Consultation on Draft National Air Pollution Control Programme (NAPCP)

CIEH Response to DEFRA Consultation

September 2022

About the Chartered Institute of Environmental Health (CIEH)

CIEH is the professional voice for environmental health representing over 7,000 members working in the public, private and third sectors, in 52 countries around the world. It ensures the highest standards of professional competence in its members, in the belief that through environmental health action people's health can be improved. Environmental health has an important and unique contribution to make to improving public health and reducing health inequalities. CIEH campaigns to ensure that government policy addresses the needs of communities and business in achieving and maintaining improvements to health and health protection.

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Key Points:

There is an overarching lack of detail in the draft NAPCP which prevents meaningful assessment of the degree to which the emission reduction policies and measures set out within it are likely to go far enough to deliver against the UK’s legally binding emission reduction commitments.

CIEH welcome the approach from the UK government in identifying the relevant pollutants, as well as identifying the main sources of their emissions with abatement forecasts included. We also welcome the fact that the proposals include an overview of the Policies and Measures (PaMs) being introduced by the various devolved administrations in reducing their respective emissions.

However, we are disappointed with the lack of detail within the proposals and feel that this prevents proper public scrutiny of the proposals and limits the degree to which stakeholders can engage with the present consultation. As those tasked with enforcing these proposals, members felt that there was little tangible detail with which they could engage with, confusion as to what the government were basing their abatement forecasts on, and a general frustration regarding the consultation process more generally. Members also expressed concerns regarding consulting on such a technically detailed and nuanced consultation via an online survey. CIEH would welcome the opportunity to meet with DEFRA officials for more meaningful consultation on the proposals outlined in this consultation.
Introduction:

Air pollution is recognised by the UK Government to be the single largest environmental risk to public health in the UK. In 2019, the-then Health Secretary, Matt Hancock, warned of this 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.”

Particulate matter (PM2.5) is small enough to pass through the lungs, into the bloodstream, and into the organs. The biggest impact is through cardiovascular disease, where breathing polluted air can increase the risk of developing heart and circulatory diseases. For people with existing health problems such as coronary heart disease, exposure to air pollution increases the risk of a heart attack or stroke. Toxic air also exacerbates respiratory illnesses, such as 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 has been linked to cancer, increases in risk of developing dementia and there is increasing evidence suggesting impacts on cognitive development, including impairing children’s ability to learn.  

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, in June 2022 the Confederation of British Industry estimates that a £1.6bn annual economic benefit to the UK could be realised by reducing PM2.5 concentrations to within 10 µg/m³, as three million working days are lost every year to air pollution. 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.

6. Do you agree or disagree with the balance of measures across the 7 NAPCP packages as set out in section 2.6.1 of the NAPCP document, for the abatement of fine Particulate Matter (PM2.5)?

Disagree

Additional comments:

CIEH disagrees with the balance of measures across the seven NAPCP packages for the abatement of PM2.5, for the reasons outlined below:

We feel that the draft NAPCP lacks key information that is critical to inform proper public scrutiny. Without sight of information about the anticipated impact of individual PaMs or

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1 Cognitive decline, dementia and air pollution: A report by the Committee on the Medical Effects of Air Pollutants (publishing.service.gov.uk)
2 The economic potential released by achieving clean air in the UK? | CBI
explanation of how the government has produced the abatement projections set out in section 2.6.1, it is extremely difficult for stakeholders to provide informed comment on whether the proposed balance of measures is likely to be sufficient to deliver against the UK’s legally binding emission reduction commitments for PM2.5.

Even without this information, a couple of major issues with the proposed balance of measures are clear.

Firstly, based on the results of the government’s own projections, there remains a clear and significant risk that the UK will miss its legally binding 2030 emission reduction commitment for PM2.5, even with the additional PaMs set out in the draft NAPCP in place.

