

Environmental Audit Committee

Oral evidence: Air pollution in England, HC 1656

Wednesday 18 March 2026

Ordered by the House of Commons to be published on 18 March 2026.

[Watch the meeting](#)

Members present: Mr Toby Perkins (Chair); Julia Buckley; Jonathan Davies; Carla Denyer; Barry Gardiner; Chris Hinchliff; Martin Rhodes; Dr Roz Savage.

Questions 31- 62

Witnesses

[II](#): Larissa Lockwood, Director of Policy and Campaigns, Global Action Plan; Matt Towner, Director of Programmes, Impact on Urban Health; and Ruth Chambers OBE, Senior Fellow, Green Alliance.

Written evidence from witnesses:

- [Written submission from Global Action Plan \(AIR0092\)](#)
- [Written submission from Impact on Urban Health \(AIR0055\)](#)
- [Written submission from Green Alliance \(AIR0146\)](#)

Examination of witnesses

Witnesses: Larissa Lockwood, Matt Towner and Ruth Chambers OBE.

Q31 Chair: We come now to the second panel of today's first session of our inquiry into air quality. I am delighted to say that we have a panel representing the environmental sector. I invite our three panellists to introduce themselves and their particular area of interest with regard to air quality.

Larissa Lockwood: Thank you very much for having me here today. I am the director of policy and campaigns at Global Action Plan. We are an environmental charity working on air pollution, big tech, data centres and education. We have been working on air pollution for the last 10 years, working with communities, schools, hospitals, community groups, local authorities and individuals on solutions for air pollution, looking for opportunities to partner and scale them up, and also advocating for system change because individuals and organisations can do only so much.

Some of you may have engaged with some of our campaigns in the past—indeed, I think you have—on things like Clean Air Day, which we have been running for the last 10 years, and Clean Air Night more recently on domestic burning.

Matt Towner: I am pleased to be here on behalf of both the Healthy Air Coalition and Impact on Urban Health. Impact on Urban Health is part of Guy's and St Thomas' Foundation, one of the largest health foundations in the UK.

We explore how living in cities impacts on people's health and health equity specifically. We take an applied approach, working in partnership with others to test solutions to complex health issues. While we focus our efforts on inner-city London, we aim to generate evidence and learnings that are relevant to cities around the UK and, indeed, the world. We have a 10-year programme on air quality and have been contributing to key evidence in a range of Departments and inquiries, including this one. I personally oversee our four programmes tackling health inequity, other issues being children's health and food, children's mental health, and the financial foundations of adult health.

Chair: Finally, we have a regular contributor, and very welcome she is, too.

Ruth Chambers: Thank you, Chair. Thanks so much for having me back, and thanks to the Committee for this timely inquiry. I am Ruth Chambers, senior fellow at Green Alliance, an environmental think-tank and charity. Our interest in air quality is multifaceted. It ranges from transport emissions to methane to the accountability frameworks and systems through which we hold Government policymakers to account. For a decade, in a personal capacity, I was a lay member of the Committee



on the Medical Effects of Air Pollutants, where I met Professor Clift for the first time. Thank you.

Q32 Chair: The UK has seen significant reductions in methane and is committed to the global reduction of methane emissions by at least 30% by 2030. First, can you set out the impacts of methane on the environment? Will the current reduction targets be achieved, and are they enough?

Ruth Chambers: Thanks for that opening question. First, methane is a very powerful greenhouse gas. The climate impact, which I know is not the primary focus of this Committee, merits a mention. Methane is roughly 80 times more powerful than carbon dioxide over a 20-year period. Over half the methane emitted in the UK comes from agriculture, around a third from the waste sector, and a tenth from the oil and gas sector.

However, a further problem that will be of more interest to this Committee's inquiry is that methane can mix with other primary pollutants to form ground-level ozone in the presence of sunlight. That is a significant, if somewhat overlooked, pollutant, as we heard from the first panel. We know that ozone pollution has been rising in the UK. We know that it reached record levels in 2023 in the south-east of England, for example, and we know that is likely to be exacerbated as temperatures rise.

That has a public health impact, obviously, but it also has other impacts, which, again, the first panel touched on. It will have significant negative impacts on crop yields, for example, because it damages plant tissue and reduces photosynthesis. In 2020—a statistic that surprised and horrified me—crop losses across Europe due to ground-level ozone pollution for wheat and potato crops corresponded to a value of £1.7 billion, a highly significant economic impact. Those are some of the impacts of methane, and I am grateful that the Committee is interested in looking at that.

Are we doing enough? The methane action plan that the Government published at the end of last year falls short of the UK's commitment to the global methane pledge, which, as you said, is 30% by 2030. The Green Alliance published a briefing on the climate emergency brake, which highlights that a 37% reduction could be achieved by 2030.

Many of the actions to reduce methane emissions can also have additional benefits or co-benefits, which is worth a mention. For example, covering slurry stores can also mean less ammonia pollution and the potential to trap that gas for energy and release it either on the farm for use in energy or as an extra income for farmers.

More action is needed, and the priority must now be to deliver what is in the existing methane action plan. It is here and we cannot afford to hang around, but we do need to shift gear in some other important areas. I will briefly mention a couple.



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In agriculture, we need to drive uptake by farmers and supply chains of methane-suppressant feed products, as progress seems to have slipped on that. The relevant commitment to hang our accountability hats on is commitment 62 of the Environmental Improvement Plan.

In waste, we need to take swift action to ban organic waste from entering landfill. If we do not, further delay will mean continued methane emissions for years due to the long tail of methane production from landfills.

Finally, reporting on how close we are to the target for all slurry and digestate stores to be covered by 2027 feels quite elusive, so some clarity on that target would be helpful.

Q33 Carla Denyer: Ms Chambers, you have just made some very clear recommendations, which is great. There is no need to repeat those if some of them are the answer to my next question.

Zooming out from methane to air quality generally, I am always a fan of looking at what other people are already doing in other countries and reminding our Government that they do not need to reinvent the wheel. What are some best-practice examples that you are aware of in other countries that the UK could also adopt?

Ruth Chambers: A place where I would direct the Committee to look for the answer to that question lies in a DEFRA report that we hope to see later this spring. The reference for this is section 21 of the UK Environment Act, which requires the Government to publish a report on international environmental protection developments. It is a requirement of the Act. There has been one of those reports so far, and it came out a couple of years ago, but the next report is due this spring.

