit question is asked on the monitoring proposals for air quality this is a key issue that needs to be openly addressed *before* the targets are set. The discussion on monitoring in the evidence document is welcome, but lacking in some areas.

Effective monitoring is critical to define meaningful air pollution targets. Similarly, the way that compliance is interpreted from the monitoring has a huge effect on the impact of the targets on real exposure to air pollution and health.

The annual concentration target is proposed to be considered to be met "If the target was met in three out of the four previous years". Amongst other things this is a highly unusual approach to regulation – no one thinks that a speed limit has been met if the target was met three out of the last four times you drove your car, or that building regulations have been adhered to if three out of the four previous houses you built didn't fall down. It is hard to see how a target with this sort of compliance structure could ever be effectively enforced.

The rationale given is that this is in order to account for intermittent and inherently unpredictable natural events, such as Saharan dust events. Although they can be large in impact such events are generally short lived and the suggestion that they would result in failure to meet an annual mean target implies that Defra are anticipating achievement by only the very slimmest of margins. This is obviously unacceptable; although natural events are unpredictable in detail, we know that they happen fairly regularly and that they contribute to the health effects of pollution.

It is worth also considering the practical incentive created by such a mechanism. We know that there are annual variations in pollution levels driven by weather and atmospheric conditions as well as "events". With a target that is to be met every year this means that authorities are incentivised to exceed the target where possible, thus allowing for natural variations to occur without risk of non-compliance.

A target that implies compliance only by the barest possible margin incentivises the minimum possible action. This is to entirely miss the point of reducing air pollution – ultimately it is not a numbers game, it is about protecting public health.

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The indication that the Automatic Urban and Rural Network (AURN) is likely to be increased, and the methodology for adding new stations is welcomed. We do note, however, that no consideration is given to incorporating existing local authority monitoring into the national network. Using existing monitoring, where appropriate and of a suitable standard, could resolve some of the issues round baseline calculations and free up limited local authority resources for action.

The principles for identifying new monitoring locations are broadly sensible but could be improved by clarifying which principles are more important. For instance, locating new monitors in areas of high deprivation should be prioritised above using existing monitoring locations.

## **Equalities:**

It well known that exposure to poor air quality is generally higher in areas of high deprivation than in more affluent areas. The detailed evidence pack considers changes to this inequality only after the fact, as an outcome of achieving the targets.

The unsurprising result of treating inequality as an output of rather than a driver for action is that there is relatively little difference in the ratio of the highest exposure to the lowest exposure in the scenarios considered. Even worse the shape of the inequality remains unaltered in all scenarios, with people living in the most deprived neighbourhoods remaining significantly more exposed to air pollution than the most well off.

While it will be possible to re-assess the unequal effects of air pollution at the detailed action planning stage it is unacceptable that absolutely no consideration has been given as to how appropriately designed targets could prioritise action to improve the lives of those already recognised as disproportionately impacted.