Regulation 6(3) of the National Emission Ceilings Regulations 2018 requires the Secretary of State to ensure that by 2030 the UK’s total anthropogenic emissions of PM2.5 are at least 46% lower than a 2005 baseline. Regulation 9(1) requires the Secretary of States to prepare and implement the NAPCP in order to limit emissions in accordance with that emission reduction commitment.

The projections set out at section 2.8.1 of the draft NAPCP suggest that the UK’s PM2.5 emissions are set to decrease by 42-47% by 2030 against the 2005 baseline in the ‘With Additional Measures’ (or ‘WAM’) scenario. The NAPCP states that these WAM projections are “based on estimated abatement from all adopted measures and measures that will be considered further as set out in section 2.6”. Most of the range of estimated impact in the WAM scenario would be insufficient to secure compliance with the 46% emission reduction commitment. Whilst it is difficult for stakeholders to properly scrutinise these projections given the lack of further information regarding their basis, it is nevertheless clear that there remains a major risk that the UK government is set to breach its 2030 emission reduction commitment for PM2.5 even if one assumes that the full suite of PaMs set out at section 2.6 were to be implemented (an assumption which itself appears far from certain). This a huge concern given the harmful impacts that PM2.5 is known to have on human health.

The NAPCP does not explain what additional action the government intends to take to minimise this major risk of non-compliance. For the NAPCP to ensure that the UK is on track to meet its legally binding emission reduction commitment for PM2.5 by 2030, the revised NAPCP should commit the government to assessing further additional measures and/or explain how it intends to minimise the uncertainty of impact of the PaMs already described (for example, through better design or quicker implementation).

Secondly, the NAPCP does not set out any significant action to reduce PM2.5 emissions from road transport, despite this being a major source of overall emissions.

The largest share of the estimated emission reductions appears to relate to domestic combustion; the combined expected emission reductions from the Solid Fuels, Communications on burning, and Cleaner stoves packages by 2030 amounts to 2.3-9kt. It is
our view that a reduction in emissions from future appliances seems relatively irrelevant and fails to tackle the issue now - every new appliance in a property that has other forms of heating (electric/gas) is an unnecessary addition. A ban on this seems fair allowing installation in properties to continue where there are no other means available. Given that urban areas are more likely to have alternative heating methods, and are therefore more populated, the impacts from these properties burning on the health of the population may be higher than that in a rural community.

The next largest expected emission reduction is attributed to the Net Zero package, estimated to deliver a 4.9kt reduction by 2030. Accordingly, these two packages comprise the vast majority of the total overall estimated emissions reductions for PM2.5 of 8.4-15.2kt. By contrast, the expected emission reduction from the Road transport package by 2030 is a mere 0.2kt. This is well out of proportion to the much greater scale of emissions contributed by this source. Figures published in the most recent Informative Inventory Report (1990-2020) appear to indicate that road transport (category 1A3b) contributed at least 12% of total PM2.5 emissions in 2020 (page 132). Nevertheless, the projected emissions abatement from the road transport package would make only a nominal contribution to the overall emissions abatement required to meet the 2030 emission reduction commitment.

Taking stronger action in relation to road transport represents a key opportunity to reduce the above-mentioned risk of non-compliance with the UK’s 2030 emission reduction commitment for PM2.5. Policies which discourage vehicle travel and encourage increased uptake of public transport and active transport should be prioritised. We note that the Net Zero Strategy acknowledges that the UK must not rely on the electrification of road transport alone and includes various policies designed to increase the share of journeys by public transport, walking and cycling. However, the paltry 0.2kt expected PM2.5 emissions reductions by 2030 for the Net-Zero package strongly indicates that such measures do not go far enough, suggesting that they may only fractionally reduce vehicle use. The revision of the NAPCP provides the government with an important opportunity to scale up action to encourage this modal shift away from vehicle use in a manner which is mutually supportive for the UK’s air quality and climate obligations.

