



# House of Commons

Environment, Food and Rural Affairs,  
Environmental Audit, Health and  
Social Care, and Transport Committees

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## Improving air quality

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**Fourth Report of the Environment, Food and  
Rural Affairs Committee, Fourth Report of the  
Environmental Audit Committee, Third Report  
of the Health and Social Care Committee, and  
Second Report of the Transport Committee of  
Session 2017–19**

*Report, together with formal minutes  
relating to the report*

*Ordered by the House of Commons  
to be printed 7 March 2018*

## The Environment, Food and Rural Affairs Committee

The Environment, Food and Rural Affairs Committee is appointed by the House of Commons to examine the expenditure, administration and policy of the Department of Environment, Food and Rural Affairs and associated public bodies.

### Current membership

[Neil Parish MP](#) (*Conservative, Tiverton and Honiton*) (Chair)

[Alan Brown MP](#) (*Scottish National Party, Kilmarnock and Loudoun*)

[Paul Flynn MP](#) (*Labour, Newport West*)

[John Grogan MP](#) (*Labour, Keighley*)

[Dr Caroline Johnson MP](#) (*Conservative, Sleaford and North Hykeham*)

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[Sandy Martin MP](#) (*Labour, Ipswich*)

[Mrs Sheryll Murray MP](#) (*Conservative, South East Cornwall*)

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[Angela Smith MP](#) (*Labour, Penistone and Stocksbridge*)

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## Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

### Current membership

[Mary Creagh MP](#) (*Labour, Wakefield*) (Chair)

[Colin Clark MP](#) (*Conservative, Gordon*)

[Dr Thérèse Coffey MP](#) (*Conservative, Suffolk Coastal*)

[Geraint Davies MP](#) (*Labour (Co-op), Swansea West*)

[Glyn Davies MP](#) (*Conservative, Montgomeryshire*)

[Mr Philip Dunne MP](#) (*Conservative, Ludlow*)

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[John McNally MP](#) (*Scottish National Party, Falkirk*)

[Dr Matthew Offord MP](#) (*Conservative, Hendon*)

[Dr Dan Poulter MP](#) (*Conservative, Central Suffolk and North Ipswich*)

[Joan Ryan MP](#) (*Labour, Enfield North*)

[Alex Sobel MP](#) (*Labour (Co-op), Leeds North West*)

## Health and Social Care Committee

The Health and Social Care Committee is appointed by the House of Commons to examine the policy, administration and expenditure of the Department of Health and Social Care and its associated bodies.

### Current membership

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[Luciana Berger MP](#) (*Labour (Co-op), Liverpool, Wavertree*)

[Mr Ben Bradshaw MP](#) (*Labour, Exeter*)

[Dr Lisa Cameron MP](#) (*Scottish National Party, East Kilbride, Strathaven and Lesmahagow*)

[Rosie Cooper MP](#) (*Labour, West Lancashire*)

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[Andrew Selous MP](#) (*Conservative, South West Bedfordshire*)

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[Martin Vickers MP](#) (*Conservative, Cleethorpes*)

[Dr Paul Williams MP](#) (*Labour, Stockton South*)

The following Members were also members of the Committee during the inquiry  
Caroline Johnson MP and Maggie Throup MP.

## Transport Committee

The Transport Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of the Department for Transport and its associated public bodies.

### Current membership

[Lilian Greenwood MP](#) (*Labour, Nottingham South*) (Chair)

[Ronnie Cowan MP](#) (*Scottish National Party, Inverclyde*)

[Steve Double MP](#) (*Conservative, St Austell and Newquay*)

[Paul Girvan MP](#) (*Democratic Unionist Party, South Antrim*)

[Huw Merriman MP](#) (*Conservative, Bexhill and Battle*)

[Grahame Morris MP](#) (*Labour, Easington*)

[Luke Pollard MP](#) (*Labour (Co-op), Plymouth, Sutton and Devonport*)

[Iain Stewart MP](#) (*Conservative, Milton Keynes South*)

[Graham Stringer MP](#) (*Labour, Blackley and Broughton*)

[Martin Vickers MP](#) (*Conservative, Cleethorpes*)

[Daniel Zeichner MP](#) (*Labour, Cambridge*)

## **Powers**

The Environment, Food and Rural Affairs Committee, Health and Social Care Committee and the Transport Committees are departmental select committees, the powers of which are set out in the House of Commons Standing Orders, principally in SO No. 152. The constitution and powers of the Environmental Audit Committee are also set out in House of Commons Standing Orders, principally in SO No 152A. These are available on the internet via [www.parliament.uk](http://www.parliament.uk).

## **Publications**

Committee reports are published on the Committee's website at [www.parliament.uk/efracom](http://www.parliament.uk/efracom), [www.parliament.uk/eacom](http://www.parliament.uk/eacom), [www.parliament.uk/hscocom](http://www.parliament.uk/hscocom) and [www.parliament.uk/transcom](http://www.parliament.uk/transcom) and in print by Order of the House.

Evidence relating to this report is published on the relevant [inquiry page](#) of the Committee's website.

## **Environment, Food and Rural Affairs Committee staff**

The current staff of the Committee are Eliot Barrass (Clerk), Sian Woodward (Clerk), Daniel Schlappa (Second Clerk), Anwen Rees (Committee Specialist), Laura Grant (Committee Specialist), James Hockaday (Senior Committee Assistant), Ian Blair (Committee Assistant), Annabel Russell (Committee Assistant), Olivia Quill (Specialist Assistant) and Sean Kinsey (Media Officer).

## **Environmental Audit Committee Staff**

The current staff of the Committee are David Slater (Clerk), Nina Foster (Second Clerk), Nicholas Davies (Committee Specialist), Ian Cruse (Committee Specialist), Dr Fedra Vanhuysse (Committee Specialist), Ameet Chudasama (Senior Committee Assistant), Baris Tufekci (Committee Assistant), Henry Marsh (Committee Researcher) and Sean Kinsey (Media Officer).

## **Health and Social Care Committee staff**

The current staff of the Committee are Huw Yardley (Clerk), Seth Roberts (Second Clerk), Laura Daniels (Senior Committee Specialist), Lewis Pickett (Committee Specialist), Dr Juliette Mullin (Clinical Fellow), Cecilia Santi O Desanti, (Senior Committee Assistant), Ed Hamill (Committee Assistant), and Alex Paterson (Media Officer).

## **Transport Committee staff**

The current staff of the Committee are Gordon Clarke (Committee Clerk), Previn Desai (Second Clerk), James Clarke (Committee Specialist), Andrew Haylen (Committee Specialist), Daniel Moeller (Senior Committee Assistant), Michelle Owens (Committee Assistant), Estelle Currie (Senior Media Officer), and Simon Horswell (Media Officer).

## **Contacts**

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## Summary

Air pollution cuts short an estimated 40,000 lives across the country each year, costing the UK an annual £20 billion.<sup>1</sup> Children, the elderly, and those with existing medical conditions are at the greatest risk. The UN special rapporteur recently said he was “alarmed that despite repeated judicial instruction, the UK government continues to flout its duty to ensure adequate air quality and protect the rights to life and health of its citizens. It has violated its obligations”.<sup>2</sup> The detrimental effects on air quality from a series of policies by successive governments over many years has led to a number of court cases against the UK Government. There is an urgent need for national leadership and consensus-building to bring about a step change in how the problem of air quality is tackled.

The Government cannot continue to put public health at risk. It needs to:

- Place the protection of public health and the environment, rather than technical compliance or political convenience, at the centre of air quality policy.
- Develop a properly resourced national air quality support scheme available to all local authorities struggling with air pollution.
- Introduce a Clean Air Act to improve existing legislation and enshrine the right to clean air in UK law.
- Initiate a national health campaign to highlight the dangers of air pollution, including the fact that air quality can be far worse inside a vehicle than on the street. Regular motorists, children, and vulnerable groups must be informed of these risks. These groups must be provided with accurate, localised air pollution data.
- Bring forward the date by which manufacturers must end the sale of conventional petrol and diesel cars, in line with more ambitious commitments from around the world. Manufacturers of private, public and commercial vehicles should also take steps to reduce emissions from tyres and braking mechanisms, known as the ‘Oslo effect’, which is also a significant contributor to poor air quality.
- Require the automobile industry to contribute to a new clean air fund, following the ‘polluter pays’ principle, on a scale that adequately compensates for the health costs of diesel pollution.
- Align climate change schemes, urban planning, public transport and fiscal incentives with air quality goals to prevent Government policy from working at cross-purposes.

1 Royal College of Physicians and Royal College of Paediatrics and Child Health, [Every breath we take](#), February 2016, p. xiii

2 Baskut Tuncak, [statement](#), September 2017

# 1 Our inquiry

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1. Poor air quality has substantial impacts on public health and the environment. Every year around 3 million early deaths are caused by air pollution worldwide.<sup>3</sup> In the UK, two air pollutants (nitrogen dioxide and particulates) are responsible for an estimated 40,000 early deaths each year.<sup>4</sup> Air pollution also threatens biodiversity and ecosystems across the UK. The UK has been unlawfully breaching nitrogen dioxide limit values since 2010.<sup>5</sup>

2. The Environment, Food and Rural Affairs, Environmental Audit, Health and Social Care,<sup>6</sup> and Transport Committees established a joint inquiry on 9 October 2017 to consider the Government's most recent plan for reducing levels of nitrogen dioxide (NO<sub>2</sub>). Given the UK's longstanding breaches of air quality limits, and the clear need for Departments to work collaboratively to address the issue, we decided to launch a cross-cutting inquiry to examine whether the Government's latest approach was adequate. In conducting this inquiry we aimed to ensure air quality problems remain at the forefront of public debate and policy-making, and hoped to raise public awareness of this national health crisis.

3. The majority of our evidence concentrated on road transport, which is responsible for some 80% of roadside NO<sub>2</sub> concentrations and is the key focus of the 2017 plan.<sup>7</sup> We heard evidence from health and air quality policy experts, as well as local authority representatives and Ministers from the Department for Environment, Food and Rural Affairs; the Department for Transport; the Ministry for Housing, Communities and Local Government (formerly Department for Communities and Local Government); and HM Treasury.

4. This Report makes a number of recommendations on the Government's approach to air quality and how the delivery of the 2017 plan should be improved. We focused on the need for action that:

- a) prioritises the protection of public health and the environment over the demonstration of compliance with legal limits in a limited number of places;
- b) unifies legislation and establishes clear enforcement mechanisms after EU-exit;
- c) increases ambition, speed of action, and support to tackle air quality; and
- d) substantially improves levels of cross-departmental collaboration.

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3 World Health Organization, [factsheet, 2016](#)

4 Royal College of Physicians and Royal College of Paediatrics and Child Health, [Every breath we take](#), February 2016, p.4

5 National Audit Office (NAO), [Air quality](#), HC 529, November 2017, p.7

6 Formerly Health Committee

7 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - technical report](#), 2017 p.123

## 2 Health impacts

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### The health impacts of poor air quality

5. Poor air quality has been classified as the largest environmental risk to public health in the UK,<sup>8</sup> and was described by the World Health Organization as “a public health emergency”.<sup>9</sup> The total burden of outdoor air pollution has been estimated to be equal to 40,000 early deaths each year, though this figure is currently under review.<sup>10</sup> We were told this figure would make air pollution the second largest cause of avoidable mortality after smoking.<sup>11</sup> Air pollution also has a substantial impact on the environment. In 2014 over 90% of sensitive wildlife habitats in England, Northern Ireland and Wales had excessive nitrogen levels.<sup>12</sup> Under the internationally adopted Sustainable Development Goals (3.9 and 11.6) the UK is committed to substantially reducing by 2030:

- a) the number of deaths and illnesses linked to air pollution; and
- b) the adverse impacts of cities on air quality and the environment.<sup>13</sup>

The current and future governments will need to take concerted action if these goals are to be met.

6. The Royal College of Physicians told us that the health damage caused by air pollution occurs across a lifetime, beginning with a baby’s first weeks in the womb and continuing right through to childhood, adolescence, adulthood and old age. In terms of specific impacts, we heard that:

The heart, brain, hormone systems and immunity can all be harmed by air pollution. Research is also pointing towards effects on growth, intelligence, and development of the brain and coordination. Both long-term exposure and acute air pollution episodes are linked to poor health.<sup>14</sup>

7. Long-term exposure to outdoor air pollution is associated with:

- premature birth;
- reduction in foetal growth and low birth weight;
- increased risk of death during the first year of life, particularly from respiratory illnesses;
- exacerbating the effects of respiratory infections in young children;
- affecting the normal growth of lung function during childhood;
- cardiovascular diseases (heart attacks, hypertension and stroke);

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8 Defra and Public Health England, [Air Quality](#), March 2017, p.19

9 The Guardian, [Shock figures to reveal deadly toll of global air pollution](#), 16 January 2016

10 Q11

11 Qq11–12

12 Plantlife International ([IAQ0126](#)) para 1.5

13 United Nations, [Sustainable Development Goals](#)

14 Royal College of Physicians (RCP) ([IAQ0031](#)), Appendix

- chronic obstructive pulmonary disease, pneumonia, accelerated decline in lung function and lung cancer in adulthood;
- development of new onset asthma as well as exacerbating asthma in those who already live with the condition;
- impaired cognition, dementia and other neurodegenerative disorders; and
- Type II diabetes, obesity and metabolic syndrome.<sup>15</sup>

8. Our evidence indicated that, whilst poor air quality is harmful to everyone, some people suffer more. Children and older people are particularly vulnerable, as are people with pre-existing health conditions including asthma, chronic obstructive pulmonary disease and coronary artery disease.<sup>16</sup> Air pollution can also produce health inequality. The Association of Directors of Public Health highlighted research showing that in England and Wales, those living in poverty were more likely to suffer from traffic-related air pollution than more affluent households. In 2010, 433 of the 1777 primary schools in London were in areas with average NO<sub>2</sub> concentrations exceeding EU limits. Of these, 82% were in deprived areas.<sup>17</sup>

9. The health impacts of poor air quality also have economic consequences, though estimates vary. A report from Defra concluded the costs arising from just particulate air pollution amounted to £16 billion per year.<sup>18</sup> The Royal College of Physicians (RCP) and Royal College of Paediatrics and Child Health found that:

The health problems resulting from exposure to air pollution have a high cost to people who suffer from illness and premature death, to our health services and to business. In the UK, these costs add up to more than £20 billion every year.<sup>19</sup>

10. The main air pollutants of current concern include nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), and ozone (O<sub>3</sub>). Professor Holgate, special advisor to the RCP, told us that longitudinal studies had “absolutely confirmed that NO<sub>2</sub> is contributing” to adverse health effects.<sup>20</sup> He noted that people are generally exposed to a range of pollutants and that it can be difficult to determine which individual pollutant is responsible for a particular health issue.<sup>21</sup>

**11. Air pollution is a national health emergency, resulting in tens of thousands of early deaths and costing billions of pounds in health impacts each year. It is unacceptable that successive governments have failed to protect the public from poisonous air. A step change in Government policy is now needed to address this.**

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15 Royal College of Physicians (RCP) ([IAQ0031](#)), Appendix

16 Royal College of Physicians (RCP) ([IAQ0031](#)), Appendix

17 Association of Directors of Public Health ([IAQ0063](#)) para 1.6

18 Defra, Valuing the Overall Impacts of Air Pollution, 2010, p.1

19 Royal College of Physicians and Royal College of Paediatrics and Child Health, [Every breath we take](#), February 2016, p.xiii

20 Q5

21 Q11

## Putting health at the centre of air quality policy

12. Professor Holgate told us that air quality problems need to be considered in tandem with other health issues. Active travel, for example, has considerable health benefits beyond improving air quality, such as increasing physical activity levels and reducing obesity.<sup>22</sup> The British Lung Foundation also highlighted the link between policies to improve air quality, and other health and social benefits:

Local authorities should work with national public health bodies and local public health teams so that policies tackle a multitude of public health goals—such as improving lung health, increasing physical activity, reducing obesity and addressing health inequalities. Deprived communities are more likely to be exposed to toxic pollution levels, yet have less access to public transport, cycle paths, walking routes and green space. Reducing air pollution and promoting active travel will help create greener, safer and healthier communities.<sup>23</sup>

As the British Heart Foundation pointed out, whilst air quality has a major impact on health, responsibility for the issue and many of the policy levers required to improve it sit outside the Department of Health’s remit. They argued that the health community needed to play a central role in ensuring health outcomes are appropriately considered in local action and across central Government policies.<sup>24</sup>

13. We heard however that the health community has not been sufficiently engaged in the air quality debate:

Maggie Throup: Do you think we are missing an opportunity here? Public health is now being devolved to local government, but the focus is still on the transport side of it, rather than the health side of it. If we had more emphasis on public health at a local authority level, we would be addressing the situation.