Having had a look at the previous report, it does mention air quality. Air quality is in scope, but let's say that it is very generic in what it says. Have a look at that report, but I would not hold our collective breath for it.

We have been speaking to our friends at the Institute for European Environmental Policy, who are monitoring carefully what is happening in the EU. We would like to bring three examples to your attention today. One is on monitoring, one is on funding and one is on a planning lever. They are quite instructive in their own way.

The first is on monitoring. In the opening question, Mr Gardiner hinted that there is very low political awareness or attention to air quality at the moment. One might say it is a Cinderella environmental issue. I do not know what we would call indoor air quality. Maybe the second—

Carla Denyer: The second cousin of the Cinderella issue, yes.

Ruth Chambers: Exactly. In France, they take it seriously. Indoor air quality monitoring in public buildings is a requirement via a law known as



Grenelle II. This was enacted in 2010 and revised in 2022, and so it is a relatively new law. It aims to create healthy spaces in establishments that, in the terms of the law, receive the public. We can call them public buildings if you like. It initially focused on high-priority public buildings like nurseries or crèches but, as it has gone on, it has become more ambitious and, slowly but surely, other public buildings are being extended within its reach.

As a couple of examples of the things it requires, its mandatory annual assessment of ventilation systems, for example, includes measurement of carbon dioxide. Self-diagnosis—it is not all on the state—of indoor air quality every four years to detect any problems, and action plans to respond to problems that are identified. I like this one in particular: measuring pollutants at each key stage of a building's development to future-proof its life in relation to indoor air quality. That is No. 1, and the other two are briefer.

Secondly, I take you to Oslo in Norway, where a planning tool called the blue-green factor mandates minimum ecological performance requirements for new developments. Again, it is relatively new. It was initially regulated in 2019 and revised in 2023. Surveys indicate that eight out of 10 citizens in Oslo not only have increased satisfaction in air quality, noise conditions and traffic levels compared with when they first started measuring, but they are happier. That is also a significant benefit.

Finally is a funding example. The EU's new social climate fund will support people and businesses most impacted by the new emissions trading system covering transport and buildings. It runs from 2026 to 2032, and it will mobilise €86.7 billion, so it is a really significant fund. It is not free money. To access the funding, member states must transpose the directive and submit their social climate plans to the Commission, setting out measures to support vulnerable households, transport users and microenterprises. While the fund may, on an initial glance, be seen as perhaps more in the climate mitigation space, it will bring important co-benefits for air quality.

Those are my three examples. We can provide more to the Committee if that is helpful.

Q34 Carla Denyer: Brilliant. I love that. Yes, we welcome any follow-up written submissions.

I want to throw the question of good practice and international examples to the other members of the panel in a moment, if you have any others. Before I do—and the panel is welcome to answer this question as well, if they want—Ms Chambers, I want to ask you the same question that I asked Ms Legge on the previous panel. Is there a need for new national legislation on air quality, or can we do what needs to be done through current legislation?



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Ruth Chambers: Can I say yes, please, and yes, please? While there is always room and scope for improving legislation, we have a lot of legislative opportunities, powers and frameworks. As Ms Legge said, we have targets in the Environment Act.

There is a relatively near-term opportunity because the Environment Act requires those targets, including the ones on particulate matter, to be reviewed every five years, and we are coming up to that review period. By 31 January 2028, the existing targets must be reviewed. It is not optional, as it is written into the Act.

We do not yet have clarity, though, on how that process is to be conducted. It was done in 2023, and the Government must meet a test, called the significant improvement test, when they review those targets. If you have never heard of it, I am not surprised because it was done almost under the cover of darkness the first time, and the Act itself was quite young at that point. That is our opportunity, but we must make sure that it is not done under the cover of darkness this time. There is an evidence-gathering process, public consultation and a vehicle for affected communities, which I am sure we will talk about later, to feed into that revision process.

Carla Denyer: Thank you. Does either of the other panellists want to talk about international best practice or whether new legislation is needed?

Larissa Lockwood: Yes and yes. We need the legally binding targets, as Sarah said earlier. Local authorities around the country are now turning off their monitors because they feel they have done the job. That is not okay if the limit you have set is four times higher than what the World Health Organisation considers to be the guideline. The job is not yet done. Our targets are far behind what the WHO recommends, and even behind Europe. The ones that we have are not fit for purpose. Yes, we need them and the action plan to achieve them, working out how we can reduce each of those pollutants.

Some of those actions will need further statutory measures, no doubt. For example, on domestic burning, which I hope we will cover in a bit, local authorities would like powers to be able to do more in their local area. I have spoken to local authorities that have said, "We would ban burning in our local area if we could. The residents want it, the councillors want it, but we do not have the powers." There could be more powers on specific measures that need legislation.

On international examples, I have a mixed bag, more UK-based because we are UK-based, but thinking again about wood burners. In Tasmania, a wood burner scrappage scheme managed to reduce particulate matter pollution by 40%, and they then saw a 40% reduction in respiratory deaths and a 20% reduction in heart disease deaths. I am happy to send the reference for that.



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There are also things across the UK. We are seeing clean air zones have an impact. Air quality in London and Bradford has improved. Bradford has 25% fewer visits to GP surgeries for respiratory and heart conditions as a result of the reduction in air pollution. This stuff works. With school streets, we have done this kind of thing with schools in Lambeth, and we saw a 36% reduction in levels of particulate matter. We often see 20% to 25% when we do things like remove gas cookers. We have done a retrofit study in homes in south Manchester. Cookers are often the biggest source of nitrogen dioxide pollution in homes. Remove the cooker and it is gone.

Chair: Okay. I will stop you there. There is plenty more to get into after we return, but we have heard the Division Bell and members will now have to go to vote. We will return in a few minutes.

Sitting suspended for a Division in the House.

On resuming—

Chair: Welcome back, everyone. Apologies for that brief interruption. Carla, you have asked your question of two of our panellists. Mr Towner has had plenty of time to think of his answer, so I expect it to be world class.

Q35 **Carla Denyer:** This is an opportunity for you, Mr Towner, to answer the same question. Are there any international examples of good practice on air quality that you think the UK could follow? Do you feel that the UK needs new legislation to tackle air quality, or can it be done with the existing powers, or indeed both? That is what everybody else has told me so far.