Finally, we would like to state the point that while we disagree with the balance of measures, we approve of the UK government taking the approach to identify the various pollutants with abatement forecasts produced for each. We approve of the process of identifying sources of pollutants and approve of the inclusion of the PaMs being considered by the devolved administrations in a UK-wide manner in this process. CIEH members have expressed disappointment in the level of detail offered with respect to specific abatement measures which are to be taken, as well as with the Consultation Survey process itself - feeling it to be too simplistic and formulaic to enable any sort of meaningful consultation on such important issues. Our members would welcome more detail on the proposals as well as a meeting with DEFRA officials as this would amount to more meaningful consultation with those tasked with enforcing these proposals.
7. Do you agree or disagree with the balance of measures across the 7 NAPCP packages as set out in section 2.6.1 of the NAPCP document, for the abatement of Ammonia (NH3)?

Disagree

Additional comments:

The CIEH disagrees with the balance of measures across the seven NAPCP packages for the abatement of PM2.5 for the reasons outlined below:

Once again, we feel that the draft NAPCP lacks key information that is critical to inform proper public scrutiny. Without sight of information about the anticipated impact of individual PaMs or explanation of how the government has produced the abatement projections set out in section 2.6.1, it is extremely difficult for stakeholders to provide informed comment on whether the proposed balance of measures is likely to be sufficient to deliver against the UK’s legally binding emission reduction commitments for ammonia.

Even so, based on the results of the government’s own projections, it is clear that there remains a significant risk that the UK will miss its legally binding 2030 ERC for ammonia, even with the additional PaMs set out in the draft revised NAPCP in place.

Regulation 6(3) of the National Emission Ceilings Regulations 2018 requires the Secretary of State to ensure that by 2030 the UK’s total anthropogenic emissions of ammonia are at least 16% lower than a 2005 baseline. Regulation 9(1) requires the Secretary of States to prepare and implement the NAPCP in order to limit emissions in accordance with that ERC.

The projections set out at section 2.8.1 of the draft revised NAPCP suggest that the UK’s ammonia emissions are set to decrease by 12-16% by 2030 in the WAM scenario. Most of the range of possible impact in this scenario would be insufficient to secure compliance with the 16% ERC. The NAPCP states that these WAM projections are “based on estimated abatement from all adopted measures and measures that will be considered further as set out in section 2.6”. Whilst it is difficult to properly scrutinise the projections given the lack of available information regarding their basis (as explained above), it is nevertheless clear that there remains a major risk that the UK government is set to breach its 2030 ERC for Ammonia even if one assumes that the full suite of PaMs being considered by the government were to be implemented.

Despite this major risk of non-compliance the NAPCP contains no explanation of what additional action the government intends to take to minimise this risk. For the NAPCP to ensure that the UK is on track to meet its legally binding ERC for ammonia by 2030, the revised NAPCP should commit the government to assessing further additional measures and/or explain how it intends to minimise the uncertainty of impact of the PaMs already described (for example, through better design or quicker implementation). Our response to
question 11 of this consultation sets out key emissions sources that the government should be looking to target as part of this, as well as additional PaMs that it could look to consider in this context.

The NAPCP refers to the UK government having submitted an adjusted inventory for ammonia to the UNECE for their consideration (see section 2.8.3). This adjusted inventory would (amongst other things) remove emissions from non-manure digestate from the UK’s emissions inventory for the purposes of assessing compliance with ERCs, and is reported as leading to a decrease in projected ammonia emissions in 2030 by 21.75kt, if approved. At the same time, section 2.3.1 of the NAPCP describes the use of anaerobic digestion plants as a growing source of ammonia emissions, driven by the Green Gas Support Scheme. We are comforted to see that the adjustment has not yet been applied in the NAPCP, as it still remains subject to approval. Furthermore, given that non-manure digestates represent a growing source of ammonia emissions we are very concerned about the prospect of the government removing ongoing legal incentive to address urge the government not to exclude this emissions source from its assessment going forward.