Professor Holgate: I could not agree with you more. Absolutely spot on [ ... ] the NHS should be taking a lead here, and it is not. If people walk into a general practice, for example, they should see evidence of where the public can get information about air pollution, what to do about it and so on. The health community—if I can use that as a broad descriptor—are not engaged in this discussion, and they need to be for all the reasons you have just set out. If the health people stood up and started to demand the changes from their local authorities, things would happen.<sup>25</sup>

**14. Air pollution has a significant impact on health, but we heard that the health community has not been sufficiently engaged in the air quality debate. *The health sector needs to play a stronger, more visible, and more vocal role in tackling air quality. This should occur at a national level, through the Department of Health and Social Care and Public Health England; at a local level, through local authority Directors of Public Health; and through NHS organisations.***

22 Q18

23 British Lung Foundation ([IAQ0006](#)), section 4

24 British Heart Foundation ([IAQ0136](#)) paras 4.1 – 4.3

25 Q33

## Public health campaign

15. Despite its clear impact on health, not enough has been done to clearly communicate the risks of poor air quality to the public. The British Lung Foundation said there was an urgent need for a public awareness campaign targeted at vulnerable groups to inform people of the dangers of air pollution and encourage effective behaviour changes to reduce exposure. They highlighted the fact that most face masks do not protect people effectively from pollution, and that most drivers were unaware they may be exposed to far higher amounts of pollution inside a vehicle than outside of it.<sup>26</sup> We were surprised to learn that air pollution levels may be up to ten times higher inside a vehicle than on the street.<sup>27</sup> Professor Holgate noted that that choosing active transport such as walking or cycling offers the tripartite benefit of improving health through increased physical activity; reducing overall pollution levels through fewer car journeys; and not being exposed to high levels of pollution inside a vehicle.<sup>28</sup>

16. Other stakeholders noted that the avoidance of engine idling was an additional simple step people could take to improve air quality,<sup>29</sup> particularly outside schools, hospitals and care homes, where people are especially vulnerable to poor air quality.<sup>30</sup>

17. Professor Holgate highlighted the need for better information provision, and said that information about air pollution and what to do about it should be more easily accessible in GP surgeries.<sup>31</sup> Our written evidence called for air quality to be visibly monitored and measured outside schools, as well as other public areas including hospitals, parks and care homes, particularly in polluted areas.<sup>32</sup>

**18. The debate on air quality is too often cast as a war against motorists, when in fact regular car users are among the worst affected. Pollution levels are often higher inside cars than on the street, meaning a switch to active transport offers dual health benefits. *There is an urgent need for a national information campaign providing clear messages about the risks of air pollution and the actions people can take. This campaign should be run by Public Health England, and implemented no later than September 2018.***

**19. Better information about air quality is also needed at a local level. *We recommend that air pollution levels should be monitored at key spots within local communities—for example near schools, hospitals and care homes—and the results clearly communicated to local residents and service users. This will not only serve to reinforce the value of measures such as anti-idling campaigns, but will also provide the public with the information they need to press their elected representatives for further changes at a local authority level.***

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26 British Lung Foundation ([IAQ0006](#)) section 5

27 Qq13–14

28 Q15, Q20

29 Professor Peckham ([IAQ0048](#)) p.6

30 New Forest Friends of the Earth ([IAQ0111](#))

31 Q33

32 The National Education Union (NUT section) ([IAQ0053](#)) p.3

## 3 Clean air in law

### Legal non-compliance

20. EU legislation sets limits on the levels of permissible outdoor air pollution.<sup>33</sup> The UK is in breach of the EU 2008 Directive on Ambient Air Quality for nitrogen dioxide (NO<sub>2</sub>) concentrations,<sup>34</sup> which had a compliance deadline of 2010.<sup>35</sup> In February 2014, the European Commission initiated an infringement case against the UK for its failure to cut ‘excessive’ levels of NO<sub>2</sub>. In February 2017, the UK received a Reasoned Opinion (RO), a final written warning before a case is referred to the Court of Justice of the European Union (CJEU). The RO required the UK to show how it will comply with legal limits within the European Commission’s timeline. Failure to do so could lead to proceedings being escalated further.<sup>36</sup> The UK submitted its response in April 2017. This response is currently under consideration. Officials from nine EU countries, including the UK, attended a meeting in Brussels in January 2018 to present their proposed air quality mitigation measures. Following the meeting, infringement measures were said to be continuing, and ClientEarth said it was possible that the UK will be referred to the CJEU.<sup>37</sup> Other EU countries regularly breaching NO<sub>2</sub> limits include Germany, France, Italy and Spain.<sup>38</sup>

21. The Government does not appear to have an estimate of how large a financial penalty could be imposed by the CJEU, as it is unclear how many air quality zone breaches would be taken into account, nor is it clear whether any such penalties could be imposed before or after EU-exit.<sup>39</sup> If the EU were to impose fines, the UK Government could ask local authorities to pay some or all of the fines under the Localism Act 2011.

22. The Government’s plans to bring NO<sub>2</sub> emissions to within legal limits were struck down by legal action in 2015 and again in November 2016. In the 2016 case, brought by ClientEarth, the High Court found that the Secretary of State must “aim to achieve compliance by the soonest date possible” via a method that “reduces exposure as quickly as possible”, and which ensured that compliance with limit values was not just possible but also likely.<sup>40</sup> The Government subsequently published its finalised 2017 plan for tackling roadside NO<sub>2</sub> concentrations on 26 July 2017, saying it was “focused on delivering nitrogen dioxide (NO<sub>2</sub>) compliance at the roadside in the shortest amount of time”.<sup>41</sup> ClientEarth launched legal proceedings over the plan in November 2017, arguing it failed to adequately address the magnitude of the problem.<sup>42</sup> The High Court subsequently ruled in February 2018 that the 2017 plan was “unlawful” as, amongst other deficiencies,

33 European Commission, [Air Quality - Existing Legislation](#)

34 [DIR2008/50/EC](#) in Official Journal 152 of 11 June 2008

35 European Commission, [Press release](#), 15 February 2017. The UK has applied for an adjustment to the national emissions inventory for NO<sub>x</sub> emissions. For details and information on air pollution trends see Defra, *Statistical Release 15 February 2018, Emissions of air pollutants in the UK, 1970 to 2016*

36 NAO, [Air quality](#), 2017, para 1.13

37 ClientEarth, [EU Commission must exert pressure on countries failing to tackle harmful air pollution](#), 30 January 2018

38 Q129

39 NAO, [Air quality](#), 2017, para 1.14

40 High Court of Justice, [ClientEarth v Secretary of State for the Environment Food and Rural Affairs, EWHC 2740 \(Admin\)](#), 2016, para 95.i

41 Department for Environment, Food and Rural Affairs and Department for Transport, [Plan for roadside NO<sub>2</sub> concentrations published](#), July 2017

42 Q22

“in its application to the 45 local authority areas, it does not contain measures sufficient to ensure substantive compliance with the 2008 Directive and the English Regulations”.<sup>43</sup> In response, the Government said it would issue legally binding directions to the 45 local authorities instructing them to examine “additional actions they can take to accelerate achieving compliance”. The Government confirmed it would publish a supplement to the 2017 plan by 5 October 2018, and said it would be releasing a “comprehensive Clean Air Strategy which will set out further steps to tackle air pollution” later this year.<sup>44</sup>

## Enforcing air quality after leaving the European Union

23. A substantial proportion of the current regulation and enforcement mechanisms relating to air quality has previously been established at EU level. There are concerns that EU-exit will negatively affect environmental protection and enforcement in the UK. In a House of Lords oral evidence session, Lord Rooker highlighted to Secretary of State Michael Gove that “there have been 34 cases where DG Environment has taken the UK Government ... to court, and it won 30 of them ... we had to be forced to operate environmental policies under threat of legal action. That will be removed following Brexit”.<sup>45</sup> ClientEarth likewise stressed the key role played by the European Commission and European Court of Justice (ECJ) in driving progress on targets and enforcing legal obligations on air quality.<sup>46</sup> It is currently unclear what enforcement mechanisms will be implemented after EU-exit.

24. The Secretary of State acknowledged there would be a “governance gap”,<sup>47</sup> and has said that an independent body would be created to hold Government to account after EU-exit. Mr Gove said Defra will consult on establishing a body that is “independent of Government ... [and] placed on a statutory footing, ensuring it has clear authority. Its ambition will be to champion and uphold environmental standards”.<sup>48</sup>

25. We asked Ministers for their views on the proposed establishment of an Environmental Protection Agency which would hold the Government to account. The proposal did not appear welcome across the Departments. Parliamentary Under-Secretary of State for the Department for Transport Jesse Norman told us that “Parliament is the correct body to hold Government to account”.<sup>49</sup> The then Exchequer Secretary to HM Treasury Andrew Jones likewise stated that “the best way to hold Government to account is through Parliament”.<sup>50</sup> The then Minister for Local Government Marcus Jones did not answer directly, saying “I do not want to get into the debate over who should be the arbiter in these situations”.<sup>51</sup>

**26. Successive governments have been slow to take the necessary action on air pollution even when confronted with legal proceedings at the UK and EU level. We therefore welcome Defra’s suggestion that a new Environmental Protection Agency be established to hold Government to account after EU-exit, and recommend that provision**

43 High Court of Justice, [ClientEarth No.3 v Secretary of State for Environment, Food and Rural Affairs & Ors \[2018\] EWHC 315 \(Admin\)](#), 21 February 2018, Para 104

44 Defra, Written Ministerial Statement, [Outcome of the judicial review of the UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations](#), 22 February 2018

45 Select Committee on the European Union, Energy and Environment Sub-Committee, [oral evidence](#), Q8  
46 Q35

47 Select Committee on the European Union, Energy and Environment Sub-Committee, [oral evidence](#), Q2

48 Defra, [Environment Secretary sets out plans to enhance environmental standards](#), 13 November 2017

49 Q295

50 Q296

51 Q298

*for such an agency be written into legislation, specifying equivalent powers, standards and enforcement mechanisms as the equivalent enforcement agencies in the EU. Given the tight timescales surrounding EU-exit, we recommend that Defra publishes its consultation response on the proposed Environmental Protection Agency and the extent of its powers as soon as possible. The new watchdog must have powers equivalent to those of the European Commission to force the Government to act, otherwise action on air quality will be further weakened.*

27. The European Union (Withdrawal) Bill does not make provision for post-Brexit institutional and governance arrangements for air quality. *The Government should establish appropriate institutions and agencies to independently enforce air quality requirements. Furthermore, the Government should establish in primary legislation a requirement that UK air pollution standards are at least as high as equivalent standards in the EU, and that the relevant enforcement agency must have equivalent powers, standards and enforcement mechanisms as the equivalent agencies in the EU.*

## New clean air legislation

28. Existing legislation requires local authorities to monitor local air quality. This is largely carried out through the Local Air Quality Management system. If an area is identified as requiring improvements to pollution levels, the local authority must declare an Air Quality Management Area (AQMA) and “produce an air quality Action Plan describing the pollution reduction measures it will put in place”.<sup>52</sup> A recent report from Defra showed that almost 600 active AQMAs had been established across the UK, mostly for NO<sub>2</sub>.<sup>53</sup>

29. ClientEarth believed the current system is not doing enough to reduce pollution levels, and has highlighted that the number of local authorities declaring AQMAs is rising rather than falling.<sup>54</sup> Some observers argued that the current air quality legislative framework needs consolidating and updating in order to achieve sustained future benefits.<sup>55</sup> It was suggested that the legislative changes required by the UK’s departure from the EU presented the Government with a window of opportunity which could be used to introduce more innovative and joined-up legislation that would stimulate more efficient action.<sup>56</sup> Environmental Protection UK said that a new Clean Air Act should be introduced to consolidate existing legislation, and argued that the “the ‘Polluter Pays Principle’<sup>57</sup> and the ‘Precautionary Principle’<sup>58</sup> should be enshrined in UK law”.<sup>59</sup> This call was echoed by Clean Air in London.<sup>60</sup>

30. We were further told that current legislation does not adequately protect public health,<sup>61</sup> and that the new legislation should adopt World Health Organization (WHO)

52 [Defra, Local air quality management policy guidance, 2016, para 1.2](#)

53 [Defra, Local air quality management policy guidance, 2016, para 1.3](#)

54 ClientEarth, [Missed air quality targets hits new high, ClientEarth mulls fresh legal action](#), 18 October 2017

55 Clean Air in London ([IAQ0157](#)), Environmental Industries Commission ([IAQ0198](#))

56 Environmental Industries Commission ([IAQ0198](#))

57 The notion that those contributing most to pollution levels should pay to mitigate the impacts.

58 The notion that actions should strive to avoid risk or harm, where the risk of damage is plausible but as yet uncertain.

59 Environmental Protection UK ([IAQ0079](#)) p.6

60 Clean Air in London ([IAQ0157](#)) paras 10–11

61 Institute of Air Quality Management ([IAQ0062](#))

guideline limits on air pollution.<sup>62</sup> The UK's limit for particulate matter, for example, is currently significantly higher than the targets recommended by the WHO.<sup>63</sup> Scotland has set lower limits for PM10 and PM2.5,<sup>64</sup> and the Mayor of London declared that London would aim to meet WHO targets by 2030.<sup>65</sup> ClientEarth told us that "England needs to raise the bar and join Scotland in imposing a higher health standard in line with World Health Organisation guidelines".<sup>66</sup> Local authority bodies criticised the Government for failing to recognise in its action plans that there are no 'safe' limits for NO2 or particulates.<sup>67</sup> In March 2017, Dr Thérèse Coffey MP, Parliamentary Under-Secretary of State for the Department for Environment, Food and Rural Affairs, said that "there are no plans to change the limit values and target values in the Regulations" once the UK leaves the EU.<sup>68</sup>

31. We asked witnesses if additional legislation would help drive air quality improvements. The Mayor of London told us that "we need a new Clean Air Act fit for purpose for the 21st century" to enshrine in legislation "a right to clean air for people across the country".<sup>69</sup> He argued that new powers were needed to improve the air quality impacts of existing and future developments and construction sites, and that these should be conferred through this new legislation.<sup>70</sup> The Local Government Association (LGA) agreed that local authorities required greater powers to tackle air quality, for example over lane rental schemes<sup>71</sup> and enforcing moving traffic regulations.<sup>72</sup> The Department for Transport recently highlighted the positive impact of lane rental schemes on reducing congestion.<sup>73</sup> The LGA believed local authorities would "broadly support" the proposal that new powers be granted through a new Clean Air Act.<sup>74</sup>

32. ClientEarth advocated a new Clean Air Act "to ensure and preserve our rights in law to breathe clean air".<sup>75</sup> They further believed there currently was confusion among local authorities over the urgency of required action, and that there was insufficient appreciation that health had to take "absolute priority".<sup>76</sup> The European Environmental Agency did not comment directly, but told us that "it is important to have very clear, focused legislation" to achieve improvements in air quality.<sup>77</sup> A Clean Air Act should be introduced by the Government in primary legislation.

33. Dr Coffey disagreed new legislation was necessary. She argued that "We are clear on what we have to try to do, we know that councils have the powers to do that and we need to press on with it together".<sup>78</sup> The Minister rejected the Mayor's calls for further powers, saying he could achieve air quality benefits by working with councils under the existing

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62 British Lung Foundation ([IAQ0006](#))

63 World Health Organization, [Ambient \(outdoor\) air quality and health](#), September 2016

64 Scottish Government, [Cleaner Air for Scotland - The Road to a Healthier Future](#), 2017

65 Mayor of London, [London Environment Strategy Draft for Consultation August 2017](#), p.39

66 Q42

67 City of Cardiff Council ([IAQ0150](#)) para 2.1

68 HC Written Question [66372](#) Air Pollution: EU Law, 8 March 2017

69 Q56

70 Q56

71 These involve charging the organisations carrying out road works for the time they are working on the highway. The aim is to incentivise the swift completion of roadworks and reduce congestion.

72 For example regulations on bus lanes, yellow boxes, and traffic prohibitions.

73 Department for Transport, [Congestion busting scheme rolled out to benefit drivers](#), 16 February 2018

74 Q58

75 ClientEarth ([IAQ0162](#)) p.1

76 Q30

77 Q59

78 Q292

framework.<sup>79</sup> She further denied that new legislation was needed to support legal redress on air quality,<sup>80</sup> and insisted that “there is absolutely no diminution in any sense of any target or of our ambition” in light of EU-exit.<sup>81</sup>

**34. The current legislative framework for air quality is not doing enough to protect public and environmental health. Improvements to air quality legislation should feature prominently in Defra’s commitment to delivering a ‘Green Brexit’. *The Government must bring forward legislative proposals on clean air that unify and update existing laws in a new Clean Air Act. The Government must set out its regulatory course, including whether to adopt World Health Organization air quality guidelines for all air pollutants, including sulphur dioxide, particulate matter and ozone, and not just nitrogen dioxide. This legislation should aim to achieve the widest possible health benefits by adopting World Health Organization targets into UK statute.***

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79 Q292

80 Q293

81 Q291

## 4 Evaluating the Government's approach to air quality

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### Overview of 2017 plan proposals

35. The Government published its 2017 air quality plan for tackling roadside NO<sub>2</sub> concentrations on 26 July 2017.<sup>82</sup> The 2017 plan identified 68 local authorities<sup>83</sup> (in addition to London and the five cities included in the 2015 plan)<sup>84</sup> with NO<sub>2</sub> breaches forecast to remain above legal limits unless additional measures are taken.<sup>85</sup> Of these, 23 councils were classified as representing “the greatest problem with exceedances projecting beyond the next 3–4 years”.<sup>86</sup> These 23 local authorities were directed to carry out feasibility studies on measures that would reduce roadside NO<sub>2</sub> concentrations as quickly as possible. They were required to submit draft clean air plans to Government for appraisal by March 2018, to be followed by final plans by December 2018.<sup>87</sup>

36. From a national point of view, there has been a long-term decline in overall emission levels since 1970 due to a variety of industrial and legislative changes, including the closure of coal power plants.<sup>88</sup> However, emissions concentrations in particular areas remain a growing concern.