Matt Towner: On international examples, I would probably refer you to organisations like C40 Cities and the Clean Air Fund, which work internationally and collate those examples fantastically.

In terms of whether we need new or supplementary legislation, yes. At the Healthy Air Coalition, we are clear that it has been 70 years since we passed the Clean Air Act, and we need a new Clean Air Act that is fit for the present day. My colleagues on both panels have spoken eloquently on the need for a higher level of ambition on existing air pollutants, as well as a broader suite of pollutants on which we are falling behind the EU.

A Clean Air Act also brings opportunities to better join up action across Government Departments. We know this is an issue that requires action from all Government Departments, and that is not always as evident as it could be. That is an area of opportunity.

There is also an opportunity to centre equity within it so that we are considering not only overall levels of pollution but the gaps and differences between areas and as experienced by different groups within society. That feels important.



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Also, the Ella Roberta Family Foundation has campaigned tirelessly on the need for greater accountability to citizens when it comes to air quality. A Clean Air Act could embed that in the same way as proposed within Ella's law. Those would be my additions.

Q36 Barry Gardiner: I do not know if it was you, Ruth, but the Green Alliance wrote something called "How much action is in the UK's methane action plan?" Could you summarise what it said?

Ruth Chambers: As in my first answer, we feel that the action plan is good as far as it goes. The priority now for the Government is to get on and deliver it, but it has gaps, some of which I highlighted. A report that we have published in relation to the climate emergency brake sets out where and how the Government could go further, and I would be happy to share that with the Committee.

Q37 Barry Gardiner: Thank you very much. On indoor air pollution, you talked about a French example in response to Ms Denyer, and you said they were adopting a little-by-little approach. As part of this Committee's recommendations, rather than asking the Government to take a big bang approach to indoor air pollution, I was struck by what you said about starting with nurseries, classrooms and other public spaces and seeing how it develops. Is that the sensible way to do this?

Ruth Chambers: It certainly could be in relation to indoor air quality, where it feels as if we are starting with a very low bar. Why not start with those spaces where the public need for good indoor air quality is the highest? Clearly, public finances are not in an amazing place at the moment, so the resources that could be given to local authorities and other bodies responsible for those public spaces could focus on those areas. Start with a solid base and increase that over time, but be clear about the road map. At the moment, there does not seem to be a road map.

Q38 Barry Gardiner: Yes, but if we were saving the billions that Professor Clift wanted to put a nought on the end of, it might pay for itself.

Ms Lockwood, in written evidence to the Committee, it was noted that domestic combustion is the second largest contributor to primary PM_{2.5}, and wood burning is a significant contributor to that. What should the Government do to reduce the pollution coming from domestic combustion?

Larissa Lockwood: We have spent considerable time working with clean air experts and local authorities, and testing measures with the public, to develop a policy pathway that looks to phase out domestic burning in urban areas by 2030. As you say, particulate matter pollution from wood-burning stoves, open fires and domestic burning is a large contributor to that source of air pollution. Wood-burning stoves are the most polluting way to heat your home.

Q39 Barry Gardiner: If we make a recommendation like that, the



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Government will come back and say, "Yes, but we have improved this with the eco-designed wood burners." Pray tell us how eco those eco-designed wood burners are. Are they 450 times worse than a gas boiler? Is that what you will tell me?

Larissa Lockwood: If you refer to the Chief Medical Officer's report, it states that an eco-designed stove is 450 times more polluting than gas central heating, and electric heating would be even cleaner than that. This is a problem for outdoor air pollution and for indoor air pollution, because homes with an eco-designed stove have been found to be three times more polluted than homes without.

We now see a greater concentration of people burning in urban areas. People are putting it in as a secondary heating source. It is not burning out of necessity, because these are urban areas where people are on the grid. It is a growing lifestyle trend. By industry estimates, 200,000 stoves go in each year, so we are looking at an extra 1 million stoves over the course of this Parliament, which of course will increase levels of air pollution. Regardless of how eco or low-polluting they are, there will be a net gain. We need to look at it. It has become a public health problem in our towns and cities, and we need to address it.

The urban context is different from the rural context, where there are off-grid homes, some of which are using wood burning for primary heating. However, in urban areas, it definitely could be phased out because, for most households, it is not a necessity. Some off-grid homes, houseboats and so on, for example, are the exception and will need support to transition. For most people, they can either do it or not do it.

The pathway sets out a number of areas of policy recommendations, one of which is around public information, because people are putting in the stoves in good faith. They do not know about the health harms.

Q40 **Barry Gardiner:** That sounds to me suspiciously like the DEFRA consultation on domestic wood burning. Of course, it has not proposed a phase out of wood burning in urban areas, which is what you and the Royal College of Paediatrics and Child Health have proposed. It has simply proposed labelling and information.

Again, crystallise this for me with a clear recommendation that should be in our report about what local authorities should be doing in terms of the regulations they are passing and how they are dealing with domestic wood burning in cities.

Larissa Lockwood: The DEFRA consultation is a start but, as you say, by its own admission it will reduce pollutants by about 2%, so it is not going to solve the problem. However, like other public health problems such as smoking, you need to have a basic public understanding, so it is part of the solution.

Barry Gardiner: I am not against information and labelling.



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Larissa Lockwood: We will start there. Give local authorities more powers. As I mentioned before, local authorities would like to do more but they cannot, so give them the powers to do what they would like to do, which could be banning.

The current smoke control area system does not really work. It is for local authorities to identify and penalise those creating smoke in those areas. When do people burn? In the dark. It is quite hard to monitor.

Barry Gardiner: You have a nose. You can smell them out.

Larissa Lockwood: They need to measure and monitor not smoke but particulate matter pollution, and local authorities need the resources to be able to do that. They do not have the monitors or the staff to be able to go out after hours to do this, so they need support.

Q41 **Barry Gardiner:** You have got me on to my next bonnet bee. In 2020, there was £225 million for local council air quality budgets. How much was it in 2024-25? How much had that £225 million fallen to?

Larissa Lockwood: I do not know the exact figure, but I know that the local air quality grant disappeared under the previous Government and has not been reinstated.

