



11 July 2022

From David Hill and Gareth Davies

Director General for Environment, Rural and Marine

Second Permanent Secretary of the Department for Transport

To Sir Geoffrey Clifton-Brown, Deputy Chair of the Committee of Public Accounts

Dear Sir Geoffrey

Air Quality PAC: Follow-Up Response

Thank you for giving us the opportunity to attend the Public Accounts Committee hearing on 27 June to discuss tackling local air quality breaches.

During the hearing there were several points we promised to follow up on with further detail.

For the transcript we would also like to note a correction to David Hill's role and length of service - Director-General Environment, Rural and Marine since October 2020.

Cross-government spending on air quality

At the hearing, we explained it is technically difficult to track spend across portfolios of air quality initiatives, including initiatives that benefit air quality but that have wider objectives (Questions 32 and 33 in the transcript). You asked why it is so difficult and what more could be done to obtain the data across Government.

Defra has robust information on spend for air quality initiatives led by Defra (a breakdown of JAQU and AQIE spending is listed in Annex A). Defra holds overall strategic responsibility on air quality policy however the levers which affect air pollution are varied, complex and sit across government (as demonstrated in Annex B).

Defra works closely with other Government Departments to manage interdependencies and maximise co-benefits of policies that affect air pollution, such as Net Zero and DfT transport programmes. For example, there are many policies and initiatives under the Net Zero Strategy and Transport Decarbonisation Plan that will also yield long term reductions of air pollutants. We attempt to anticipate and model what these long-term reductions may be, but our estimates tend to be subject



to uncertainty because it is difficult to predict the level levels of uptake, and other factors that will influence how pollution is reduced in practice.

Given how difficult it can be to determine the precise air pollution reductions associated with net zero policies and other important programmes such as active travel, it would be consequently challenging to assign any meaningful estimates of public expenditure on each component of action that results in air pollution emission reductions. Any estimates that are possible to make could in practice be quite misleading.

We agree it is important for us to continue to have robust procedures in place to ensure we are accountable for how money is spent on programmes in each Department. Given the significant complexities in estimating how much that expenditure contributes to other environmental outcomes, it would not be proportionate to maintain ongoing detailed tracking of the air quality components of policies affecting air pollution across government, especially if the resulting estimates were subject to uncertainties.

Our priority remains to ensure that our respective policies dovetail to secure multiple benefits, and to estimate the real-world outcomes and benefits in terms of emissions reductions and potential health benefits.

JAQU modelling

During the hearing (Question 61 in the transcript) you asked about our plans to evaluate the impact of the NO₂ programme measures in the context of the model uncertainty reported in Section 2.12 of the 2022 NAO report on air quality.

The impact of local measures is evaluated based on analysis of local air quality and traffic measurement data, together with assessments of behaviour change and wider external factors. This provides a detailed picture of local level changes over time and an indication of whether these changes may be attributed to the measures. The national model provides an assessment of annual average NO₂ levels across the UK, and as such is not a suitable tool for evaluating the impact of local measures.

While the model uncertainty may seem high, an uncertainty of around +/-30% is not unusual for a model of this scale and complexity, and our model meets the uncertainty requirements for assessing compliance with the annual mean NO₂ limit value under the Air Quality Standards Regulations (2010).

Local authorities are brought into the NO_2 programme when the modelling predicts a persistent exceedance of the NO_2 limit value. While we don't apply a formal margin of tolerance, we have committed to updating our national modelling to reflect the latest evidence, and where these updates identify new exceedances, additional local authorities are brought into the programme.

Local monitoring is not directly fed into Defra's national model in real time - in fact many local measurements don't meet the stringent requirements for inclusion in the national NO₂ compliance assessment. However, we do review the model results against local NO₂ assessments and use any discrepancies to prioritise improvements to the national NO₂ compliance assessment, as part of our ongoing improvement programme.



As you requested during the hearing, we will also send the publication and results of the Annual Compliance Assessment in September 2022.

(and) agree

We hope you find this additional information and clarification helpful.

Yours sincerely,

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Annex A: JAQU (Joint Air Quality Unit) and AQIE (Air Quality & Industrial Emissions) Funding

Total AQIE programme budget for 22/23 is £34.92 million

- This year (21/22) we awarded £11.6 million through our Local Air Quality Grant scheme, and more than £42 million has been awarded to almost 500 projects since 2010.
- This year (22/23) we have budgeted for £7.3 million of spending on research and development, up from £3.5 million last year.
 - In 21/22 we invested £1.15m to expand PM2.5 monitoring and by end of 2025 we will be investing a further £10m to at least double the size of the current PM2.5 network. This expansion will be vital in supporting our ability to meet new targets for PM2.5.
- The remainder of our budget, which totals just over £12.1 million for 22/23, supports multiple projects from communication campaigns, running of websites, engagement with local authorities, communication campaigns, the evaluation of policy that has been implemented, and policy development replacing EU legislation.

Total JAQU NO2 Programme funding is £883 million

- Implementation Fund: £238 million spent to date on the delivery of air quality measures.
- Clean Air Fund: £284 million spent to date on schemes to mitigate the negative impacts of air quality measures.
- Communications: £1.5 million for local authority regional marketing campaigns.

Annex B: Cross-government air quality initiatives

DfT **Energy Emissions** Road NO2 emissions (JAQU) Net Zero, Hydrogen, Biomass Private car use strategies Shipping Renewable energy demand Rail Fossil fuel combustion Uptake of active travel & public Use of capacity market Industry & goods emissions · Transport decarbonisation Cost incentives for new technology uptake Anaerobic digestion Domestic emissions - Use of gas, oil, and solid fuel for heating and cooking - Use of emission mitigation technology Overall strategic responsibility for reducing International work on transboundary Agriculture & food production emissions Domestic solid fuel emissions BAT legislation Road NO₂ emissions (JAQU) DHSC/UKHSA DHI UC Levelling up Public health Local government policy · Indoor air quality Vehicle idling Health disparities Proximity to emissions sources Social awareness Constructed/urban Chronic illness · Ability to work (shared with DWP) landscape/planning