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82 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - an overview](#), July 2017

83 Excluding those where Devolved Administrations have policy responsibility

84 Birmingham, Derby, Leeds, Nottingham and Southampton

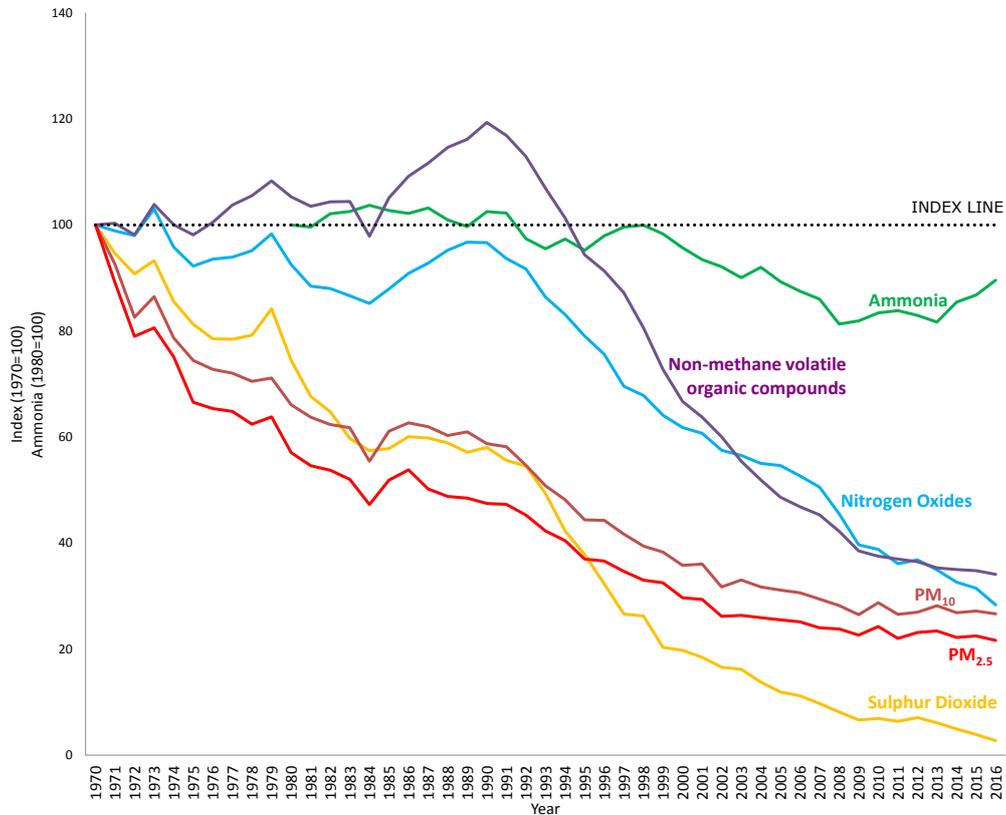
85 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - detailed plan](#), July 2017, p.85–87

86 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - detailed plan](#), July 2017, para 93

87 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - detailed plan](#), July 2017, paras 93 – 94

88 Defra, [Emissions of air pollutants in the UK, 1970 to 2016](#), 15 February 2018

**Figure 1: Trends in UK sulphur dioxide, nitrogen oxides, non-methane volatile organic compounds, ammonia and particulate matter (PM10, PM2.5) emissions 1970–2016**



The index line is a comparator that shows the level of emissions if they had remained constant from the beginning of the time series.

Source: Defra, Emissions of air pollutants in the UK, 1970 to 2016, 15 February 2018

37. The 2017 plan suggested local air quality improvement measures could include: changing road layouts; reducing congestion; encouraging active travel and public transport use; encouraging Ultra Low Emission Vehicle (ULEV) uptake; and retrofitting existing vehicles.<sup>89</sup> The plan further proposed the introduction of charging Clean Air Zones, in which vehicle owners would have to pay to enter or move around the designated area if their vehicle did not meet a required emission standard. The plan was clear that charging Clean Air Zones may be established only if others measures were “not sufficient”.<sup>90</sup>

38. The plan confirmed the Government’s commitment to ending the sale of conventional petrol and diesel cars and vans by 2040 and promised a consultation on a vehicle scrappage scheme. This consultation was published on 22 November 2017.<sup>91</sup> The plan further identified a number of existing funding schemes from across Government that could bring air quality benefits, including £1 billion for ULEVs and £1.2 billion associated with the Cycling and Walking Investment Strategy. A wider strategy on air quality is expected in 2018.

89 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - an overview](#), July 2017, para. 18

90 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - an overview](#), July 2017, para 18

91 Defra, [Air Quality: Additional measures to support individuals and businesses affected by local NO2 plans](#), November 2017

## Adequacy of the latest plan

39. The 2017 plan received significant criticism for failing to address the magnitude of the challenge. The High Court recently declared it “unlawful” as it did “not contain measures sufficient to ensure substantive compliance” among 45 local authority areas.<sup>92</sup> Following the ruling, ClientEarth said that “For the third time in the space of three years, the courts have declared that the Government is failing in its obligation to clean up the air in our towns and cities ... The problem was supposed to be cleaned up over eight years ago, and yet successive governments have failed to do enough”.<sup>93</sup> The UN Special Rapporteur Baskut Tuncak also criticised the adequacy of the plan, saying:

The new 2017 Air Quality Plan fails to bring the necessary urgency and concrete commitment to improve air quality and reduce emissions of hazardous air pollutants as quickly as possible ... The UK has an obligation to protect its population from exposure to health hazards, including air pollution, and to ensure effective remedies when violations occur.<sup>94</sup>

40. Our evidence highlighted a range of concerns over the plan, including:

- **Speed of action:** many evidence submissions argued the plan was too slow and would not deliver air quality improvements in the shortest time possible.<sup>95</sup>
- **Prioritisation of compliance over public and environmental health:** several stakeholders felt the 2017 plan failed to advance a more joined-up strategy which moved away from narrowly demonstrating compliance with EU legislation and prioritised the protection of public and environmental health instead.<sup>96</sup> The National Centre for Atmospheric Science cautioned that “too great a focus on a rather narrow set of technical infringements may result in national policy losing sight of the much more important aim of improving air quality wherever possible for the whole population”.<sup>97</sup>
- **Lack of clarity:** witnesses said the 2017 plan offered unclear messaging, contained contradictions between technical findings and policy recommendations, and offered insufficient detail on the operation and local impact of charging zones.<sup>98</sup>
- **Insufficient emphasis on public transport:** others were sceptical about the Government’s overall approach to air quality, highlighting the Government’s reliance on technological improvements and new emissions standards to deliver gradual improvements when these have failed to deliver the expected benefits in

92 High Court of Justice, [ClientEarth No.3 v Secretary of State for Environment, Food and Rural Affairs & Ors \[2018\] EWHC 315 \(Admin\)](#), 21 February 2018, Para 104

93 ClientEarth, [UK Government loses third air pollution case as judge rules air pollution plans ‘unlawful’](#), 21 February 2018

94 United Nation Human Rights Office of the High Commissioner, [Brexit puts UK at risk of worsening pollution and lower environmental standards, UN rights expert warns](#), September 2017

95 See for example Southwark Council ([IAQ0128](#)) and ClientEarth ([IAQ0162](#))

96 Birmingham City Council ([IAQ0094](#)) para 3.1, National Centre for Atmospheric Science ([IAQ0045](#)) para 19

97 National Centre for Atmospheric Science ([IAQ0045](#)) para 19

98 ClientEarth ([IAQ0162](#))

the past.<sup>99</sup> Policy Connect argued that reducing traffic would be the fastest way to cut air pollution, and said the Government needed to focus on making public transport “accessible and affordable”.<sup>100</sup>

- **Inadequate support for local authorities:** many councils believed that the level of funding, guidance and technical support available to local authorities fell far short of what was needed to tackle air quality effectively.<sup>101</sup>
- **Joined-up action:** existing mechanisms to encourage Departments to collaborate effectively over air pollution were said to be inadequate.<sup>102</sup> Policies across health, climate change, urban planning and fiscal incentives were identified as key areas where joined-up thinking over air quality was needed.
- **No clear future roadmap:** many of the key proposals, such as fiscal reform, a scrappage consultation, vehicle ban, encouraging ULEV uptake, and modal shift, were thought to be too vague, lacked a clear roadmap for effective delivery, and contained distant targets delivering benefits too far in the future to be pertinent to tackling the current crisis.<sup>103</sup>

41. We asked Ministers what was being done to tackle air quality as quickly as possible, and whether the 2017 plan would deliver on its targets. Dr Coffey defended the speed of action and stressed that Defra was working with “greater urgency” than previously.<sup>104</sup> She noted that progress had been slower than hoped among the five cities required to develop clean air strategies under the 2015 plan,<sup>105</sup> but hoped Defra could “work with them to make good progress”.<sup>106</sup> Dr Coffey acknowledged the importance of protecting public health, and said that whilst Defra had been “focus[ing] [its] efforts on delivery of this NOx plan”, the Department “will be updating [its] clean air strategy” in 2018 and would “work across Government in a co-ordinated way” to deliver it.<sup>107</sup>

**42. We do not believe the latest air quality plan will deliver improvements at a pace and scale proportionate to the size of the challenge. The High Court agrees. Significant improvements to the plan, and to the Government’s wider approach to air quality, are needed to protect the public from toxic air. Defra’s latest plan also focuses largely on achieving legal compliance. Whilst we appreciate the necessity of this, we believe the Government should move from this narrow focus on technical infringements towards a long-term holistic strategy which prioritises environmental and health benefits.**

**43. Defra’s forthcoming Clean Air Strategy must ensure that public health and environmental protection are at the forefront of Government thinking. The strategy must ensure measures are considered and implemented as a suite of complementary packages rather than in isolation, as has previously been the case with NO2. Improving public**

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99 Sustrans ([IAQ0137](#)), Institute of Air Quality Management ([IAQ0062](#))

100 Policy Connect ([IAQ0151](#)) p.1

101 Mayor of Greater Manchester ([IAQ0180](#)), Southwark Council ([IAQ0128](#))

102 Royal College of Physicians (RCP) ([IAQ0031](#))

103 ClientEarth ([IAQ0162](#)), Greenpeace ([IAQ0184](#)), Sandwell Metropolitan Council ([IAQ0113](#)), Local Government Association ([IAQ0070](#)), City of Cardiff Council ([IAQ0150](#))

104 Q131

105 Q133

106 Q156

107 Q134

*transport and providing incentive packages that reduce the need for private vehicles must form a key part of this approach. This national action plan must also ensure air quality policies are properly aligned with public health and climate change goals.*

## Improvements to monitoring and modelling

44. National and local air quality action plans must be based on the most accurate obtainable data. Witnesses identified several deficiencies in Defra’s current approach to monitoring and modelling that may be hindering more effective action:

- **Overly focused on demonstrating compliance:** As previously indicated, air quality experts told us that the UK’s current approach to modelling and monitoring is largely focused on demonstrating compliance with EU limit values. Whilst this was said to be important and provided crucial insight into the UK’s overall air quality performance, the National Centre for Atmospheric Science (NCAS) believed that “some rebalancing of local and national resources away from compliance monitoring and towards the surveillance of more appropriate metrics such as emissions measurement at source, would greatly improve the evidence base to underpin future action”.<sup>108</sup>
- **Underestimating the size of the challenge:** The Royal Academy of Engineering (RAE) said it was possible to identify cities publishing monitoring data significantly exceeding compliance levels, yet these jurisdictions were not designated in the 2017 plan, nor did they appear on the lists for councils which were acknowledged to be exceeding limits but were not required to produce clean air plans. The RAE concluded it was possible that the basis on which action plans were being produced was “seriously underestimating the number of areas requiring action”.<sup>109</sup>
- **Disparity between local and national data:** Local authorities criticised the disparity between data collected locally and the data used to inform Defra’s national plan. Liverpool City Combined Regional Authority told us it was “difficult to argue that the measures are likely to be effective or proportionate when they are based on relatively coarse information that is often inconsistent with local authority data”.<sup>110</sup> City of Cardiff Council likewise expressed concerns that local authority data was not being sufficiently taken into account in national policy formation.<sup>111</sup>
- **More accurate forecasts needed:** More detailed data are required to support accurate forecasting. A group of researchers recently argued it was possible the UK might meet NO<sub>2</sub> standards faster than originally thought, due to potential emission variances over a vehicle’s lifecycle.<sup>112</sup> The authors stressed however that the Government was lagging on NO<sub>2</sub> targets regardless of the potential adjustment.

108 National Centre for Atmospheric Science ([IAQ0045](#)) para 58

109 Royal Academy of Engineering ([IAQ0177](#)) p.1

110 Liverpool City Region Combined Authority ([IAQ0089](#)) para 3.2

111 City of Cardiff Council ([IAQ0150](#))

112 Grange et al, [Lower vehicular primary emissions of NO<sub>2</sub> in Europe than assumed in policy projections](#), 2017, Nature Geoscience

- **Expand aim of monitoring:** Cranfield University highlighted the importance of expanding the aim of monitoring, saying that models and assumptions needed to be systematically checked against local level developments to determine the effects of air quality interventions or technological changes. This would be particularly useful when assessing whether interventions actually reduce pollution or merely move it elsewhere.<sup>113</sup>

45. We asked Ministers whether the current approach to monitoring was adequate, and whether the UK should take a more targeted approach that aims to capture and use greater amounts of local level data. Dr Coffey denied that Defra's modelling takes insufficient account of local authority data,<sup>114</sup> and maintained that that Defra's approach "fulfils the requirements of how we are required to report all this different data, and [Defra creates a] model on that basis".<sup>115</sup> Regarding the UK's departure from the EU, she acknowledged that "there are opportunities to reconsider in the future how we get more targeted, focused monitoring and measuring in order to really tackle this issue".<sup>116</sup>

**46. The current approach to monitoring and modelling is not operating at its full potential and is overly focused on demonstrating compliance. The modelling process is subject to substantial (+/-29%) uncertainty. Defra has directed 23 local authorities to take action, based on a central forecast that 25 of the UK's 43 reporting zones would otherwise not comply with NO2 limits by 2021. Given the model's level of uncertainty, however, the low and high scenarios show that as few as 1 or as many as 37 reporting zones could be non-compliant in 2021 if no additional action is taken. Direct measurement of air pollution is much more accurate than estimation and modelling is likely to be. The Government should work with local government to obtain these more accurate measurements. These actions should be supported by real world vehicle emissions testing and support for local authorities to acquire and use technology to monitor live emission levels. More detailed information on the impacts of individual policy interventions is required to enable councils to tackle air quality as efficiently as possible. Improved oversight of local monitoring stations by the responsible bodies is also needed to ensure they are properly sited and functioning.**

*47. National action frameworks should take greater account of local authority data. The overall approach to air quality monitoring needs to be expanded to capture more useful local data and ensure this is used effectively to inform appropriate policy action. This will require greater investment in existing and emerging local surveillance capabilities. Defra should conduct an evidence review; investigate the steps needed to undertake such an expansion; and develop a pilot project by December 2018. Defra should provide a progress update in response to this Report.*

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113 Cranfield University ([IAQ0018](#))

114 Q175

115 Q165

116 Q202

## 5 Improving delivery of the 2017 plan

### Charging Clean Air Zones

48. One of the 2017 plan's key proposals was the establishment of charging Clean Air Zones (CAZ). These would require vehicle owners pay to enter or move around the designated area if their vehicle did not meet a required standard. The plan proposed four types of charging zone categories which councils could implement, depending on their assessment of local need:

- Band A - Buses, coaches and taxis
- Band B - Buses, coaches, taxis, and heavy goods vehicles (HGVs)
- Band C - Buses, coaches, taxis, HGVs, and light goods vehicles (LGVs)
- Band D - Buses, coaches, taxis, HGVs, LGVs, cars, motorcycles and mopeds