Q42 **Barry Gardiner:** It went from £225 million to £1.45 million. Given the lack of funding for this specific issue that the Government have given to local authorities, should we be making a recommendation to the Government about simply empowering or about enabling and funding local authorities to do this properly?

Larissa Lockwood: Both powers and funding. I am very clear on that.

Q43 **Barry Gardiner:** Could you say something about the consistency of local authority action in different parts of the country?

Larissa Lockwood: It will depend on resource and willingness within the local authorities, and which areas are designated as smoke control areas, because entire towns like St Albans, I believe, are not covered by smoke control areas but have a lot of people burning and a lot of people living there. It is not fit for purpose.

As we have seen, Mums for Lungs does an excellent freedom of information request every year. Councils report getting 15,000 complaints from the public about neighbours burning, and only a handful of fines are issued. The system is not working at the moment.

Barry Gardiner: I am glad you gave a shout out for Mums for Lungs. They do a great job. Behind you, Simon Birkett from Clean Air London is nodding away. It is great to have campaigners who have been on the ball for so long. Thank you very much.

Q44 **Chair:** To push back slightly, Ms Lockwood, some people watching this might say, "Reducing air pollution in doctors' surgeries and children's



nurseries is a great idea. Get on with that. I have to use those services and do not have any choice in the matter. It is one thing to educate me better about the risks I am putting myself through, but you will come into my home and rip out my wood burner. It is not about providing me with information; it is about you deciding that I cannot have this because of the dangers." That is quite a step from where we are. We have seen on other clean air issues that there is resistance to public behaviour change. We spoke about behaviour change quite a bit in our Carbon Budget 7 report. How do you think the public would react to us moving from a stage of better informing them to saying, "We are going to make you rip out the wood burner that has cost you however many thousands of pounds and force you not to use it?"

Larissa Lockwood: Yes, it is a difficult one, because people have put these in in good faith, and they are expensive, so to be told not to use it—when we did our focus groups and tested this policy pathway, the message we got back is, "Don't go for a ban straight off". Ultimately, that is what we need in urban areas, but you need a phased approach, which is why we have developed the policy pathway. Then again, in those focus groups, even with burners—and we see this repeatedly with our public engagement campaigns, because we run Clean Air Night, which is about providing the information to the public on wood burning—actually a lot of people turn around and say, "I didn't know that, I'm going to burn less", or "I'm going to stop burning".

Q45 **Chair:** Choosing to burn less is one thing, and you have given them information, and they have said, "Because of the issues you've now raised with me, I'm going to burn less". It is quite another to say, "It is now illegal, and you are going to be in danger of prosecution if you carry on". That is not "burn less", that is "burn none at all", and it possibly has quite substantial additional costs.

Larissa Lockwood: This is a public health problem, and the pollution coming from wood-burning stoves is not just affecting residents in the home; it is going out into the world, affecting neighbours. We did a piece of research earlier this year that shows that non-essential domestic burning, from wood-burning stoves and open fires, contributes to over 2,500 deaths a year, 1,500 cases of asthma a year and 3,700 cases of diabetes a year—I could go on—and if we stop the non-essential burning, it could save the NHS £54 million a year. To Mr Gardiner's point, there is an economic case for doing this as well. It is a public health problem, and we need to address it.

Q46 **Barry Gardiner:** I take the Chair's point about taking the public with you, as your study showed. Could you perhaps think of a ban on new installations as the first stage, so you are not stopping somebody using something on which they have already spent a lot of money?

Larissa Lockwood: Yes.

Barry Gardiner: But you are saying, "Okay, thus far and no further",



and then you can begin to tackle the residual installations that are already there.

Larissa Lockwood: Yes, that is an excellent idea, and it is in the policy pathway. We are seeing things at the moment, such as the Future Homes Standard that is being developed. There is no need for new homes to be developed with wood-burning stoves, and they should not be fuelled by fossil fuels or forest fuels, so that seems like an obvious and easy opportunity. I am afraid that it may go out saying that they can have wood burners for secondary heating. That is something I would urge the Committee to act on quite urgently.

Q47 **Chris Hinchliff:** Mr Towner, we have already heard today about the thousands of early deaths as a result of air pollution, and the even greater number of morbidities that come from the effects of air pollution. If a disease were killing that many people across the country, there would be a public outcry. When we had thousands of deaths from cholera, we had sweeping legislative reform to improve public health across the country. In your written evidence, you highlighted the different impacts that air pollution has on people from different socioeconomic backgrounds. Frankly, are we allowing this to go ahead because where air pollution falls hardest is on people from the poorest backgrounds?

Matt Towner: This is such a crucial point. Air pollution remains one of the most significant environmental threats to health in the UK, but as you have just alluded to, the health effects are not felt equally. We feel it is vital that air quality policy design and interventions take full account of the implications for health inequality. We welcome the recognition from Government that air pollution is an issue of health equity. Those experiencing poverty or racism face a triple jeopardy here. You can imagine that someone might be living in a more polluted area because it is cheaper to live there, it is closer to a main road, and so on. They may then go to work on a construction site or as a taxi driver, where, again, they are more exposed. Their child is more likely to go to school in an area of higher pollution and along a busy road, and the commute there could be worse. More than that, they could be residing in homes with mould or damp. This exposure is cumulative.

Secondly, those same people are at increased risk of harm once exposed. Different forms of health inequity layer up; the chronic effects of stress from poverty layer up. That results in higher levels of pre-existing health conditions, and as we heard earlier, if you have those, you are more susceptible to the health effects of air pollution. Living in areas of higher deprivation, you may face greater barriers to accessing quality healthcare as well.

Finally, you might have lower agency, whether that is to change where you live or where you work. You might have less awareness of the health effects of air pollution, and certainly reduced representation and advocacy for clean air. Those cumulative effects really compound the



issue and result in the stark health inequalities we see. I take the challenge. Are we letting this slide because it is only affecting people over there, and are we othering them as a society? That probably comes back to the fact that we need greater public awareness and understanding. I know that will be a later question.

- Q48 Chris Hinchliff:** You say we need additional understanding, but you have just set out eloquently all the ways in which this is an issue of air quality affecting the most vulnerable groups in society, affecting more the people who are poorer. We know this is what is happening. Are the Government doing enough to tackle that inequality in our society?