Again, we would like to reiterate that while we disagree with the balance of measures, we approve of the UK government taking the approach to identify the various pollutants with abatement forecasts produced for each We approve of the process of identifying sources of pollutants and approve of the inclusion of the PaMs being considered by the devolved administrations in a UK-wide manner in this process. CIEH members have expressed disappointment in the level of detail offered with respect to specific abatement measures which are to be taken, as well as with the Consultation Survey process itself - feeling it to be too simplistic and formulaic to enable any sort of meaningful consultation on such important issues. Our members would welcome more detail on the proposals as well as a meeting with DEFRA officials as this would amount to more meaningful consultation with those tasked with enforcing these proposals.

8. Do you agree or disagree with the balance of measures across the 7 NAPCP packages as set out in section 2.6.1 of the NAPCP document, for the abatement of Nitrogen Oxides (NOx)?

Neither agree or disagree

Additional comments:

As aforementioned, the CIEH feel that the draft NAPCP lacks key information that is critical to inform proper public scrutiny. Without sight of information about the anticipated impact of individual PaMs or explanation of how the government has produced the abatement projections set out in section 2.6.1, it is extremely difficult for stakeholders provide informed comment on whether the proposed balance of measures is likely to be sufficient to deliver against the UK’s legally binding emission reduction commitments for NOx.
Again, we would like to reiterate that we approve of the UK government taking the approach to identify the various pollutants with abatement forecasts produced for each. We approve of the process of identifying sources of pollutants and approve of the inclusion of the PaMs being considered by the devolved administrations in a UK-wide manner in this process. CIEH members have expressed disappointment in the level of detail offered with respect to specific abatement measures which are to be taken, as well as with the Consultation Survey process itself - feeling it to be too simplistic and formulaic to enable any sort of meaningful consultation on such important issues. Our members would welcome more detail on the proposals as well as a meeting with DEFRA officials as this would amount to a more meaningful consultation with those tasked with enforcing these proposals.

9. Do you agree or disagree with the balance of measures across the 7 NAPCP packages as set out in section 2.6.1 of the NAPCP document, for the abatement of Non-Methane Volatile Organic Compounds NMVOCs?

Don’t know

Additional comments:

As aforementioned, the CIEH feel that the draft NAPCP lacks key information that is critical to inform proper public scrutiny. Without sight of information about the anticipated impact of individual PaMs or explanation of how the government has produced the abatement projections set out in section 2.6.1, it is extremely difficult for stakeholders provide informed comment on whether the proposed balance of measures is likely to be sufficient to deliver against the UK’s legally binding emission reduction commitments for NMVOCs.

Again, we would like to reiterate that we approve of the UK government taking the approach to identify the various pollutants with abatement forecasts produced for each. We approve of the process of identifying sources of pollutants and approve of the inclusion of the PaMs being considered by the devolved administrations in a UK-wide manner in this process. CIEH members have expressed disappointment in the level of detail offered with respect to specific abatement measures which are to be taken, as well as with the Consultation Survey process itself - feeling it to be too simplistic and formulaic to enable any sort of meaningful consultation on such important issues. Our members would welcome more detail on the proposals as well as a meeting with DEFRA officials as this would amount to a more meaningful consultation with those specifically tasked with enforcing these proposals.

10. Do you agree or disagree with the balance of measures across the 7 NAPCP packages as set out in section 2.6.1 of the NAPCP document, for the abatement of Sulphur Dioxide (SO2)?

Don’t know
Additional comments:

As aforementioned, the CIEH feel that the draft NAPCP lacks key information that is critical to inform proper public scrutiny. Without sight of information about the anticipated impact of individual PaMs or explanation of how the government has produced the abatement projections set out in section 2.6.1, it is extremely difficult for stakeholders provide informed comment on whether the proposed balance of measures is likely to be sufficient to deliver against the UK’s legally binding emission reduction commitments for SOx.