49. The 2017 plan was preceded by the publication of a Draft Technical Report, which examined the expected impact of various potential air quality improvement measures.<sup>117</sup> The results showed that establishing Clean Air Zones would be “the most effective way to bring the UK into compliance with NO<sub>2</sub> concentration levels in the shortest possible time”.<sup>118</sup> The recommendations in the final 2017 plan however did not appear to reflect this finding. The plan proposed that local authorities should introduce charging Clean Air Zones only if other non-charging measures were shown to be insufficient, and “for a limited time period and should be lifted once legal compliance is achieved”.<sup>119</sup>

### Charging zones and mandation

50. Stakeholders expressed mixed views on the 2017 plan's charging zone recommendations. Some were sceptical about the merits of charging and said it was critical for local authorities to exhaust all possible options before resorting to charging Clean Air Zones.<sup>120</sup> The Society of Motor Manufacturers and Traders (SMMT) believed the requirement to first identify alternative measures “provides a good basis for the assessment of options by local authorities”.<sup>121</sup>

51. Proponents of charging zones were critical of the apparent contradiction between Defra's technical findings and policy recommendations.<sup>122</sup> The Chartered Institution of Water and Environmental Management believed the 2017 plan “ignores its own technical evidence that identifies charging Clean Air Zones as the most effective way to reduce air pollution in towns and cities”.<sup>123</sup> The Institute of Air Quality Management highlighted that the requirement to exhaust ‘non-charging measures’ would involve similar methods to those taken under the existing Local Air Quality Management (LAQM) framework,

117 Defra, [Draft UK Air Quality Plan for tackling nitrogen dioxide - technical report](#), 2017

118 Defra, [Draft UK Air Quality Plan for tackling nitrogen dioxide - technical report](#), 2017, p.9

119 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - an overview](#), July 2017, p.8

120 Builders Merchants Federation ([IAQ0125](#))

121 SMMT ([IAQ0103](#)) para 17

122 The Chartered Institute of Logistics and Transport in the UK ([IAQ0055](#)) p.1

123 Chartered Institution of Water and Environmental Management ([IAQ0170](#)) para 3

which has “largely been ineffective at reducing NO<sub>2</sub> concentrations”.<sup>124</sup> The Institute believed it was “essential that national governments take the lead and mandate the necessary action (based on the local assessment) to protect human health, as they have for other politically sensitive public health issues, such as smoking”.<sup>125</sup>

52. Introducing charging zones would be politically contentious for many councils, particularly if they opted for Band D Zones, which would charge private vehicles. The British Lung Foundation believed that Clean Air Zones would be “difficult to implement locally without leadership from national government and a persuasive, evidence based, compelling argument”.<sup>126</sup> The Mayor of London told us, however, that the T-charge indicated the political acceptability of charging zones, and that this scheme had reduced diesel sales and changed people’s travel behaviour.<sup>127</sup>

53. We asked witnesses whether the Government should mandate charging zones where necessary. ClientEarth endorsed such a move, saying it would provide clarity and national leadership.<sup>128</sup> The LGA was clear however that local authorities “do not want to be mandated” and would prefer to find “local solutions that work for them”.<sup>129</sup>

54. The LGA was nevertheless critical of the “onerous new requirement on authorities to demonstrate that they have considered the impact of all possible measures” before opting for charging, saying this would mean local authorities would have to “demonstrate the ineffectiveness of measures that they are legally obliged not to carry out. Councils will have to demonstrate the ineffectiveness of measures that Defra’s own technical report clearly indicates will not achieve the required improvements to reach compliance”.<sup>130</sup> The requirement to assess ‘other measures first’ is thought to have added a six month delay to the first five cities required to produce clean air strategies under the 2015 plan.<sup>131</sup>

55. We asked Ministers why the 2017 plan did not mandate, or indeed appear to prioritise, the implementation of Clean Air Zones. Dr Coffey suggested such a move would not be welcomed by local authorities, which she believed were “desperate to try to find other ways to improve the air quality”. She stated that the Government would work with local authorities if charging zones appeared to be the only way to improve air quality as quickly as possible.<sup>132</sup>

**56. The Government is failing to provide clear messaging and national leadership on the issue of charging Clean Air Zones (CAZ). Defra’s technical report found that charging zones offer the fastest and most effective route to air quality improvements, yet the 2017 plan requires councils to demonstrate that all other measures will fail to achieve the necessary results before introducing a charging zone. This lack of clarity is causing confusion and hampering councils’ ability to tackle air pollution as quickly as possible.**

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124 Institute of Air Quality Management ([IAQ0062](#)) section 2

125 Institute of Air Quality Management ([IAQ0062](#)) section 2

126 British Lung Foundation ([IAQ0006](#)) section 5

127 Q76

128 Q28

129 Q112

130 Local Government Association ([IAQ0070](#)) para 4.3

131 Institute of Air Quality Management ([IAQ0062](#)) section 2

132 Q153

57. *Defra’s modelling already shows that, in many cases, non-charging options will not be as swift or effective as charging Clean Air Zones. If local authorities are regularly exceeding NO<sub>2</sub> concentration limits and identify a charging Clean Air Zone as being the most effective mitigation strategy, they should be able to receive Government support for implementing a CAZ without having to go to onerous lengths to demonstrate the inefficacy of other options. If this approach fails to deliver the required improvements as quickly as possible, the Government should consider mandating charging zones in hotspot areas.*

58. *There is a risk that, if not supported with additional measures, Clean Air Zone charges will disproportionately affect low-income drivers. We recommend that all Clean Air Zone proposals are accompanied by mitigating measures to reduce the effect on low-income motorists.*

### **Aligning Clean Air Zones with public transport and active travel goals**

59. Our evidence suggested that reducing private vehicle use through improving public transport and encouraging active travel should lie at the heart of any clean air strategy.<sup>133</sup> This would help address problems that are not likely to be entirely solved by Clean Air Zones, since low emission vehicles will still be linked to problems including harmful particulate matter from tyre and brake wear; congestion; and wider health issues such as obesity.<sup>134</sup> The evaluation of public transport solutions should also give appropriate weight to the effects of tyre and brake wear from buses and other vehicles which use rubber tyres and braking mechanisms. Particulates emissions from these, known as the ‘Oslo effect’, can be as significant a contributor to poor air quality as tailpipe emissions. Rail based public transport options, such as trams, can often have a more beneficial air quality impact. We were told that the introduction of Clean Air Zones needed to be accompanied with a suite of complementary policies to address these issues and ensure maximum benefits are gained from investments in air quality.<sup>135</sup>

60. Some witnesses were sceptical about the level of joined up thinking and additional support accompanying the introduction of Clean Air Zones.<sup>136</sup> Campaign for Better Transport argued that “Much greater weight needs to be given to the advice from the health profession to steer public investment in active travel and public transport”.<sup>137</sup> The LGA agreed that the “primary focus” of local authority policy should be “focused on demand management, and enabling active and public transport travel as a first priority where that is feasible”.<sup>138</sup> It criticised the support for enabling active travel and local transport, saying that funding mechanisms were fragmented, uncondusive to long-term planning, and subject to bidding processes that created a “patchwork” of infrastructure coverage.<sup>139</sup>

61. Local authorities and industry bodies were also concerned that Clean Air Zones could discourage bus use. While buses may be amongst the largest contributors to NO<sub>2</sub> per vehicle, on a per passenger basis they can have a far lower NO<sub>2</sub> footprint.<sup>140</sup> The LGA

133 Sustrans ([IAQ0137](#))

134 Policy Connect ([IAQ0151](#)) p.1

135 Dr Tate ([IAQ0161](#))

136 Stagecoach Group ([IAQ0041](#))

137 Campaign for better Transport ([IAQ0194](#)) section 4

138 Local Government Association (LGA) ([IAQ0070](#)) para 4.8

139 Local Government Association (LGA) ([IAQ0196](#)) p.4

140 Greener Journeys ([IAQ0084](#)) paras 10 – 11

noted that buses were likely to be targeted by Clean Air Zones, which could lead to higher costs for operators and passengers, and precipitate a decline in services.<sup>141</sup> This would be particularly problematic if a council decided its Clean Air Zone would not charge private car users, as the incentive to use public transport would further decline. Fleet operators and industry bodies told us there was not enough funding available to upgrade the non-compliant buses likely to be affected by Clean Air Zones.<sup>142</sup>

62. We asked Ministers how they were ensuring that action on air quality included appropriate support for improved public transport and active travel. Parliamentary Under-Secretary of State for the Department for Transport Jesse Norman told us that a variety of measures would be introduced at the local level supporting “the reconfiguration of local transport” and providing cleaner modes of travel.<sup>143</sup> We put it to the then Exchequer Secretary Andrew Jones that increases in public transport were unlikely when costs for public transport are projected to rise whilst those for private motorists are falling.<sup>144</sup> Mr Jones maintained the Government was “encouraging people to use public transport with the greatest period of investment in public transport in generations”,<sup>145</sup> but acknowledged that there was “fairly flat or gently declining bus use”.<sup>146</sup>

63. We also asked Ministers about the number of non-compliant buses in air quality hotspots, how much money was needed to upgrade them, and how this related to the level of available funding.<sup>147</sup> Dr Coffey told us she was “not aware” of the relevant data.<sup>148</sup> The Government subsequently provided details on the extent of its data on the number of clean buses and the various funding mechanisms supporting this, but noted it did “not hold data on the proportion of the current UK bus fleet that has been retrofitted to Euro VI-equivalent emissions standard” as funding streams “did not set outcomes in terms of Euro standards equivalence”.<sup>149</sup>

**64. Reducing the need for private vehicle use within our metropolitan cities should be a key aim of air quality policy. There is not enough urgency in the Government’s current strategy to achieve this. Defra and the Department for Transport must work closely with local authorities to ensure that councils introducing Clean Air Zones receive the support they need to implement complementary measures which encourage car drivers to switch to public transport, active travel or electric vehicles. This may involve granting local authorities greater powers, for example over lane rental schemes and new development. Defra and the DfT should also urgently evaluate whether there are sufficient resources to ensure enough clean buses can be introduced in air quality hotspots to reduce NO2 concentration levels as fast as possible. The Departments should inform us of the outcome of this assessment in response to this Report.**

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141 Local Government Association (LGA) ([IAQ0070](#)) para 4.5

142 Stagecoach Group ([IAQ0041](#)), Chartered Institution of Highways & Transportation ([IAQ0061](#))

143 Q145

144 Q143

145 Q142

146 Q144 [Andrew Jones]

147 Qq272–274

148 Q274

149 Defra ([IAQ0200](#)) p.3

### **Avoiding displacement and maximising CAZ benefit**

65. We heard a number of complaints about the lack of clarity over displacement. Councils were concerned that charging zones might simply encourage polluting vehicles to be deployed to areas outside a Clean Air Zone. As Sandwell Metropolitan Council told us:

Displacement is a major concern for those local authorities who border Clean Air Zones (CAZs) as older vehicles may be diverted through surrounding areas and displace the problem. Specific consideration needs to be given to addressing how new impacts will be assessed, managed and controlled and whether bus operators should be permitted to simply divert old bus stock to other areas, particularly if they already show compromised air quality.<sup>150</sup>

66. The Chartered Institute of Environmental Health highlighted the issue of health inequality, arguing that Clean Air Zones:

may remove “dirty vehicles” from a city centre but they will not be removed from the road. There is the potential over time for this to encourage older more polluted vehicles to become condensed around lower socio-economic areas thus increasing air pollution and inadvertently increasing health inequalities.<sup>151</sup>

The organisation called for clearer guidance to ensure that local air quality schemes will not negatively affect neighbouring areas.<sup>152</sup>

**67. Defra and the Department for Transport must clarify in response to this Report how they will ensure that Clean Air Zones will not simply displace polluting vehicles to areas where monitoring is more limited, and what systems will be implemented to verify this accurately.**

### **Charging zones and economic impacts**

68. The 2017 plan advised local authorities implementing air quality measures to “minimise their impact on local residents and businesses”.<sup>153</sup> If councils introduce charging zones, the plan stated that “support should be available to the owners of affected vehicles”.<sup>154</sup> The Local Government Association highlighted the likelihood of “conflict” between the need to reduce pollution as quickly as possible and simultaneously ensure the impact on affected populations and businesses was minimal.<sup>155</sup>

69. Stakeholders expressed a number of concerns about the local economic impact of Clean Air Zones, including:

- **The burden on SMEs:** The Freight Transport Association believed the 2017 plan “will place far too great a burden on businesses in our towns and cities,

150 Sandwell Metropolitan Council ([IAQ0113](#)) para 3.0

151 Chartered Institute of Environmental Health ([IAQ0105](#)) section 5

152 Chartered Institute of Environmental Health ([IAQ0105](#)) section 5

153 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - detailed plan](#), 2017, para 117

154 Defra, [UK plan for tackling roadside nitrogen dioxide - an overview](#), 2017, para 26

155 Local Government Association ([IAQ0070](#)) para 4.4

especially SMEs” which often rely on vans and HGVs.<sup>156</sup> The Federation of Small Businesses cautioned that air quality interventions might lead to SMEs and trade services being deterred from entering city centres to avoid charging fees, which would unfairly advantage larger businesses better able to bear the costs.<sup>157</sup>

- **Insufficient adjustment time:** The Builders Merchants Federation warned that the current timescales for Clean Air Zones will leave insufficient time for small businesses to adjust, as they may be unable to replace vehicles quickly enough to comply with the new Clean Air Zone standards. The organisation said more time was needed for small businesses to adjust their vehicles.<sup>158</sup>

70. We asked Ministers how the Government was addressing concerns from small businesses and local communities. Dr Coffey told us that councils will be able to access the £220 million Clean Air Fund to mitigate some of the impacts of new air quality measures on affected residents and businesses.<sup>159</sup>

***71. Defra and the Department for Transport must ensure Clean Air Zone plans include robust economic impact assessments, and work with local authorities to ensure affected communities and businesses are made aware of the support measures accompanying clean air plans. To ensure small businesses are not disproportionately affected by the new measures, Defra and the DfT should also investigate the feasibility of providing small businesses with more time or resources to upgrade their vehicles.***

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156 Freight Transport Association ([IAQ0059](#)) para 7

157 Federation of Small Businesses ([IAQ0133](#)) para 2.3–2.4

158 Builders Merchants Federation ([IAQ0125](#)) para 17

159 Q155

## 6 Funding clean air and supporting local authorities

### Funding allocated

72. The 2017 plan stated that a £255 million Implementation Fund would be available to the councils required to develop clean air plans. An additional £220 million Clean Air Fund was announced in the 2017 Autumn Budget to support the implementation of these air quality measures and, in some cases, obviate the need for charging zones.<sup>160</sup>

73. In February 2016 the Joint Air Quality Unit (JAQU) was established by Defra and the Department for Transport to coordinate delivery of the Government’s plans for achieving NO<sub>2</sub> compliance. According to the NAO, JAQU expected the £255 million implementation fund to cover:

- local authority feasibility studies between 2016–17 and 2018–19;
- implementation of Clean Air Zones or other measures selected by the local authority, from 2016–17 to 2019–20;
- operation and management of measures from 2018–19 to 2020–21;
- improvements in modelling and monitoring of air quality from 2017–18 to 2020–21;
- and provision of the £8 million Air Quality Grant to local authorities from 2016–17 to 2020–21.<sup>161</sup>

### Adequacy of funding

74. Many witnesses believed that the funding committed to improving air quality was insufficient. The Mayor of Greater Manchester condemned the existing level of financial support as “simply inadequate” for both local and national action plans.<sup>162</sup> Many councils are reportedly struggling to meet even local air quality monitoring requirements due to financial constraints.<sup>163</sup> A recent report in the Lancet concluded that “the £255 million ‘Implementation Fund’ currently committed under the 2017 plan is inadequate to the scale of the problem”.<sup>164</sup>

75. Many local authorities record unlawful breaches of NO<sub>2</sub> levels but were not required to produce clean air plans.<sup>165</sup> The 2017 plan nevertheless made it clear that these councils should take immediate action “if there are measures they could take to bring forward the point where they meet legal limits”.<sup>166</sup> Some observers suggested that Defra’s air quality proposals and support mechanisms were narrowly drawn and disadvantaged many

160 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - an overview](#), July 2017, para 19

161 NAO, Air quality, 2017, para 3.17

162 Mayor of Greater Manchester ([IAQ0180](#)) p.2

163 British Lung Foundation ([IAQ0006](#)), section 5

164 Lancet Countdown 2017 Report: [Briefing for UK Policymakers](#), October 2017, p.17

165 ClientEarth ([IAQ0162](#)) section 2

166 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - technical report](#), July 2017, p.3

councils with serious air quality problems.<sup>167</sup> We received complaints that multiple local authorities exceeding NO<sub>2</sub> limits were unable to access financial support for air quality improvement measures.<sup>168</sup> The Institute of Air Quality Management (IAQM) explained that councils which the Government identified as having a “non-persistent exceedance” were not eligible for the same funding as the 23 councils named in the 2017 plan.<sup>169</sup> The IAQM added it was therefore unlikely that these local authorities would introduce new measures to tackle air quality, and believed a wider roll-out of support and funding would be beneficial.<sup>170</sup>