Matt Towner: I think that is two different questions. To the former part, I do think air pollution affects everybody, but it disproportionately affects those experiencing poverty and racism. To the second part of the question, the answer is no. We have heard a lot about the level of ambition that is needed, and what I would say is that we need to focus first and foremost on interventions that reduce air pollution at source. A 2019 Public Health England report highlighted that those are the interventions that will have the greatest impact on reducing the harm to people's health. There are actions that policymakers can take to ensure that policies are equitable. This is something we have thought about quite extensively with an organisation called think/feel/change, and there are opportunities for policies that involve proportionate universalism approaches of focusing resources, whether that be funding for local authorities in areas of high deprivation and where pollution is highest, for example, or the use of enforcement officers. The work of Merton was highlighted earlier. We funded work on construction compliance officers, and those can focus their time and attention on these poorer areas. There are these steps that central Government and local government could be taking if they were properly resourced.

- Q49 Chris Hinchliff:** Thank you very much. I think "proportionate universalism" is a very nice tagline.

Ms Chambers, I am going to come to you on an additional point on this issue, because we have already touched on the concerns around rural air pollution as opposed to air pollution in urban and city centres, and particularly the concerns around agricultural air pollution. Again, I referred to this earlier, but I have market towns like Buntingford and Baldock in my constituency, where often they will be downwind of big agricultural fields nearby. People are spreading slurry; they are spraying their crops. These are processes that are common in agriculture—we know why they are done from an agricultural perspective—but one of the groups that is most vulnerable to air pollution is elderly people, and we have ageing populations, particularly in constituencies like mine. What can we do? What policies could the Government bring forward to tackle agricultural air pollution that is putting older people at risk in rural communities?



Ruth Chambers: That is very much linked to the question you have just asked Mr Towner, so I might link my answers, if I may.

The first is for this Committee to name the issue in the way that we have been doing: this is an environmental, a public health and a social justice issue. Just a couple of weeks ago, the special rapporteur on the human right to a clean, healthy and sustainable environment—a bit of a mouthful, but a very important title—called on states, entities and businesses, which includes the UK Government, to address the dual public health and human rights crisis of air pollution. The UK Government will be responding to that report. That is one thing in scope of the inquiry.

Before I come to your agricultural point, I encourage the Committee to take a slightly closer trip outside these hallowed corridors, if you can find the time and space to do that. That is to cross the river to the London borough of Southwark. Many of you will know the Old Kent Road, which would offer a vivid and proximate case study of many of the issues that Matt has just talked about in relation to the impact of very busy roads on communities that are in some way minority, deprived or poor.

Your question is really interesting, and agricultural pollution is not only not being addressed in relation to air pollution, but it is also perhaps a lower priority for the Government in terms of water pollution. Looking at a space for the Government to bring forward an integrated approach on water and air pollutants in relation to agriculture would be an important step forward, and I could write to you with some more details about some of the policies that that might include.

Q50 **Julia Buckley:** I would like to take us back a step to the discussion we had about the UK being a bit of an outlier in those comparisons with other countries. Starting with you, Larissa Lockwood, what are the benefits of bringing the UK targets in line with World Health Organisation guidelines?

Larissa Lockwood: As has been said, there is no safe level of air pollution, and what that means is that the more we reduce air pollution, the greater the health impact, first and foremost. At the moment, 30,000 lives are being cut short every year by air pollution. If you get rid of the air pollution, bringing it down to World Health Organisation limits, you will reduce the number of deaths, but also prevent 3,000 new cases of lung cancer in adults, 6,000 strokes and 10,000 new cases of asthma in children each year—and that is asthma that will stay with the child for life—so there are definite health benefits.

There are the cost benefits as well. By reducing the health burden, you will be saving at least £27 billion a year in health and productivity, possibly with another zero on the end of it, but that is the figure from the Royal College of Physicians' recent work. We will be keeping people in work, and there will be productivity gains as well. There are estimates that by bringing pollution levels down to World Health Organisation



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levels, we could gain an extra 3 million working days per year, due to the number of days people currently take off due to ill health.

We would improve children's ability to learn because, as we know, air pollution crosses from the lungs into the blood and goes into every organ in the body, including the brain. It has been shown that if we reduced air pollution by 20% in schools in areas of high air pollution, we could improve the development of a child's working memory, their ability to learn, by about 6%, which is the equivalent of four weeks, or a month, of extra learning each year. It would also reduce school absenteeism, because there are over 315,000 days of school absence each year attributed just to PM_{2.5} pollution.

Those are some of the benefits that you could crudely term as matters for growth, as well as having a civic and moral imperative. Then there are also the co-benefits of carbon reduction and climate change, because many of the sources of air pollution are from the burning of fossil fuels, which are the same as those that cause climate change. So if we cut one, we cut the other. We will be reducing CO₂ levels as well, which will obviously have benefits for all the impacts of climate change on people and planet that we are aware of.

Q51 Julia Buckley: That is really clear. Turning to your colleagues for a moment, what additional measures would be necessary to reach those lower targets for PM_{2.5}?

Matt Towner: As Larissa mentioned, bringing air pollution into line with the 2021 WHO guidelines will have huge positive implications for public health and the economy. Examples of areas that we think need to be looked at include clean home heating, a shift away from diesel and making car alternatives more accessible. An organisation called Clean Cities is doing some fantastic work looking at the size of SUVs, for example, and the ever-growing size of cars on our roads. Sarah Legge mentioned the impact of particulate matter coming from tyre and brake wear, so I think that is certainly an area to look at.

We think that cleaning up polluting practices in farming and industry would also go a long way. We have talked quite a bit about farming today. Industries such as construction and freight tend to be less focused on, but they make considerable contributions to both PM_{2.5} and PM₁₀ emissions, particularly in cities. Government action on those industries can raise the issue of air pollution. We think that materiality assessments, when those are being conducted by companies, will strengthen the investor case for pushing the companies that they invest in quite considerably.

Q52 Julia Buckley: I will push you on that, to try to translate it for people who might be watching. Are you suggesting things like ULEZ, lower emission zones? Is that the type of measure you mean, or do you mean that there should be regulation around carburettors so that there is a different level? This would help lay people to understand.



Matt Towner: ULEZ is one example. We think there are also possibilities for clean freight zones, which is something we have seen in other countries.