Again, we would like to reiterate that we approve of the UK government taking the approach to identify the various pollutants with abatement forecasts produced for each. We approve of the process of identifying sources of pollutants and approve of the inclusion of the PaMs being considered by the devolved administrations in a UK-wide manner in this process. CIEH members have expressed disappointment in the level of detail offered with respect to specific abatement measures which are to be taken, as well as with the Consultation Survey process itself - feeling it to be too simplistic and formulaic to enable any sort of meaningful consultation on such important issues. Our members would welcome more detail on the proposals as well as a meeting with DEFRA officials as this would amount to a more meaningful consultation with those specifically tasked with enforcing these proposals.

11. After the publication of this NAPCP, UK government and devolved administrations will continue to develop our policy measures and approaches. Please inform us of any further measures you think we should consider to help achieve the UK ERCs most effectively.

Proposals should be evidence based. Please select a country from the list below to which your measure(s) relate to and use the text box and file upload button to describe the proposed measure and supporting evidence.

As highlighted in response to consultation questions 6 and 7, based on the results of government projections there remains a clear risk that the PaMs proposed within the draft NAPCP will not go far enough to achieve the UK’s 2030 emission reduction commitments for PM2.5 and ammonia. In order to minimise this risk and ensure that compliance is achieved in line with the statutory deadline, we urge the government to include additional measures to tackle the major sources of these pollutants such as:

Additional measures to reduce ammonia emissions:

CIEH would recommend a strict line that all new poultry units be fitted with scrubbers with all existing poultry units to be retrofitted over a given timeframe.

Additional measures to reduce PM2.5 emissions:
The Welsh government does not currently regulate the sale of domestic solid fuels. We would like to see such regulations come into force.

The Northern Ireland Assembly has published its Clean Air Strategy in 2020, but without an Executive this cannot be legislated for. CIEH would like to see proposals explored which would enable such legislation to come into effect - either via the Northern Ireland Assembly or via Westminster.

12. Do you agree or disagree with the scale of the potential emission reductions for each of the 7 packages of PaMs as set out in table 2.6.1 of the draft NAPCP?

Don’t know

If you answer disagree (i.e. you feel the scale is either too low or high) please provide views and information to support your view.

As aforementioned, the CIEH feel that the draft NAPCP lacks key information that is critical to inform proper public scrutiny. Without sight of information about the anticipated impact of individual PaMs or explanation of how the government has produced the abatement projections set out in section 2.6.1, it is extremely difficult for stakeholders provide informed comment on the estimated scale of emissions reductions for the seven packages of PaMs.

Again, we would like to reiterate that we approve of the UK government taking the approach to identify the various pollutants with abatement forecasts produced for each. We approve of the process of identifying sources of pollutants and approve of the inclusion of the PaMs being considered by the devolved administrations in a UK-wide manner in this process. CIEH members have expressed disappointment in the level of detail offered with respect to specific abatement measures which are to be taken, as well as with the Consultation Survey process itself - feeling it to be too simplistic and formulaic to enable any sort of meaningful consultation on such important issues. Our members would welcome more detail on the proposals as well as a meeting with DEFRA officials as this would amount to a more meaningful consultation with those tasked with enforcing these proposals.

13. We have outlined the uncertainty of projections in the ‘UK NAPCP additional factors’ above. Please provide any additional information on potential changes over the next 8 years which may impact emission projections. Please also select the category that your information relates to.

N/A

14. In revising the NAPCP the UK has followed the format set out in EU implementing decision 2018/1522. Do agree or disagree that the format of the NAPCP could be improved?
Don’t know

If you answer agree and think the format could be improved, please provide views on how the NAPCP can be improved. This can be either presentational (i.e. the format or content required), or effectiveness/usefulness of the document. If you disagree and don’t think the format of the NAPCP could be improved, please provide your views on the content and/or effectiveness/usefulness of the current format.

No further comments.