76. ClientEarth criticised the fact that 45 local authority areas identified in Defra’s models as exceeding legal limits were not included in the 2017 plan and were not properly benefiting from its funding and support structures.<sup>171</sup> The High Court found on 21 February 2018 that the approach to tackling air quality in these 45 local authority areas did “not contain measures sufficient to ensure substantive compliance”.<sup>172</sup> Prior to this decision, Dr Coffey defended the decision not to include these authorities, saying that mitigation measures “will take some time to come into effect” and the councils would in any case “not be in breach by the timeline of 2021”, which Defra believed would be the earliest date for getting comprehensive schemes in place.<sup>173</sup> She further stated that other councils with air quality problems “have been able to apply for grants to support them”, but acknowledged this support was “more modest in total”.<sup>174</sup> Exchequer Secretary to HM Treasury Andrew Jones told us HM Treasury “will provide sufficient funding to meet our legal obligations on air quality”.<sup>175</sup>

**77. Local authorities face significant financial restrictions and this is directly affecting their ability to meet air pollution targets. The narrow scope of the 2017 plan restricts councils struggling with air quality from accessing the support and guidance they need to reduce pollution levels as quickly as possible. The funding committed does not reflect the externalised health costs of air pollution or the savings that improvements to air quality would bring. *The 2017 NO<sub>2</sub> air quality plan should be widened to offer direction, financial resources, and technical support to the 45 local authority areas which breach NO<sub>2</sub> limit levels but are not included under the current action framework. This should be accompanied with commensurate financial increases in the Implementation Fund and Clean Air Fund.***

## Raising funds for air quality

78. Some observers suggested that local authorities could use the revenues from charging zones to raise funds for investment in local road and transport systems.<sup>176</sup> The Mayor of London also noted the potential for using charging zone revenues, saying that whilst the T-Charge was not operating for profit, “over a period of time it will bring in revenues”

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167 Professor Peckham ([IAQ0048](#)) section 3

168 ClientEarth ([IAQ0162](#)) section 2, Mayor of Greater Manchester ([IAQ0180](#))

169 Institute of Air Quality Management ([IAQ0062](#)) section 5

170 Institute of Air Quality Management ([IAQ0062](#)) section 5

171 ClientEarth ([IAQ0162](#)) section 2

172 High Court of Justice, *ClientEarth No.3 v Secretary of State for Environment, Food and Rural Affairs & Ors* [2018] EWHC 315 (Admin), 21 February 2018, Para 104

173 Q210

174 Q200

175 Q190

176 Dr David Metz ([IAQ0012](#)) p.1

which would be ring-fenced for clean air initiatives.<sup>177</sup> The SMMT said however that local authorities “should not use receipts from Clean Air Zone charges as a revenue raising approach”, and stressed the importance of charging schemes being “clearly communicated, understood and related to specific policy outcomes”.<sup>178</sup>

79. Another suggestion involved ‘making the polluter pay’. ClientEarth said the VW scandal was likely to be the “tip of the iceberg” and praised initiatives in Germany to secure 250 million euros from the automobile industry for a clean air fund.<sup>179</sup> ClientEarth criticised the UK Government’s inability to extract substantial fines from VW for the emissions scandal, and said it was unclear why clean air initiatives were only being funded by the taxpayer.<sup>180</sup> Transport Minister Jesse Norman said “we are continuing to press Volkswagen to get it fixed as quickly as possible”,<sup>181</sup> and maintained the Government was “doing what we can within proper obedience to the rule of law”.<sup>182</sup>

**80. Defra should examine additional ways of raising funds for air quality improvements. This should first involve establishing a fund for clean air initiatives partially financed by the private sector. This should be organised by December 2018. The Government should provide us with a progress update in response to this Report. Defra should further examine the expected financial returns from charging zones and the feasibility of allowing local authorities to use this money to fund local air quality schemes. Defra should inform us of the outcome of these assessments in response to this Report.**

## Support for all local authorities

81. The initial focus of the Joint Air Quality Unit (JAQU) was on assisting the five cities expected to develop Clean Air Zones under the 2015 plan. This remit was then expanded to provide financial support, guidance and coordination to the local authorities required to develop clean air plans under the 2017 strategy. JAQU has a system of account managers to track progress and support communication and coordination with the designated local authorities.<sup>183</sup>

82. Poor air quality is not however limited to the local authorities named in the 2015 and 2017 plans. There are 498 Air Quality Management Areas (AQMAs) for NO<sub>2</sub> in England, as of January 2018.<sup>184</sup> Our evidence suggested potential knowledge and capacity gaps among some local authorities regarding the most effective ways to tackle air pollution. The Energy Saving Trust believed that some councils “lack the capacity and expertise” to tackle air quality effectively, and was sceptical as to whether there was sufficient support to ensure local officers could make the best use of the data sets and technical tools provided by Defra.<sup>185</sup>

83. The National Centre for Atmospheric Science described the available evidence base to support local decision-makers as “inadequate”, and said central Government had a key role to play in improving the collection and synthesis of evidence to help councils make

177 Q76

178 SMMT ([IAQ0103](#)) para 22

179 Q53

180 Q53

181 Q262

182 Q258

183 National Audit Office, [Air quality](#), HC 529, November 2017, para 3.8 – 3.9

184 Defra, [Summary AQMA data](#)

185 Energy Saving Trust ([IAQ0042](#)) p.5

better choices.<sup>186</sup> The Local Government Technical Advisers Group noted that council budget cuts had undermined the capacity of local authorities to deal with air quality effectively.<sup>187</sup> Local Government Association said it helped knowledge-sharing by holding seminars and facilitating an online information-sharing hub.<sup>188</sup>

84. We asked Ministers how they ensured all councils were taking appropriate action. The then Minister for Local Government Marcus Jones told us: “when we have concerns about a particular council, we ask the LGA quite often to look into those concerns and assist our Department in making sure that some of the functions of local government are being carried through properly”.<sup>189</sup> Defra told us that the Government “will also consider further steps to ensure that air quality improves in areas that are modelled to be below but close to the legal limit and to ensure that forecast levels in such areas remain compliant”.<sup>190</sup>

**85. We recognise the need for councils to take ownership of delivering local solutions to local problems. However, we do not believe significant, sustainable reductions in air pollution across the country will be achieved on the scale needed without additional support. Existing mechanisms do not appear to be delivering the necessary results. *The Joint Air Quality Unit should develop a centralised support programme available to all local authorities to address current and prevent future air pollution problems. Plans for the support programme should be developed with the aim of making a service available nationally by January 2019. We would be grateful for written confirmation of the establishment of this service.***

## Low cost interventions

86. We heard there were a range of low cost interventions that could have a significant positive impact on air quality but did not feature prominently in the 2017 plan. One suggestion involved taking greater action against engine idling, particularly outside schools.<sup>191</sup> Some observers believed that greater enforcement powers over idling could be given to local authorities to tackle the problem.<sup>192</sup>

87. Including emissions on a vehicle labelling system was also raised as a measure that deserved greater attention.<sup>193</sup> The National Audit Office calculated that including air quality emissions on new car labels could deliver £2.8 million in health-related benefits at a negligible cost to Government.<sup>194</sup> Urban Transport Group said this labelling system should extend to the second hand car market, and recommended that the Government publish real-world driving emissions data to help consumers when comparing vehicle choices.<sup>195</sup> Car manufacturers must be obligated to test vehicles to real world standards and publish this in place of other emissions specifications.

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186 National Centre for Atmospheric Science ([IAQ0045](#)) para 54

187 Local Government Technical Advisers Group ([IAQ0068](#))

188 Local Government Association (LGA) ([IAQ0196](#))

189 Q158

190 Defra ([IAQ0186](#)) p.7

191 New Forest Friends of the Earth ([IAQ0111](#))

192 Professor Peckham ([IAQ0048](#)) section 4

193 Mayor of London ([IAQ0185](#))

194 NAO, [Air quality](#), 2017, figure 16

195 Urban Transport Group ([IAQ0082](#)) para 5.5

88. The then Exchequer Secretary to HM Treasury Andrew Jones told us that “We have new labelling regulations coming into force in 2018, which will provide significantly greater customer information” and confirmed this would include air quality information.<sup>196</sup>

*89. We welcome the proposal to introduce air quality emissions information in vehicle labelling, and urge the Government to provide clear guidance on how this will be extended to the second-hand market as quickly and effectively as possible. The Government should also consider aligning this labelling system with an easily accessible online register of real-world emissions to help consumers make informed choices. We recommend the Government re-examines its anti-idling policy guidance to assess whether higher fines and stricter enforcement mechanisms should be used to discourage motorists from idling.*

## 7 Joined up action

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### Joined up working

90. The UK Government has overall responsibility for meeting EU air quality limits. Defra has lead responsibility for meeting these targets, though the levers for action are spread across the Department for Transport (DfT), the Department for Business, Energy and Industrial Strategy (BEIS), the Ministry of Housing, Communities and Local Government (formerly DCLG), the Department of Health and Social Care and Public Health England, as well as local authorities and mayors. Effective cooperation and collaboration is needed between these units to tackle air pollution effectively.

### Current approach

91. The Joint Air Quality Unit (JAQU) was established as a joint venture between Defra and the DfT to deliver the Government's NO<sub>2</sub> reduction strategies. JAQU has an oversight Board for ensuring that the NO<sub>2</sub> programme meets the strategic aims of Defra and DfT. Defra told us there was a "standing requirement that air quality be assessed in all relevant policies, programmes and projects".<sup>197</sup> This has been reflected in the Treasury's Green Book guidance since 2013.

92. We were concerned about reports that Defra's air quality objectives were not however reflected in the policies of other Departments, and that there was an ongoing lack of joined-up thinking and cross-departmental collaboration.<sup>198</sup> The Royal College of Physicians told us that there was "no incentive or framework for different departments to work together to devise a long-term strategy to tackle air pollution".<sup>199</sup> Our evidence identified a number of areas for improvement, including:

### Aligning carbon emissions with air quality targets

- Policies aiming to reduce CO<sub>2</sub> levels were said to be poorly aligned with air pollution measures.<sup>200</sup> Sustrans believed that the failure to treat air quality and carbon emissions as closely interlinked issues had led to "silo-ised policy responses ... incoherent policy positions and contradictory investment priorities".<sup>201</sup> Our evidence suggested that the Government needs to develop more holistic policies that recognise CO<sub>2</sub> reduction and air quality as inter-related issues requiring a joined-up response.<sup>202</sup>
- Birmingham City Council highlighted the example of the disjunction between the UK's targets to reduce road freight CO<sub>2</sub> by 2025 and air quality goals: the DfT proposed to reduce CO<sub>2</sub> per lorry kilometre by 15% using measures<sup>203</sup> that

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197 Defra ([IAQ0186](#)) section 1

198 Institute of Air Quality Management ([IAQ0062](#)), ClientEarth ([IAQ0162](#))

199 Royal College of Physicians (RCP) ([IAQ0031](#)) p.4

200 National Centre for Atmospheric Science ([IAQ0045](#)), University of Nottingham ([IAQ0134](#))

201 Sustrans ([IAQ0137](#)) para 2

202 Policy Connect ([IAQ0151](#))

203 Focusing on diesel efficiency, adopting retrofit technologies, including aerodynamics, body and mud skirts, installing speed limiters and investing in driver training.

the council believed would operate largely independently of air quality goals and timelines, and which focused on measures that were “the wrong focus for air quality environmental impacts”.<sup>204</sup>

### **Health, transport and urban planning**

- Urban planning was identified as a key area where air quality improvement measures should overlap with other public health goals. Our evidence called for public health officials to play a greater role in developing visions and policies for urban areas to ensure the benefits of active travel and air pollution mitigation are properly taken into account and acted upon.<sup>205</sup> The Local Government Technical Advisers Group noted that strategies to take account of air quality “must not simply ‘position’ existing policy interventions within a narrative of air quality improvements” but should instead institute concrete changes that address cross-cutting issues of air pollution, congestion and obesity in a co-ordinated way.<sup>206</sup>
- The Chartered Institute of Environmental Health believed that mechanisms to bring health professionals together with urban and transport planners exist in theory, but “in reality, ‘joined-up’ approaches are not being followed and Government policies are simply not making this a priority”.<sup>207</sup> The failure to join up the Air Quality Strategy with the Childhood Obesity Strategy and the Cycling and Walking Investment Strategy was cited by the Association of Directors of Public Health as an example of cross-cutting policy priorities being addressed through isolated policy development.<sup>208</sup>
- Some observers highlighted the potential for urban planning guidelines to improve health, and called for the guidance framework on spatial planning (NPPF) to be strengthened.<sup>209</sup> Others similarly suggested that a commitment to tackling air pollution, physical inactivity and community severance<sup>210</sup> should be included in strategy documents which guide local planning decisions, with specific air quality policies included in all Local Plans.<sup>211</sup>

93. We asked Ministers what steps they were taking to improve joined-up working. Dr Coffey told us that an Inter-Ministerial Group on clean growth brought together senior representatives from different Departments,<sup>212</sup> and stressed that Defra was “working proactively” across Government on air quality.<sup>213</sup> She also said she had worked with Public Health England and the Health Minister to create a “toolkit” for public health directors.<sup>214</sup> We did not however receive clear indications as to why these efforts at joined-up action would be more successful than those undertaken in the past.

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204 Birmingham City Council ([IAQ0094](#)) para 3.3

205 British Lung Foundation ([IAQ0006](#)) section 4

206 Local Government Technical Advisers Group ([IAQ0068](#)) para 2.3

207 Chartered Institute of Environmental Health ([IAQ0105](#)) section 1

208 Association of Directors of Public Health ([IAQ0063](#)) para 1.2

209 Stagecoach Group ([IAQ0041](#)) para 3.6

210 Where the transport system limits rather than facilitates people’s mobility, for example through the configuration of railways, roads with high speed traffic, bus routes and similar.

211 Association of Directors of Public Health ([IAQ0063](#)) para 5.2

212 Q134

213 Q278

214 Q279

94. Improvements to air quality can only be sustained by co-ordinated cross-departmental action on policy development, legislation, taxation and spending. Defra and the Treasury are not demonstrating the firm leadership needed to achieve this, and it is unclear that the Inter-Ministerial Group on clean growth has demonstrated sufficient progress either. *The remit of the Joint Air Quality Unit (JAQU) should therefore be expanded to meet this need. JAQU should work with the Cabinet Office to ensure all Departments are clear about their duty to consider air quality in policy development. JAQU should further scrutinise policies relating to air quality across all Departments to ensure these form a coherent set of complementary actions. Public health officials should play a key role in JAQU's scrutiny work to ensure health considerations are properly taken into account. Defra and the DfT should outline a delivery framework in response to this Report and provide us with regular subsequent progress updates.*

95. Greater inter-disciplinary involvement in urban planning and collaboration across local authorities is needed to ensure that air pollution, congestion, obesity and a range of public health issues are tackled through joined-up initiatives. *Government should give additional priority to the funding of infrastructure projects which will help to meet air quality objectives. We welcome efforts from local authorities to work collaboratively to address air pollution, and recommend the Ministry of Housing, Communities and Local Government (MHCLG) plays a more active role in supporting greater co-ordination.*

96. *More robust air quality policies should also be included in all Local Plans. MHCLG should audit Local Plans for authorities with NO<sub>2</sub> exceedances to assess whether the National Planning Policy Framework guidance is doing enough to encourage effective action on air quality. MHCLG should inform us of its findings in response to this Report.*

### **Aligning Treasury policies with clean air objectives**

97. Our evidence indicated that HM Treasury had not taken sufficient steps to align fiscal policies with the Government's air quality objectives. The road-tax system was identified as a key opportunity to join up CO<sub>2</sub> and air pollution targets. Under the current approach, carbon emissions broadly take precedence over air quality.<sup>215</sup> The National Centre for Atmospheric Science (NCAS) called for a re-think of this approach, saying it was questionable whether a singular focus on climate targets was representative of current national priorities. NCAS suggested examining whether CO<sub>2</sub> and air pollution could be combined into composite instruments that delivered on both.<sup>216</sup> The SMMT believed however that the appropriate method to assess tax on diesel vehicles "should take into account the role diesel has played in the decarbonisation of road transport [and] the importance of diesel in driving the economy".<sup>217</sup>

98. A number of industry bodies criticised the April 2017 amendments to Vehicle Excise Duty (VED), which removed CO<sub>2</sub> emission banding. This move was said to have significantly reduced tax incentives to purchase an electric vehicle, and would hamper the growth of a second hand low-emission market which will be crucial to increasing clean

215 National Centre for Atmospheric Science ([IAQ0045](#)) para 52

216 National Centre for Atmospheric Science ([IAQ0045](#)) para 52

217 SMMT ([IAQ0103](#)) para 28

vehicle uptake.<sup>218</sup> We heard calls for the banding to be re-established and to take account of air quality emissions.<sup>219</sup> The SMMT was however critical of suggestions to amend the VED rate, saying it would be a “blunt instrument that would not guarantee a specific and effective remedy to air pollution.”<sup>220</sup>

99. The then Exchequer Secretary to HMT told us the Treasury was engaged in air quality and committed to going “much further” than simply meeting its legal obligations.<sup>221</sup> We were therefore surprised he did not appear to have been provided with information on the health costs of poor air quality to the Exchequer.<sup>222</sup> He maintained that HMT ensured its funding was used “wisely”,<sup>223</sup> and rejected the suggestion that its fiscal incentives were providing mixed messages.<sup>224</sup>

**100. The health impacts of poor air quality cost the UK an estimated £20 billion per year. We are not convinced that HM Treasury is taking sufficient account of this when establishing taxation and spending policy. We are also concerned that current fiscal incentives for CO2 and NO2 reduction are disjointed. *The Treasury must take greater account of the costs of air pollution when establishing taxation and spending policy. It must explore how existing policies to achieve CO2 reductions can be combined with air quality targets—particularly NO2 and particulate matter—to produce a single instrument that delivers on both. The Treasury could begin by examining the feasibility of incorporating harmful pollutant emissions into vehicle taxation. The Treasury should update us on progress in the Government’s response to this Report.***

**101. *We recommend the Treasury introduces more ambitious measures to encourage the take-up of low emission vehicles. This should include a revision of Vehicle Excise Duty rates to better incentivise both new purchases and support the second-hand market.***

### **Joined up oversight**

102. The 2017 plan stated the Government was committed to investing over £2.7 billion in air quality and cleaner transport measures.<sup>225</sup> This included:

- a £255 million implementation fund for assessing and enacting air quality initiatives required by the 2017 plan;
- a Clean Air Fund to minimise the financial impact of local air quality plans (later announced as £220 million);
- £1.2 billion associated with the Government’s cycling and walking strategy;
- £1 billion in funding for low emission vehicles.