Q53 **Julia Buckley:** Last-mile or outer zones for delivery?

Matt Towner: Exactly. Lambeth council, for example, has invested quite heavily in developing its kerbside strategy, which really incentivises the last-mile delivery system and the use of cleaner vehicles in cities for delivery. I think it is those actions that make this issue material for large companies. These things are connected, and our partner, ShareAction, has invested quite a lot of time and effort in developing an investor briefing on this issue, if it is useful to share that.

Q54 **Julia Buckley:** Basically, regulation and local initiatives to control areas rather than incentives, grants or innovation support?

Matt Towner: It is a good question. There are two sides to it. On the materiality side of it, yes, it is the regulation side. We also work with the Sustainable Urban Freight Trade Alliance, and they can share their manifesto for local authorities, but the “carrot” side of things for industry is important, and incentivising the uptake of cargo bikes by local businesses, for example, and local authorities providing grants for those, can be really helpful. The availability of charging infrastructure and the VAT that is charged for that—

Julia Buckley: The electrification agenda.

Matt Towner: Exactly. It is huge.

Julia Buckley: Ms Chambers, did you want to add anything?

Ruth Chambers: Very briefly. I have three whats, but I have one on your why, because it is an important question. The why is because it is the right thing to do, and there is an important justice angle, as my colleagues have explained. I would also suggest that it is a growth opportunity—not in the way that the Government are necessarily interpreting growth, and not in the way that Mr Gardiner talked about growth earlier, but growth of people and individuals. Growth is being held back by these impacts on development and public health. It is a growth of people opportunity.

The three whats, very briefly—first, the Government’s forthcoming integrated transport strategy is on its way, and it is interesting that each of us is drawing on transport policy examples, which says something. I wonder about the extent to which the Department for Transport is now thinking about applying environmental principles to the policy development in that strategy. Each and every one of those environmental principles is particularly relevant for the conversation we are having, whether it is prevention, rectification at source, polluter pays, and so on. So one for DfT, perhaps.



Secondly, over the next year, the UK is going to make an awful lot of policy decisions on car, van and HGV regulation, so we can return to this conversation in that context. I think the most important thing will be to keep ambition high in relation to the zero emission vehicle mandate and the uptake of zero emission lorries.

Finally, something that the Government have not done yet, but committed to in Opposition, is to set a target for a modal shift to public transport, as was promised in Labour's pre-election "Get Britain Moving" policy paper.

Q55 Julia Buckley: I can reassure you that, yesterday, the Transport Committee had a session looking at the electrification agenda, specifically focusing on freight. I would encourage you to engage with them so that we can join up that circle.

My final question is on the debate we keep having: how does the UK compare with other countries on policy and funding in this specific slice of that policy? How do we compare on the support that enables us to achieve those higher targets?

Larissa Lockwood: I would have to get back to you on that one. I am happy to provide some written evidence afterwards.

Ruth Chambers: Over and above the examples I gave, which are more on policy implementation, I could go back and ask colleagues if we have anything on the resourcing front.

Julia Buckley: Yes, particularly on transport, which you all referred to. Even when you were referring to housing, you were talking about housing on main roads and children walking along main roads to school. It keeps coming back to what is happening with pollution from vehicle emissions. The overlap is so strong, isn't it? We need to make sure it is feeding through. Thank you for your comments.

Q56 Martin Rhodes: Ms Lockwood, in your written evidence to the Committee, you mentioned the lack of a national public health response to the issue. You also talked about the lack of a joined-up approach across Government from the Department of Health, MHCLG, the Department for Transport and so on, in addition to DEFRA with the lead role. What recommendations and specific actions would you make to Government to address these issues? What recommendations might we make as a Committee to the Government about this?

Larissa Lockwood: Before I get into the detail, I want to inject a bit of something else. We have talked a lot about ambition, but not about urgency. This Government, before they came in, committed to a Clean Air Act, which was promptly dropped after the election. There was then a commitment to a clean air strategy or an air quality strategy, which we were told was going to be drafted and published in this financial year, by the end of March. That, we now understand, is going to be done by March 2028, which is nearly four years into this Government's term. We may all



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have views on what measures the Government should be doing, but what we need, as well as ambition on targets, is a plan. That plan needs to be developed and implemented soon, because if we are four years into a term with no action to local authorities, as we have discussed, with the air quality grant having been cut, that is four years of more lives ruined, an extra 120,000 lives cut short, 40,000 children developing asthma for life and 24,000 unnecessary strokes. We must add some sense of urgency as well as ambition into this, and for this to be dealt with as a public health issue.

I take encouragement that the 10-year health plan has a chapter on preventive health, which is called "From Sickness to Prevention, Power to Make the Healthy Choices". It lists the following priorities: childhood obesity, the smoke-free generation, healthy food choices, healthy alcohol choices, exercise and the Get Active campaign. It also includes a commitment to refresh the Government's ambition on air quality to protect everyone from the health impacts of air pollution. That is great. It is brilliant to see that air quality and air pollution are recognised as a public health priority. Then if you look at the Department of Health website, there are public health campaigns on all those other issues, on exercise, alcohol, food, smoking. There is nothing on air pollution. Where is the public health response to this public health challenge that is addressed and identified in that 10-year health plan?

We are often told that it is because air pollution is a DEFRA issue. It is an environmental issue. I would argue that food is also seen as a DEFRA issue. It is the Department for Environment, Food and Rural Affairs, yet we see the Department of Health frequently running campaigns on food and healthy eating choices. I do not see why there cannot be a more joined-up approach, led by both Health and Environment. Even then, with DEFRA, there is willingness but it is an unprotected Department. There is no funding or political support behind this, and nor does it have the levers to create the change required. As we have talked about, it is about transport; we have talked about planning and housing; we have talked about energy policy; it is to do with industry and technology. These are all beyond DEFRA's direct control. It really does require a cross-departmental approach if we want to have cross-societal benefits.

I would urge the Committee to recommend that we have an urgent plan, working to legally binding targets, and a cross-departmental approach to implementation, and for there to be, within this, a public health response. That will include a public health campaign, which is not to put the onus of responsibility on individuals, because this is a systemic issue. It requires change across all those Departments, but the public need to understand what the problem is. People need to know the truth, and they also need to know what they can do to protect their health, because there are measures that people can take. We have been running Clean Air Day, which is a public engagement campaign, for the last 10 years, and we see that people who engage with the campaign change their behaviour. They try to do something to reduce air pollution.