The Government told us around £1.6 billion of the funding identified in the 2017 plan had been spent to date.<sup>226</sup>

218 NFDA ([IAQ0106](#)), RAC ([IAQ0056](#)), Vauxhall Motors ([IAQ0067](#)), Local Government Association ([IAQ0070](#)) British Lung Foundation ([IAQ0006](#))

219 British Lung Foundation ([IAQ0006](#)) section 4

220 SMMT ([IAQ0103](#)) para 27

221 Q194

222 Qq149–150

223 Q209

224 Q139

225 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - an overview](#), July 2017, para 4

226 Defra ([IAQ0200](#)) Annex A

103. JAQU has direct oversight of £330 million in air quality funding, including the Implementation Fund; Air Quality Grant; Clean Bus Technology Fund and Clean Vehicle Technology Fund; and £40 million retrofit funding which is part of the National Productivity Investment Fund.<sup>227</sup>

104. The NAO found that JAQU does not have an oversight system for tracking progress and spending on other Departments' schemes that have measures intended to improve air quality. The spending on these measures is spread across eight sets of initiatives and accounts for over £2.2 billion between 2015 and 2020.<sup>228</sup> We also heard there was a lack of information quantifying the benefits of investments in air quality and transport measures, which is needed to inform decision-makers evaluating whether proposed schemes are likely to be successful and provide value for money.<sup>229</sup>

105. Defra said it supported practitioners by providing "detailed guidance on how impacts on air quality should be incorporated into cost benefit analyses".<sup>230</sup> Mr Andrew Jones told us that "officials from the Treasury work with officials from other Departments across all the areas of Government expenditure, and monitor the success that is being achieved."<sup>231</sup> Dr Coffey said however that "we recognise that spending is going on right across different Departments and that we can do more to ensure that we have one dashboard that tries to establish that".<sup>232</sup>

**106. There is no single effective system for tracking the funding commitments across Government which aim to deliver air quality benefits. We are also not convinced there is a unified system for evaluating and comparing the outcomes of particular air quality schemes. This lack of joined-up working and fragmented oversight means there is no way of knowing whether existing policies are delivering a coherent set of measures that represent good value for money.**

***107. The remit of JAQU should be expanded to track spending on measures intended to improve air quality across all Departments. JAQU should also develop a system to help better quantify what effect new policies will have on air quality, and measure their actual impact after implementation. This information should be collated into a single resource to provide a robust, easily accessible evidence base for future decision-making.***

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227 NAO, [Air quality](#), 2017, para 3.9

228 NAO, [Air quality](#), 2017, para 3.10

229 WSP ([IAQ0046](#)) section 4

230 Defra ([IAQ0186](#)) section 1

231 Q206

232 Q179

## 8 Cleaner vehicles on our roads

### Roadmap for the future

108. Local management of current pollution hotspots may address the immediate problem of non-compliance in the short term. However, a longer term holistic strategy encouraging the uptake of clean technologies and removing the most polluting vehicles is needed to ensure sustainable air quality benefits accrue on a national level.<sup>233</sup> Ambitious targets, clear milestones, and detailed planning are required to ensure the UK has cleaner vehicles on its roads as soon as possible.

109. Three key proposals in the 2017 plan addressed the longer term adoption of clean vehicles, namely the pledge to end the sale of new conventional cars and vans by 2040; support for Ultra Low Emission Vehicles (ULEVs); and a targeted vehicle scrappage scheme.

### Making manufacturers produce clean cars

110. The 2017 plan confirmed the Government's intention to end the sale of all new conventional petrol and diesel cars and vans by 2040. This objective was criticised by some for its timidity. Policy Connect said the pledge lacked ambition and was too distant to encourage earlier and more widespread adoption of ULEVs.<sup>234</sup> The Local Government Association also said the ban was too far in the future to drive the behaviour changes needed to protect public health.<sup>235</sup> Greenpeace told us that Norway had set a target of selling only zero-emission vehicles by 2025, and that the Netherlands had confirmed plans to prohibit diesel and petrol vehicles from 2030. India and China were also reportedly considering bans on conventional petrol and diesel vehicles.<sup>236</sup> The Scottish Government has pledged to phase out new petrol and diesel cars and vans across Scotland by 2032, eight years ahead of the UK Government target.<sup>237</sup> Greenpeace called for a ban on new petrol and diesel car sales to be implemented from 2030.<sup>238</sup>

111. Industry bodies maintained that the motor sector needs clarity and time to adjust to new policies. The SMMT said the Government should qualify its definition of 'conventional vehicle' and clarify whether this will include hybrid vehicles.<sup>239</sup> Some firms however said however that they were pressing ahead. We heard that Volvo recently announced all new models would be electric or hybrid from 2019.<sup>240</sup> Uber said its target was for all vehicles using its app to be electric by 2028.<sup>241</sup> ABB Ltd expected that "the market will beat the Government to its 2040 ambition, but without clear Government action to support the private sector this won't happen as quickly as it should".<sup>242</sup> This evidence indicates the UK Government's target lacks ambition, and the UK risks falling behind in competitiveness when other countries are pressing ahead.

233 National Centre for Atmospheric Science ([IAQ0045](#)) para 49, ClientEarth ([IAQ0162](#))

234 Policy Connect ([IAQ0151](#)) para 20

235 Local Government Association ([IAQ0070](#)) para 4.6

236 Greenpeace ([IAQ0184](#)) para 7.1

237 Scottish Government, [A Nation With Ambition: The Government's Programme for Scotland 2017-18](#), Chapter 1

238 Greenpeace ([IAQ0184](#))

239 SMMT ([IAQ0103](#)) para 14

240 Friends of the Earth (England, Wales and Northern Ireland) ([IAQ0167](#)) para 3.2

241 Uber UK ([IAQ0164](#))

242 ABB Ltd ([IAQ0122](#)) section 2

112. The Under-Secretary of State for Transport Jesse Norman said the Government wanted to “see an end to the sale of new conventional cars by 2040” and noted it “might happen faster than that, because we are seeing radical changes already in the market in the transition towards electric”.<sup>243</sup>

**113. There is insufficient urgency in current policies to accelerate vehicle fleet renewal. Whilst we welcome the Government’s commitment to end the sale of new petrol and diesel cars by 2040, this target lacks sufficient ambition. It is too distant to produce a step-change in industry and local government planning, and falls far behind similar commitments from other countries. The Minister believed the UK could phase out conventional cars before 2040, and this ambition should be reflected in the Government’s policy targets.**

*114. The Government should bring forward the date by which the sale of conventional petrol and diesel vehicles will be ended. The Government should conduct a feasibility assessment to determine the earliest date by which this could be achieved, balancing the health impacts of air pollution with economic and practical considerations. We expect the Government to then require manufacturers to end the sale of conventional petrol and diesel vehicles by this earlier date. The Government should inform us of the outcome of its assessments in response to this Report.*

## Encouraging ULEV uptake

115. The 2017 plan highlighted the Government’s desire to become a “world leader in low emission transport”.<sup>244</sup> In addition to meeting carbon reduction targets, the switch to electric vehicles is expected to improve roadside air quality, as fully electric vehicles have no tailpipe emissions and plug-in hybrid vehicles have no tailpipe emissions if they are in electric mode.<sup>245</sup> Concerns remain however over particulate matter generated by tyre and brake wear.<sup>246</sup>

116. In 2013, the Office for Low Emission Vehicles (OLEV) outlined its target to make “every new car an ULEV from 2040 and an effectively decarbonised fleet by 2050”.<sup>247</sup> Whilst the uptake of electric vehicles is increasing, the overall proportion remains small.<sup>248</sup> In 2016 only 0.4% of new cars were pure electric, and 1% partial electric, while 4% new buses in the UK were totally electric.<sup>249</sup> Factors contributing to the slow take-up of electric vehicles include consumer concerns over charging, range anxiety, and cost, as well as manufacturing volumes and market incentives.<sup>250</sup>

117. In the Autumn Budget 2017, the Chancellor committed to ‘electrify 25% of cars in central government department fleets by 2022’.<sup>251</sup> The Ministry of Justice has just two

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243 Q136

244 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - an overview](#), July 2017, para 32

245 Office for Low Emission Vehicles ([ELV0064](#))

246 National Centre for Atmospheric Science ([IAQ0045](#))

247 Office for Low Emission Vehicles, [Driving the Future Today - A strategy for ultra low emission vehicles in the UK](#), September 2013, p.11

248 Department for Transport, [Vehicle Statistics](#)

249 Greenpeace UK ([ELV0042](#))

250 Department for Transport, [Public attitudes towards electric vehicles: 2016 \(Revised\)](#), p.7, Zero Carbon Futures ([ELV0005](#)), RAC ([ELV0014](#))

251 Autumn Budget 2017, paragraph 4.15

electric vehicles in its 1,482 vehicle fleet.<sup>252</sup> Defra also has just two electric vehicles in its fleet.<sup>253</sup> *The Government should set out a procurement route map to show how it will achieve this target in the Budget, and extend this commitment to cover the fleets of all departments, agencies and public bodies.*

118. Our evidence was clear the Government is not doing enough to address the inadequate provision of charging infrastructure. Key criticisms included:

- **Too few charging points:** Observers said there are simply too few charging points, particularly for rapid charging, to support a wider uptake of ULEVs among the public and fleet operators.<sup>254</sup>
- **Patchwork approach:** The current approach to funding and delivering charging points has been criticised for creating a patchwork of charging concentrations which do not reflect strategic needs or aim to target areas with poor air quality.<sup>255</sup> Observers have pointed out that in 2016 there were more chargers in the Orkney Islands than in Blackpool, Grimsby and Hull combined.<sup>256</sup>
- **Lack of outcome-orientated strategy:** Some councils believed there was a lack of clarity over how the Government’s targets for increasing clean vehicle uptake translated into timescales and action in local authorities.<sup>257</sup> In its 2017 report to Parliament, the Committee on Climate Change also warned there was a “lack of strategy for on-street residential charging” and found “little progress in developing infrastructure for households without off-street parking”.<sup>258</sup>
- **Reluctant councils:** Slow take-up has been exacerbated by councils themselves. The Government reported in January 2018 that just five councils in the UK had taken advantage of the On-Street Residential Chargepoint Scheme, which offers local authorities funding of up to 75% of the cost procuring and installing charging points.<sup>259</sup> The Mayor of London told us that in some cases the roll-out of charging infrastructure was hampered by the refusal of planning committees to accept charging installations, following pressure from residents.<sup>260</sup>

119. We put it to Ministers that the current speed of infrastructure roll-out was inadequate, and that the UK was unlikely to meet the Committee on Climate Change’s target of 9% ULEV by 2020 and 60% by 2030 without substantial additional impetus. The Under-Secretary for Transport Jesse Norman told us “I don’t think there is any reason for concern”, and said it was “not impossible” to see an increase of electric vehicle purchases that would take the proportion from below its current level of under 1% to between 3%

252 [Ministry of Justice: Environmental Sustainability](#), Third Report of the Environmental Audit Committee, HC 545, para 13

253 Defra, [Written Answer](#), No. 115978

254 Energy Saving Trust ([IAQ0042](#)), ABB Ltd ([IAQ0122](#)), Addison Lee ([IAQ0121](#))

255 Birmingham City Council ([IAQ0094](#)), Institute of Air Quality Management ([IAQ0062](#)), Zero Carbon Futures ([ELV0005](#))

256 The Times, [Owners of electric cars are struggling to get plugged in](#), 24 September 2016

257 City of Cardiff Council ([IAQ0150](#))

258 Committee on Climate Change, [Meeting Carbon Budgets: Closing the policy gap - 2017 Report to Parliament](#), p.130

259 Gov.uk, [Funding for thousands of electric car charge points unused by councils](#), January 2017

260 Q107

and 7% by 2020.<sup>261</sup> Mr Norman maintained the UK “will be on track to hit the 2030 targets”, despite being unlikely to meet the 9% targets for 2020.<sup>262</sup> He added there was “a lot of uncertainty” in the forecasting figures.<sup>263</sup>

120. We welcome the Government’s optimism that ULEV targets will be met. This now needs to be translated into concrete action. The current pace of change is far too slow and we have no confidence that there will be adequate infrastructure to support the UK’s rapid transition away from polluting vehicles without substantial efforts from both central Government and local authorities. *The Government should work with National Grid and local authorities to identify the key practical barriers preventing a more rapid roll-out of charging infrastructure, and provide details and timescales of how these will be overcome in response to this Report. Local authorities also need to be clear that they should be facilitating the switch to ULEVs as far as possible. This should be clearly communicated to residents and planning committees.*

121. We are not convinced that the existing framework for delivering charging infrastructure adequately addresses strategic priorities. *The DfT should work with Defra and the Ministry for Housing, Communities and Local Government to ensure that charging infrastructure addresses strategic needs and prioritises air quality hotspots. A technology-neutral approach must be maintained whilst ensuring these systems are future-proofed and capable of handling increases in usage and larger battery sizes.*

122. Increased ULEV uptake will place greater demands on electricity generation. It is therefore important that measures to encourage the purchase of electric vehicles do not simply shift harmful emissions from the tailpipe to power production. We heard that careful co-ordination between clean energy, economic development, and air quality strategies was needed to ensure that measures to improve urban NO<sub>2</sub> hotspots do not result in overall increases in national emissions.<sup>264</sup> **It is important that the switch to electric vehicles does not simply move emissions from the tailpipe to power plants. The Government should produce a detailed roadmap outlining how the predicted increase in energy consumption arising from greater ULEV uptake will be produced using clean sources, and the concrete steps needed to ensure these goals are met.**

## Diesel scrappage

123. The 2017 plan identified a vehicle scrappage scheme as one potential option to remove polluting vehicles from the road. Defra launched a new consultation for a national vehicle scrappage scheme in November 2017.<sup>265</sup> The 2017 plan estimated the cost of a scrappage scheme at £110 million, delivering a 0.4kt NO<sub>x</sub> reduction over ten years.<sup>266</sup>

124. A scrappage scheme could be designed in many ways. ClientEarth recommended a diesel scrappage scheme that would complement Clean Air Zones and target people on low-incomes and small businesses.<sup>267</sup> The British Vehicle Rental and Leasing Association (BVRLA) highlighted the possibility of a system of mobility credits, under which drivers

261 Qq223–227

262 Qq221–226

263 Q227

264 National Centre for Atmospheric Science ([IAQ0045](#))

265 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - an overview](#), July 2017

266 Defra, [UK plan for tackling roadside nitrogen dioxide concentrations - detailed report](#), July 2017

267 ClientEarth ([IAQ0162](#))

could be offered credits payable on public transport, car rental or car if they gave up older, more polluting diesel cars.<sup>268</sup> The Mayor of London told us a scrappage scheme should target vehicles owned by the poorest families and businesses operating vans.<sup>269</sup> Over 20 scrappage schemes are available through private industry.<sup>270</sup>