We also see that people who understand the problem are more willing to see policy solutions implemented. When we test with the public, because we do polling every quarter, what measures they would support, those who are more familiar with the facts about air pollution are more willing to see changes such as investment in walking and cycling, but also charges for more polluting vehicles.

We need to do that underpinning public health piece, and there is a strong role for the Department of Health within that. Part of that is also around the role of health professionals, because you would expect, with a health issue, for health professionals to know about it. Air pollution is not on the medical curriculum, and one of the things we often hear from the public is, "Well, if air pollution is a problem, wouldn't my GP have mentioned it to me? And wouldn't the Government be doing something about it?" We need health professionals to be trained so that they can advise patients accordingly. It works.

We have done a number of pilots in general practice for respiratory health, maternity, cardiac health. We evaluated one of the studies in Islington, which is a really polluted part of the country. Before we did the programme, only 7% of the doctors were talking to patients about air pollution. Afterwards—and it is only a couple of hours of training a couple of times; it is not heaps and heaps—they all said that they felt much more confident to talk to patients about air pollution. About 90% went on to have those conversations with patients, and when we evaluated what the patients did in response, half of them said that they had done something different to protect their health from air pollution. As a method, it works, and it should be part of that public health approach. The onus of responsibility cannot be on patients; it cannot be on the public. This is a collective problem, and it needs a full, cross-Government solution. We need a plan, and we need it urgently.

Q57 Jonathan Davies: Ella, a nine-year-old girl who died in 2013, was the first person to have air pollution listed as a cause of death on her death certificate, which was a shocking moment. I looked into the situation in my county of Derbyshire and found that air pollution contributes to between 400 and 600 deaths a year, even though parts of the county are fairly rural. Larissa, you talked quite a lot about things that the Government could do to promote better air quality or to encourage consumers to make certain choices, such as through labelling on wood-fired stoves and better work with healthcare professionals. I will come back to you on that, through the lens of local authorities, but Mr Towner, what steps do you think the Government could take to increase awareness of the risks of poor air quality while incentivising reforms and transitions to reduce exposure?

Matt Towner: The Government have a vital role in communicating the risks of air pollution. It is an invisible killer, and as we have heard, it contributes to up to 43,000 deaths a year. There is still a high level of public misunderstanding of those risks. We really welcome and will



continue to support the nascent DEFRA-led efforts to align messaging across sectors. We will continue to support that. I think a public awareness campaign that is properly resourced and funded is part of the answer. Why is it important? At the moment, there is a lack of co-ordinated and resourced national campaigns, and the result is fragmentation of communication efforts and scepticism on behalf of the public. For example, the communication around clean air zones was largely left to local authorities, and the National Audit Office's evaluation of the NO₂ programme found significant public misunderstanding, with nearly a quarter of residents believing the policy was simply designed to raise funds for local authorities, even where this was not true.

Similarly, there is a gap in awareness of key sources of pollution. While people might be aware that air pollution as a whole is bad for their health, only 36% of respondents to a YouGov survey believed that wood-burning stoves had a negative impact on people's health. There is a need for clear information, and the Government need to be clear in their messaging on that. An example is the daily air quality index and the discrepancies between what it says is safe and what the WHO evidence says is safe, and that is hugely confusing for the public. We need the Government to be clearer in that respect.

Involving communities in air quality communications and their development is vital. Whether that is place-based campaigns or campaigns using art, they all have a role to play. We support a range of partners in this area, and the engagement that those partners have achieved shows that communities do care about air pollution when it is positioned in a way that resonates with the experience of their everyday lives, and where it is communicated by the right messengers.

Q58 Jonathan Davies: I would like to tease out some more information, because it is an interesting point, although there are lots of points in what you have raised that we could explore further.

We know that local authorities have a role under the Environment Act 1995, and one of the levers that the public would have is better information, and it is not easy to see what the situation is like in your local area. Sometimes people raise air quality issues with me as an MP, but often it is about the visual amenity of the traffic, or the noise, or the congestion that it has caused, and the air quality issue is somewhat secondary. Perhaps that is the way we can bring all the stakeholders around the table more effectively on this. Is there a dashboard that people can see? I had a little look online, and it predicts the future weather. It does not give you a live readout of what is going on in your area, or am I mistaken about that?

Matt Towner: There are various apps that you can use and other information sources, and Simon Birkett, behind me, is incredibly knowledgeable on them all. We at Impact on Urban Health have worked with Imperial College to develop the AWAIR monitor, which uses the WHO standards and more accurately reflects levels of pollution and how



harmful those are on a given day. We have worked with community researchers to understand how best to introduce those in local areas, to talk with local residents and to engage them on the topic of air pollution. Residents have found those monitors helpful in understanding the challenge that air pollution presents to their health.

Ruth Chambers: I have three brief areas that the Committee may want to think about in this context, building on what Matt said—first, there is quite a sophisticated alert system in London, run by the Mayor of London. It goes into different faculties, schools, GPs and emergency departments and alerts those organisations when air pollution episodes are occurring. They can then cascade the information to their stakeholder communities. Is it possible to replicate that in other parts of the country?

Secondly, the Air Quality Information System, or AQIS, review was published in 2024. I would be interested to hear from the UK Health Security Agency and DEFRA on how those recommendations are going, so perhaps asking for an update from them.

Finally, a Bill going through Parliament at the moment, the English Devolution and Community Empowerment Bill, will place a new health improvement and equality duty on combined authorities, combined county authorities and mayors. Air quality is within scope of that duty. I had a quick look at the Bill this morning, and I could not see that there would be follow-on recommendations or a requirement for guidance, but surely the Government would want to set out clear expectations on how that duty should be applied consistently across England, including in relation to air quality.

Q59 **Jonathan Davies:** I will take that one away. Thank you very much indeed. Ms Lockwood, I have seen some good initiatives locally in my constituency where there have been efforts to reduce the impact of poor air quality. For example, in the village of Duffield, there has been a safer school streets initiative. Sometimes these initiatives are about promoting physical activity or reducing congestion, which is, of course, welcome, and local authorities have been significant drivers of that.