125. A 2016 Defra evidence review found that, whilst many scrappage schemes elsewhere have been successful in reducing emissions, other schemes have failed or generated counterproductive results.<sup>271</sup> Some industry bodies questioned whether there is currently sufficient evidence to determine that a Government-led scrappage scheme would achieve the desired results at a reasonable cost. The SMMT said a scrappage scheme would not offer good value for money and would not be effective in guaranteeing air quality benefits.<sup>272</sup> Greener Journeys concluded that bus retrofitting would provide better value than car scrappage per kilogram of NOx reduction.<sup>273</sup>

126. The Under-Secretary for Transport Jesse Norman also cautioned that scrappage schemes were “not a panacea”. He maintained the Government needed to be “careful and sensitive” about concerns over cost, targeting, fraud.<sup>274</sup> Mr Norman further highlighted the issue of social justice, saying that “the worst vehicles are older and owned by people on limited incomes” whereas it was often the ‘energised middle class’ that would benefit from scrappage schemes.<sup>275</sup>

**127. The current rate of renewal of the UK fleet means it will be many years before ultra-low emission vehicles replace all of the most polluting vehicle types. A national scrappage scheme could speed up this process considerably. Any scrappage scheme must include provisions to support low-income drivers and small businesses. The Government should focus on reducing vehicle use and encouraging public transport use where practical, rather than simply switching to alternative vehicle types. Therefore any scrappage scheme must be accompanied by a suite of additional measures and not implemented in isolation.**

***128. Defra must publish its analysis of the scrappage consultation responses as soon as possible. It should provide details of the fiscal measures it would take to fund any scrappage proposals and the value for money this represents. The Government should also work closely with private scrappage providers to ensure that existing schemes do more to target support at low-income households and small businesses.***

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268 British Vehicle Rental and Leasing Association (BVRLA) ([IAQ0108](#))

269 Q87

270 For an overview see RAC, [Scrappage schemes - a simple guide](#), September 2017

271 Defra, [Evidence review on effectiveness of transport measures in reducing nitrogen dioxide](#), May 2016

272 SMMT ([IAQ0103](#))

273 Greener Journeys ([IAQ0084](#))

274 Q243

275 Q243

## Conclusions and recommendations

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### Health impacts

1. Air pollution is a national health emergency, resulting in tens of thousands of early deaths and costing billions of pounds in health impacts each year. It is unacceptable that successive governments have failed to protect the public from poisonous air. A step change in Government policy is now needed to address this. (Paragraph 11)
2. Air pollution has a significant impact on health, but we heard that the health community has not been sufficiently engaged in the air quality debate. *The health sector needs to play a stronger, more visible, and more vocal role in tackling air quality. This should occur at a national level, through the Department of Health and Social Care and Public Health England; at a local level, through local authority Directors of Public Health; and through NHS organisations.* (Paragraph 14)
3. The debate on air quality is too often cast as a war against motorists, when in fact regular car users are among the worst affected. Pollution levels are often higher inside cars than on the street, meaning a switch to active transport offers dual health benefits. *There is an urgent need for a national information campaign providing clear messages about the risks of air pollution and the actions people can take. This campaign should be run by Public Health England, and implemented no later than September 2018.* (Paragraph 18)
4. Better information about air quality is also needed at a local level. *We recommend that air pollution levels should be monitored at key spots within local communities—for example near schools, hospitals and care homes—and the results clearly communicated to local residents and service users. This will not only serve to reinforce the value of measures such as anti-idling campaigns, but will also provide the public with the information they need to press their elected representatives for further changes at a local authority level.* (Paragraph 19)

### Clean air in law

5. Successive governments have been slow to take the necessary action on air pollution even when confronted with legal proceedings at the UK and EU level. *We therefore welcome Defra's suggestion that a new Environmental Protection Agency be established to hold Government to account after EU-exit, and recommend that provision for such an agency be written into legislation, specifying equivalent powers, standards and enforcement mechanisms as the equivalent enforcement agencies in the EU. Given the tight timescales surrounding EU-exit, we recommend that Defra publishes its consultation response on the proposed Environmental Protection Agency and the extent of its powers as soon as possible. The new watchdog must have powers equivalent to those of the European Commission to force the Government to act, otherwise action on air quality will be further weakened.* (Paragraph 26)
6. The European Union (Withdrawal) Bill does not make provision for post-Brexit institutional and governance arrangements for air quality. *The Government should establish appropriate institutions and agencies to independently enforce air quality*

*requirements. Furthermore, the Government should establish in primary legislation a requirement that UK air pollution standards are at least as high as equivalent standards in the EU, and that the relevant enforcement agency must have equivalent powers, standards and enforcement mechanisms as the equivalent agencies in the EU. (Paragraph 27)*

7. The current legislative framework for air quality is not doing enough to protect public and environmental health. Improvements to air quality legislation should feature prominently in Defra's commitment to delivering a 'Green Brexit'. *The Government must bring forward legislative proposals on clean air that unify and update existing laws in a new Clean Air Act. The Government must set out its regulatory course, including whether to adopt World Health Organization air quality guidelines for all air pollutants, including sulphur dioxide, particulate matter and ozone, and not just nitrogen dioxide. This legislation should aim to achieve the widest possible health benefits by adopting World Health Organization targets into UK statute. (Paragraph 34)*

### Evaluating the Government's approach to air quality

8. We do not believe the latest air quality plan will deliver improvements at a pace and scale proportionate to the size of the challenge. The High Court agrees. Significant improvements to the plan, and to the Government's wider approach to air quality, are needed to protect the public from toxic air. Defra's latest plan also focuses largely on achieving legal compliance. Whilst we appreciate the necessity of this, we believe the Government should move from this narrow focus on technical infringements towards a long-term holistic strategy which prioritises environmental and health benefits. (Paragraph 42)
9. *Defra's forthcoming Clean Air Strategy must ensure that public health and environmental protection are at the forefront of Government thinking. The strategy must ensure measures are considered and implemented as a suite of complementary packages rather than in isolation, as has previously been the case with NO<sub>2</sub>. Improving public transport and providing incentive packages that reduce the need for private vehicles must form a key part of this approach. This national action plan must also ensure air quality policies are properly aligned with public health and climate change goals. (Paragraph 43)*
10. The current approach to monitoring and modelling is not operating at its full potential and is overly focused on demonstrating compliance. The modelling process is subject to substantial (+/-29%) uncertainty. Defra has directed 23 local authorities to take action, based on a central forecast that 25 of the UK's 43 reporting zones would otherwise not comply with NO<sub>2</sub> limits by 2021. Given the model's level of uncertainty, however, the low and high scenarios show that as few as 1 or as many as 37 reporting zones could be non-compliant in 2021 if no additional action is taken. Direct measurement of air pollution is much more accurate than estimation and modelling is likely to be. The Government should work with local government to obtain these more accurate measurements. These actions should be supported by real world vehicle emissions testing and support for local authorities to acquire and use technology to monitor live emission levels. More detailed information on

the impacts of individual policy interventions is required to enable councils to tackle air quality as efficiently as possible. Improved oversight of local monitoring stations by the responsible bodies is also needed to ensure they are properly sited and functioning. (Paragraph 46)

11. *National action frameworks should take greater account of local authority data. The overall approach to air quality monitoring needs to be expanded to capture more useful local data and ensure this is used effectively to inform appropriate policy action. This will require greater investment in existing and emerging local surveillance capabilities. Defra should conduct an evidence review; investigate the steps needed to undertake such an expansion; and develop a pilot project by December 2018. Defra should provide a progress update in response to this Report.* (Paragraph 47)

### Improving delivery of the 2017 plan

12. The Government is failing to provide clear messaging and national leadership on the issue of charging Clean Air Zones (CAZ). Defra's technical report found that charging zones offer the fastest and most effective route to air quality improvements, yet the 2017 plan requires councils to demonstrate that all other measures will fail to achieve the necessary results before introducing a charging zone. This lack of clarity is causing confusion and hampering councils' ability to tackle air pollution as quickly as possible. (Paragraph 56)
13. *Defra's modelling already shows that, in many cases, non-charging options will not be as swift or effective as charging Clean Air Zones. If local authorities are regularly exceeding NO<sub>2</sub> concentration limits and identify a charging Clean Air Zone as being the most effective mitigation strategy, they should be able to receive Government support for implementing a CAZ without having to go to onerous lengths to demonstrate the inefficacy of other options. If this approach fails to deliver the required improvements as quickly as possible, the Government should consider mandating charging zones in hotspot areas.* (Paragraph 57)
14. *There is a risk that, if not supported with additional measures, Clean Air Zone charges will disproportionately affect low-income drivers. We recommend that all Clean Air Zone proposals are accompanied by mitigating measures to reduce the effect on low-income motorists.* (Paragraph 58)
15. Reducing the need for private vehicle use within our metropolitan cities should be a key aim of air quality policy. There is not enough urgency in the Government's current strategy to achieve this. *Defra and the Department for Transport must work closely with local authorities to ensure that councils introducing Clean Air Zones receive the support they need to implement complementary measures which encourage car drivers to switch to public transport, active travel or electric vehicles. This may involve granting local authorities greater powers, for example over lane rental schemes and new development. Defra and the DfT should also urgently evaluate whether there are sufficient resources to ensure enough clean buses can be introduced in air quality hotspots to reduce NO<sub>2</sub> concentration levels as fast as possible. The Departments should inform us of the outcome of this assessment in response to this Report.* (Paragraph 64)

16. *Defra and the Department for Transport must clarify in response to this Report how they will ensure that Clean Air Zones will not simply displace polluting vehicles to areas where monitoring is more limited, and what systems will be implemented to verify this accurately. (Paragraph 67)*
17. *Defra and the Department for Transport must ensure Clean Air Zone plans include robust economic impact assessments, and work with local authorities to ensure affected communities and businesses are made aware of the support measures accompanying clean air plans. To ensure small businesses are not disproportionately affected by the new measures, Defra and the DfT should also investigate the feasibility of providing small businesses with more time or resources to upgrade their vehicles. (Paragraph 71)*

### Funding clean air and supporting local authorities

18. *Local authorities face significant financial restrictions and this is directly affecting their ability to meet air pollution targets. The narrow scope of the 2017 plan restricts councils struggling with air quality from accessing the support and guidance they need to reduce pollution levels as quickly as possible. The funding committed does not reflect the externalised health costs of air pollution or the savings that improvements to air quality would bring. The 2017 NO<sub>2</sub> air quality plan should be widened to offer direction, financial resources, and technical support to the 45 local authority areas which breach NO<sub>2</sub> limit levels but are not included under the current action framework. This should be accompanied with commensurate financial increases in the Implementation Fund and Clean Air Fund. (Paragraph 77)*
19. *Defra should examine additional ways of raising funds for air quality improvements. This should first involve establishing a fund for clean air initiatives partially financed by the private sector. This should be organised by December 2018. The Government should provide us with a progress update in response to this Report. Defra should further examine the expected financial returns from charging zones and the feasibility of allowing local authorities to use this money to fund local air quality schemes. Defra should inform us of the outcome of these assessments in response to this Report. (Paragraph 80)*
20. *We recognise the need for councils to take ownership of delivering local solutions to local problems. However, we do not believe significant, sustainable reductions in air pollution across the country will be achieved on the scale needed without additional support. Existing mechanisms do not appear to be delivering the necessary results. The Joint Air Quality Unit should develop a centralised support programme available to all local authorities to address current and prevent future air pollution problems. Plans for the support programme should be developed with the aim of making a service available nationally by January 2019. We would be grateful for written confirmation of the establishment of this service. (Paragraph 85)*
21. *We welcome the proposal to introduce air quality emissions information in vehicle labelling, and urge the Government to provide clear guidance on how this will be extended to the second-hand market as quickly and effectively as possible. The Government should also consider aligning this labelling system with an easily accessible online register of real-world emissions to help consumers make informed*

*choices. We recommend the Government re-examines its anti-idling policy guidance to assess whether higher fines and stricter enforcement mechanisms should be used to discourage motorists from idling. (Paragraph 89)*

### Joined up action

22. Improvements to air quality can only be sustained by co-ordinated cross-departmental action on policy development, legislation, taxation and spending. Defra and the Treasury are not demonstrating the firm leadership needed to achieve this, and it is unclear that the Inter-Ministerial Group on clean growth has demonstrated sufficient progress either. *The remit of the Joint Air Quality Unit (JAQU) should therefore be expanded to meet this need. JAQU should work with the Cabinet Office to ensure all Departments are clear about their duty to consider air quality in policy development. JAQU should further scrutinise policies relating to air quality across all Departments to ensure these form a coherent set of complementary actions. Public health officials should play a key role in JAQU's scrutiny work to ensure health considerations are properly taken into account. Defra and the DfT should outline a delivery framework in response to this Report and provide us with regular subsequent progress updates. (Paragraph 94)*
23. Greater inter-disciplinary involvement in urban planning and collaboration across local authorities is needed to ensure that air pollution, congestion, obesity and a range of public health issues are tackled through joined-up initiatives. *Government should give additional priority to the funding of infrastructure projects which will help to meet air quality objectives. We welcome efforts from local authorities to work collaboratively to address air pollution, and recommend the Ministry of Housing, Communities and Local Government (MHCLG) plays a more active role in supporting greater co-ordination. (Paragraph 95)*
24. *More robust air quality policies should also be included in all Local Plans. MHCLG should audit Local Plans for authorities with NO<sub>2</sub> exceedances to assess whether the National Planning Policy Framework guidance is doing enough to encourage effective action on air quality. MHCLG should inform us of its findings in response to this Report. (Paragraph 96)*
25. The health impacts of poor air quality cost the UK an estimated £20 billion per year. We are not convinced that HM Treasury is taking sufficient account of this when establishing taxation and spending policy. We are also concerned that current fiscal incentives for CO<sub>2</sub> and NO<sub>2</sub> reduction are disjointed. *The Treasury must take greater account of the costs of air pollution when establishing taxation and spending policy. It must explore how existing policies to achieve CO<sub>2</sub> reductions can be combined with air quality targets—particularly NO<sub>2</sub> and particulate matter—to produce a single instrument that delivers on both. The Treasury could begin by examining the feasibility of incorporating harmful pollutant emissions into vehicle taxation. The Treasury should update us on progress in the Government's response to this Report. (Paragraph 100)*

26. *We recommend the Treasury introduces more ambitious measures to encourage the take-up of low emission vehicles. This should include a revision of Vehicle Excise Duty rates to better incentivise both new purchases and support the second-hand market.* (Paragraph 101)
27. There is no single effective system for tracking the funding commitments across Government which aim to deliver air quality benefits. We are also not convinced there is a unified system for evaluating and comparing the outcomes of particular air quality schemes. This lack of joined-up working and fragmented oversight means there is no way of knowing whether existing policies are delivering a coherent set of measures that represent good value for money. (Paragraph 106)
28. *The remit of JAQU should be expanded to track spending on measures intended to improve air quality across all Departments. JAQU should also develop a system to help better quantify what effect new policies will have on air quality, and measure their actual impact after implementation. This information should be collated into a single resource to provide a robust, easily accessible evidence base for future decision-making.* (Paragraph 107)

### Cleaner vehicles on our roads

29. There is insufficient urgency in current policies to accelerate vehicle fleet renewal. Whilst we welcome the Government's commitment to end the sale of new petrol and diesel cars by 2040, this target lacks sufficient ambition. It is too distant to produce a step-change in industry and local government planning, and falls far behind similar commitments from other countries. The Minister believed the UK could phase out conventional cars before 2040, and this ambition should be reflected in the Government's policy targets. (Paragraph 113)
30. *The Government should bring forward the date by which the sale of conventional petrol and diesel vehicles will be ended. The Government should conduct a feasibility assessment to determine the earliest date by which this could be achieved, balancing the health impacts of air pollution with economic and practical considerations. We expect the Government to then require manufacturers to end the sale of conventional petrol and diesel vehicles by this earlier date. The Government should inform us of the outcome of its assessments in response to this Report.* (Paragraph 114)
31. *The Government should set out a procurement route map to show how it will achieve this target in the Budget, and extend this commitment to cover the fleets of all departments, agencies and public bodies.* (Paragraph 117)
32. We welcome the Government's optimism that ULEV targets will be met. This now needs to be translated into concrete action. The current pace of change is far too slow and we have no confidence that there will be adequate infrastructure to support the UK's rapid transition away from polluting vehicles without substantial efforts from both central Government and local authorities. *The Government should work with National Grid and local authorities to identify the key practical barriers preventing a more rapid roll-out of charging infrastructure, and provide details and timescales of*

*how these will be overcome in response to this Report. Local authorities also need to be clear that they should be facilitating the switch to ULEVS as far as possible. This should be clearly communicated to residents and planning committees. (Paragraph 120)*

33. We are not convinced that the existing framework for delivering charging infrastructure adequately addresses strategic priorities. *The DfT should work with Defra and the Ministry for Housing, Communities and Local Government to ensure that charging infrastructure addresses strategic needs and prioritises air quality hotspots. A technology-neutral approach must be maintained whilst ensuring these systems are future-proofed and capable of handling increases in usage and larger battery sizes. (Paragraph 121)*
34. It is important that the switch to electric vehicles does not simply move emissions from the tailpipe to power plants. *The Government should produce a detailed roadmap outlining how the predicted increase in energy consumption arising from greater ULEV uptake will be produced using clean sources, and the concrete steps needed to ensure these goals are met. (Paragraph 122)*
35. The current rate of renewal of the UK fleet means it will be many years before ultra-low emission vehicles replace all of the most polluting vehicle types. A national scrappage scheme could speed up this process considerably. Any scrappage scheme must include provisions to support low-income drivers and small businesses. The Government should focus on reducing vehicle use and encouraging public transport use where practical, rather than simply switching to alternative vehicle types. Therefore any scrappage scheme must be accompanied by a suite of additional measures and not implemented in isolation. (Paragraph 127)
36. *Defra must publish its analysis of the scrappage consultation responses as soon as possible. It should provide details of the fiscal measures it would take to fund any scrappage proposals and the value for money this represents. The Government should also work closely with private scrappage providers to ensure that existing schemes do more to target support at low-income households and small businesses. (Paragraph 128)*

# Formal minutes

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**Wednesday 7 March 2018**

The Environment, Food and Rural Affairs, Environmental Audit, Health and Social Care, and Transport Committees met concurrently, pursuant to Standing Order No. 137A.