Previously, you talked about local authorities wanting to have more teeth in this enforcement space. We know they have to assess air quality, and if it falls below the standards that are updated periodically, they have to have either an action plan or a clean air zone—I am probably paraphrasing the legislation a little. How much enforcement goes on? If local authorities were to hold the polluters to account, where they can—of course, they cannot always—that would be a significant driver. And if the local authorities are falling short, who holds them to account?

Larissa Lockwood: It is a good question, and I think it would be great to bring in some local authorities to answer those questions. I am not going to be able to answer it from their position, but I can say that making the action as local and relevant as possible is clearly very powerful, as is meeting people where they are. As you say, people are



coming at this from different angles, be it congestion or physical activity. Working with those affected communities on the issues that matter to them is very powerful, and that is what we have seen with campaigns like Clean Air Day. It is a mobilisation approach. You give resources to one area, and they make it local and relevant.

The other bodies that I would encourage you to talk to are potentially the integrated care systems, the regional health level, because they have a responsibility to reduce health inequalities. As we have discussed, this is an equity issue. By reducing air pollution, you can also reduce health inequalities. There is restructuring going on, and it would be interesting to see where air pollution features as part of that.

Q60 Jonathan Davies: My worry is that these integrated care systems are going to be so big that it is very difficult to put your finger on specific hotspots, and they have been very busy dealing with, particularly, hospital care. When they talk about the wider determinants of people's health, it is often smoking and drinking or lack of physical activity.

I would like to ask you one final question. We have these air quality management areas and action plans where local authorities have identified significant risk to people. Can you think of any examples of where they have led to significant enforcement or prosecution, or where anyone has ever been held to account? Or are these just documents that sit on a shelf?

Larissa Lockwood: Not to my knowledge, but that is potentially my limited knowledge. Sarah or somebody might be better placed to respond.

You asked about local information, and that point about making it relevant and how it impacts the population in your local area in Derbyshire. The UK Health Security Agency now has a dashboard that shows air quality levels and the health impact in a local area, so there is information that can be pulled out. As has been pointed out, things like the air quality information system, the DAQI—the daily air quality index—the air pollution forecast, to my mind, are not very effective. I knitted an air pollution scarf. I live in zone 3 in London. I bought 10 balls of wool for the different colours from green through to red, and I thought, "Oh, I will be knitting loads of red". I never once used it. You can see that it is pretty much all green, which shows that, in Zone 3 of London, the air pollution forecast and the daily air quality index were telling me there was no problem.

What we have pushback on quite often, as we saw around the clean air zone, ULEZ, in London, is people sending us images of the forecast saying, "Air pollution is low in London today. We don't need ULEZ. We don't need to do anything. Why should I change my life? Why should I accept any policy change if there isn't a problem?" It is important that the information is presented in the right way, in a meaningful way, that does not scare people. People need to know that they have some agency on



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what they can do, but the information should equally not give the false illusion that there is no problem. That UKHSA dashboard has a lot more detail on the actual local health impact.

- Q61 **Chair:** Mr Towner, you have spoken about the public awareness of these issues, and we are very conscious in this place that, particularly on the issue of ULEZ, if you go back maybe four years, it seemed to be cropping up in various cities and there was a real reaction. Following the Uxbridge by-election, we saw mayoral candidate after mayoral candidate right across the country say, "Don't worry. If I get in, there won't be any ULEZ". Do you think that when it comes to expecting people to pay for these decisions, it is just a case of informing them better? Or do you think it will remain politically unpopular to expect people to pay for measures to improve air quality?

Matt Towner: On clean air zones specifically, I think that national leadership—with the Government coming out unequivocally in support of action, on which local authorities may then follow through—is crucial. If you have that aligned messaging, it helps to build public understanding of why these policies are being introduced. Others, such as the Institute for European Environmental Policy, have looked at the implementation of clean air zones around the world, and they are undoubtedly more popular when they are introduced where there is adequate public transport to fall back on.

It does not just have to be the clean air zone. Manchester is taking a different route and is investing heavily in public transport, and in the future you could see the two going hand in hand. That would be a key point. Action on air pollution does not always need people to end up paying for things. In the wood-burning stove example, they could stop buying wood, and that would cost them nothing. Otherwise, we could be looking to support industry to act differently, and so on. There is the role that landlords need to play in making sure that their homes are—

- Q62 **Chair:** The point I was making is that I think there will be widespread public support for the Government making different decisions. When it requires behaviour change, whether that be cost or other kinds, public support might diminish.

Finally, we raised the point of inequality around air pollution, and it brought to mind a long road in Chesterfield—a major road linking two cities. It is one of those streets where, at one end, you have people in probably £150,000 houses. At the far end of the street, you have people in houses that cost five or six times more. One of the things that occurs to me is that the less you pay for your house, the closer you are to the street. Some people are just a pavement away, you have people a little further down the street who have enough space for a car, and you move a little further up and there is a short drive that is the distance you are away from me. Then you move to the top end of the street, and they may be 40 or 50 yards away. Do we have any assessment of how much of a difference the proximity of the house to the street makes in areas of



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pollution?

Matt Towner: They do exist, and academic colleagues are probably better placed to speak to the exact differentials. We know that proximity to a road makes a big difference, particularly to your exposure to nitrogen dioxide; particulate matter tends to disperse more. Yes, I would follow up with academic colleagues.

Ruth Chambers: In researching for this session, I saw that the *Derbyshire Times* had published an article about the 20 most-polluted streets in Chesterfield. I was researching your constituency, Chair. It told us where those streets are, but that was it. There was no more information. There was me looking at it as an outsider, but even if you lived on those streets, it did not tell you very much about how it would affect you as a resident. As Larissa said, the clarity of information is key.

Chair: That article raised significant issues, and one of the interesting things is that the worst affected were not the streets you would immediately associate with having the greatest traffic numbers. Did you just want to come in, Ms Lockwood?

Larissa Lockwood: On exposure and pavements, I would say that every metre matters. I have seen studies showing that walking just a metre away from the edge of the pavement, the roadside, can reduce exposure by about 30%. Every metre does matter.

Chair: That is a really interesting message to try to get out. Thank you so much to you all: Ruth Chambers, Matt Towner and Larissa Lockwood. We appreciate the evidence you have brought to us and the expertise you have provided, and we bring this session to a close.