Members present:

Environment, Food and Rural Affairs Committee	Environmental Audit Committee	Health and Social Care Committee	Transport Committee
Neil Parish	Mary Creagh	Andrew Selous	Lilian Greenwood
Alan Brown	Geraint Davies	Ben Bradshaw	Iain Stewart
John Grogan	Zac Goldsmith	Diana Johnson	Graham Stringer
Dr Caroline Johnson	Dr Matthew Offord		Daniel Zeichner
Sandy Martin			
Mrs Sheryll Murray			

Neil Parish was called to the Chair, in accordance with Standing Order No.137A (1)(d).

**Draft Report: *Improving air quality***

The Committees considered this matter.

[The Committees adjourned

## Environment, Food and Rural Affairs Committee

Neil Parish in the Chair

Alan Brown    John Grogan

Draft Report (*Improving air quality*) proposed by the Chair, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 128 read and agreed to.

Summary agreed to.

*Resolved*, That the Report be the Fourth Report of the Committee to the House.

*Ordered*, That the Chair make the Report to the House.

*Ordered*, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[The Committee adjourned until Wednesday 14 March 9.15am

## Environmental Audit Committee

Mary Creagh in the Chair

Geraint Davies                  Dr Matthew Offord  
Zac Goldsmith

Draft Report (*Improving air quality*) proposed by the Chair, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 128 read and agreed to.

Summary agreed to.

*Resolved*, That the Report be the Fourth Report of the Committee to the House.

*Ordered*, That the Chair make the Report to the House.

*Ordered*, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[The Committee adjourned until Tuesday 20 March 10am

## Health and Social Care Committee

Andrew Selous

Ben Bradshaw     Diana Johnson

In the absence of the Chair, Andrew Selous was called to the Chair.

Draft Report (*Improving air quality*) proposed by the Chair, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 128 read and agreed to.

Summary agreed to.

*Resolved*, That the Report be the Third Report of the Committee to the House.

*Ordered*, That the Chair make the Report to the House.

*Ordered*, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[The Committee adjourned until Tuesday 13 March 2pm

## Transport Committee

Lilian Greenwood in the Chair

Iain Stewart                     Daniel Zeichner  
Graham Stringer

Draft Report (*Improving air quality*) proposed by the Chair, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 128 read and agreed to.

Summary agreed to.

*Resolved*, That the Report be the Second Report of the Committee to the House.

*Ordered*, That the Chair make the Report to the House.

*Ordered*, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[The Committee adjourned until Monday 12 March 4.15pm

## Witnesses

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The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's websites.

### Thursday 23 November 2017

**Alan Andrews**, ClientEarth, and **Professor Stephen Holgate**, Medical Research Council Clinical Professor of Immunopharmacology, University of Southampton [Q1–53](#)

**Martin Adams**, Head of Air Pollution, Transport and Noise Group, European Environment Agency, **Rt Hon Sadiq Khan**, Mayor of London, and Councillor **Adele Morris**, Deputy Chair of the Environment, Economy, Housing and Transport Board, Local Government Association [Q54–129](#)

### Thursday 30 November 2017

**Dr Thérèse Coffey MP**, Parliamentary Under-Secretary of State, Department for Environment, Food and Rural Affairs; **Jesse Norman MP**, Parliamentary Under-Secretary of State, Department for Transport; **Mr Marcus Jones MP**, Parliamentary Under-Secretary of State, Department for Communities and Local Government; and **Andrew Jones MP**, Exchequer Secretary, HM Treasury [Q130–298](#)

## Published written evidence

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The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

IAQ numbers are generated by the evidence processing system and so may not be complete.

- 1 ABB Ltd. ([IAQ0122](#))
- 2 Addison Lee Group ([IAQ0121](#))
- 3 ADEPT ([IAQ0147](#))
- 4 AECB ([IAQ0034](#))
- 5 All Party Parliamentary Light Rail Group Transport Select Committee ([IAQ0172](#))
- 6 Anaerobic Digestion and Bioresources Association ([IAQ0030](#))
- 7 Anglo American ([IAQ0110](#))
- 8 Arriva ([IAQ0140](#))
- 9 Association of Directors of Public Health ([IAQ0063](#))
- 10 Autogas Ltd ([IAQ0098](#))
- 11 Bartec Auto ID Ltd ([IAQ0155](#))
- 12 BEAMA Ltd. ([IAQ0112](#))
- 13 BeemCar Ltd ([IAQ0189](#))
- 14 Birmingham City Council ([IAQ0094](#))
- 15 Brampton A14 Campaign group ([IAQ0023](#))
- 16 British Heart Foundation ([IAQ0136](#))
- 17 British Lung Foundation ([IAQ0006](#))
- 18 British Vehicle Rental and Leasing Association (BVRLA) ([IAQ0108](#))
- 19 Builders Merchants Federation ([IAQ0125](#))
- 20 Cadent ([IAQ0131](#))
- 21 Calor Gas Ltd ([IAQ0141](#))
- 22 Camden AQGOST ([IAQ0139](#))
- 23 Campaign for Air Pollution ([IAQ0190](#))
- 24 Campaign for Better Transport ([IAQ0194](#))
- 25 Canal & River Trust ([IAQ0127](#))
- 26 CEMEX ([IAQ0095](#))
- 27 Centre for Atmospheric and Instrumentation Research ([IAQ0064](#))
- 28 Centrica plc ([IAQ0107](#))
- 29 Chartered Institute of Environmental Health ([IAQ0105](#))
- 30 Chartered Institution of Highways & Transportation ([IAQ0061](#))
- 31 CHATR ([IAQ0154](#))
- 32 Christabel Watts ([IAQ0116](#))
- 33 Church Road and Districts Residents Association ([IAQ0002](#))

- 34 CIBSE ([IAQ0115](#))
- 35 Citizen Sense ([IAQ0132](#))
- 36 City of Cardiff Council ([IAQ0150](#))
- 37 City of London Corporation ([IAQ0015](#))
- 38 CIWEM ([IAQ0170](#))
- 39 Clean Air Bishopston ([IAQ0078](#))
- 40 Clean Air for Brent ([IAQ0066](#))
- 41 Clean Air in London ([IAQ0157](#))
- 42 Clean Air Southampton ([IAQ0099](#))
- 43 ClientEarth ([IAQ0162](#))
- 44 Colnbrook Community Association ([IAQ0036](#))
- 45 Community Transport Association ([IAQ0152](#))
- 46 Compass Point Residents Assn ([IAQ0146](#))
- 47 Confederation of Passenger Transport (UK) ([IAQ0016](#))
- 48 Copart UK Ltd ([IAQ0038](#))
- 49 Core Cities ([IAQ0083](#))
- 50 Cranfield University ([IAQ0018](#))
- 51 Cycle Bath ([IAQ0192](#))
- 52 David Holmes ([IAQ0005](#))
- 53 David Milne ([IAQ0193](#))
- 54 David Pye ([IAQ0004](#))
- 55 Dearman Engine Company ([IAQ0051](#))
- 56 DEFRA ([IAQ0200](#))
- 57 Department for Environment, Food and Rural Affairs (DEFRA) ([IAQ0186](#))
- 58 Doosan Babcock ([IAQ0085](#))
- 59 Dr David Metz ([IAQ0012](#))
- 60 Dr Ewa Walker ([IAQ0043](#))
- 61 Dr James Tate ([IAQ0161](#))
- 62 Dr Moshe Kinn ([IAQ0035](#))
- 63 Dr Richard Lofthouse ([IAQ0008](#))
- 64 EMRC ([IAQ0080](#))
- 65 Energy Saving Trust ([IAQ0042](#))
- 66 Enterprise Rent A Car ([IAQ0160](#))
- 67 Environment Agency ([IAQ0188](#))
- 68 Environmental Industries Commission (EIC) ([IAQ0198](#))
- 69 Environmental Protection UK ([IAQ0079](#))
- 70 Faculty of Public Health ([IAQ0060](#))
- 71 Federation of Small Businesses (FSB) ([IAQ0133](#))

- 72 FirstGroup plc ([IAQ0159](#))
- 73 Freight on Rail ([IAQ0065](#))
- 74 Freight Transport Association ([IAQ0059](#))
- 75 Freightliner Group ([IAQ0088](#))
- 76 Friends of the Earth (England, Wales and Northern Ireland) ([IAQ0167](#))
- 77 FSB London ([IAQ0165](#))
- 78 Gasrec Limited ([IAQ0123](#))
- 79 Gatwick Airport Ltd ([IAQ0087](#))
- 80 Greener Journeys ([IAQ0084](#))
- 81 Greenpeace ([IAQ0184](#))
- 82 Heathrow Airport Ltd ([IAQ0183](#))
- 83 IAM RoadSmart ([IAQ0040](#))
- 84 Institute of Air Quality Management ([IAQ0062](#))
- 85 Institution of Chemical Engineers (IChemE) ([IAQ0179](#))
- 86 Jacobs UK Ltd ([IAQ0073](#))
- 87 Joint Nature Conservation Committee ([IAQ0090](#))
- 88 joyce taylor ([IAQ0028](#))
- 89 Lady Iveta Iveta Kurpniece ([IAQ0003](#))
- 90 LEVC ([IAQ0102](#))
- 91 Licensed Taxi Drivers Association ([IAQ0145](#))
- 92 Light Rail Transit Association ([IAQ0171](#))
- 93 Liverpool City Region Combined Authority ([IAQ0089](#))
- 94 Living Streets ([IAQ0097](#))
- 95 Local Government Association ([IAQ0070](#))
- 96 Local Government Association (LGA) ([IAQ0196](#))
- 97 Local Government Association (LGA) ([IAQ0197](#))
- 98 Local Government Technical Advisers' Group ([IAQ0068](#))
- 99 London Borough of Islington ([IAQ0135](#))
- 100 London Boroughs of Hillingdon, Richmond and Wandsworth and the Royal Borough of Windsor and Maidenhead ([IAQ0149](#))
- 101 London Forum of Amenity and Civic Societies ([IAQ0037](#))
- 102 Mayor of Greater Manchester ([IAQ0180](#))
- 103 Mayor of London ([IAQ0185](#))
- 104 Michael Ryan ([IAQ0178](#))
- 105 Mimi Romilly ([IAQ0050](#))
- 106 Mineral Products Association ([IAQ0049](#))
- 107 Mr Christopher Carr ([IAQ0017](#))
- 108 Mr david leeming ([IAQ0129](#))

- 109 Mr Duncan Grassie ([IAQ0029](#))
- 110 Mr George Faulkner ([IAQ0033](#))
- 111 Mr Kristopher Clarke ([IAQ0166](#))
- 112 Mr Martyn Maynard ([IAQ0013](#))
- 113 Mr Patrick Moore ([IAQ0014](#))
- 114 Mr Raymond Woods ([IAQ0025](#))
- 115 Mr Simon Bacon ([IAQ0077](#))
- 116 Mr Tom Kennedy ([IAQ0117](#))
- 117 Mrs Jill Austen ([IAQ0072](#))
- 118 Mrs Suzanne Faulkner ([IAQ0027](#))
- 119 Ms Allyson Webb ([IAQ0026](#))
- 120 Ms Lyn Brayshaw ([IAQ0057](#))
- 121 Ms Primavera Boman-Behram ([IAQ0044](#))
- 122 National Centre for Atmospheric Science ([IAQ0045](#))
- 123 National Express ([IAQ0142](#))
- 124 National Franchised Dealers Association (NFDA) ([IAQ0106](#))
- 125 Natural Gas Vehicle Network ([IAQ0100](#))
- 126 NERC Centre for Ecology & Hydrology ([IAQ0120](#))
- 127 Network of Public Health Specialty Registrars ([IAQ0181](#))
- 128 New Forest Friends of the Earth ([IAQ0111](#))
- 129 Nicholas Bradshaw ([IAQ0074](#))
- 130 No Third Runway Coalition ([IAQ0156](#))
- 131 PACTS ([IAQ0187](#))
- 132 Parking and Traffic Regulations Outside London (PATROL) ([IAQ0182](#))
- 133 Patrick Moore ([IAQ0201](#))
- 134 Plantlife International ([IAQ0126](#))
- 135 Policy Connect ([IAQ0151](#))
- 136 Port of London Authority ([IAQ0086](#))
- 137 Professor Stephen Peckham ([IAQ0048](#))
- 138 Public Health England ([IAQ0199](#))
- 139 RAC ([IAQ0056](#))
- 140 Rail Delivery Group ([IAQ0158](#))
- 141 Rail Freight Group ([IAQ0101](#))
- 142 Rebecca Thomas ([IAQ0019](#))
- 143 Renewable Energy Association ([IAQ0104](#))
- 144 Research Councils UK ([IAQ0143](#))
- 145 Richmond Heathrow Campaign ([IAQ0130](#))
- 146 Riversimple Movement Ltd ([IAQ0076](#))

- 147 Robert Shapton ([IAQ0024](#))
- 148 Rosamund Adoo-Kissi-Debrah ([IAQ0191](#))
- 149 Royal Academy of Engineering ([IAQ0177](#))
- 150 Royal College of Physicians ([IAQ0031](#))
- 151 Sandwell MBC ([IAQ0113](#))
- 152 Slough and District Against Runway Expansion ([IAQ0039](#))
- 153 Society of Motor Manufacturers and Traders ([IAQ0103](#))
- 154 Soil Association ([IAQ0163](#))
- 155 Southwark Council ([IAQ0128](#))
- 156 SPACE for Gosforth ([IAQ0174](#))
- 157 Stagecoach Group plc ([IAQ0041](#))
- 158 Stop Killing Cyclists ([IAQ0195](#))
- 159 Stove Industry Alliance ([IAQ0052](#))
- 160 Sustrans ([IAQ0137](#))
- 161 Teddington Action Group ([IAQ0011](#))
- 162 Templeton Parish Council ([IAQ0114](#))
- 163 Tesla ([IAQ0081](#))
- 164 The Academy of Medical Sciences ([IAQ0091](#))
- 165 The British Parking Association ([IAQ0058](#))
- 166 The Chartered Institute of Logistics and Transport in the UK ([IAQ0055](#))
- 167 The National Education Union (NUT section) ([IAQ0053](#))
- 168 The Royal College of General Practitioners ([IAQ0047](#))
- 169 The Volkswagen Diesel Customer Forum (Emissions Scandal) ([IAQ0032](#))
- 170 Timothy Stockton ([IAQ0007](#))
- 171 Uber UK ([IAQ0164](#))
- 172 UCL ([IAQ0075](#))
- 173 UK Hydrogen and Fuel Cell Association ([IAQ0124](#))
- 174 UK Pesticides Campaign ([IAQ0176](#))
- 175 UK Petroleum Industry Association ([IAQ0092](#))
- 176 UK Public Health Registrar Sustainable Development Network ([IAQ0168](#))
- 177 UKLPG ([IAQ0169](#))
- 178 Unicef UK ([IAQ0054](#))
- 179 University of Bristol Law School ([IAQ0153](#))
- 180 University of Nottingham ([IAQ0134](#))
- 181 Urban Transport Group ([IAQ0082](#))
- 182 Vauxhall Motors Limited ([IAQ0067](#))
- 183 Vivergo Fuels ([IAQ0022](#))
- 184 Winchester Action on Climate Change ([IAQ0071](#))

- 185 Winchester Friends of the Earth ([IAQ0173](#))
- 186 Wolseley UK ([IAQ0138](#))
- 187 Woodland Trust ([IAQ0119](#))
- 188 World Business Council for Sustainable Development ([IAQ0148](#))
- 189 WSP ([IAQ0046](#))