

‘Too little, too late’ - a critique of the Air Quality Plan

This briefing provides a summary of key points in the government’s final Air Quality Plan for NO₂ (2017), as well as a critique from Friends of the Earth.

Our analysis of the UK’s [Air Quality Plan](#) for tackling roadside Nitrogen Dioxide (NO₂) concentrations reveals serious shortcomings in the government’s approach.

This is not a plan which will reduce air pollution to within legal limits in the shortest time possible, nor will it reduce exposure as quickly as possible, as required by the High Court. The measures proposed are too little, too late – and this briefing sets out some of Friends of the Earth’s alternative solutions.

The air pollution crisis

- The **UK is in breach of EU legal limits for NO₂** – a toxic gas that inflames the lining of the lungs. These were meant to be met in 2010, or 2015 at the latest, but shockingly [37 of the 43](#) Air Quality Zones still fail to meet EU annual legal limit of 40 micrograms/m³. This is also the current World Health Organisation recommended level, though worryingly they have identified health impacts at [lower levels](#).
- The government’s **2015 Air Quality Plan** for NO₂ air pollution was ruled as **too weak** in a [High Court judgement](#) in November 2016, and it was forced to produce a revised Air Quality Plan.
- Friends of the Earth’s [analysis](#) found the **May 2017 draft Air Quality Plan fell well short of what was required**, and called for strengthening of the final plans. To support this call Friends of the Earth published [Unmasked: the true story of the air you’re breathing](#), a report summarising results of our ground-breaking air quality citizen science experiment. We also mobilised many people across the UK to engage with the plan through a nationwide ‘**Clean Air Everywhere**’ [week of action](#), securing support for Clean Air Zones from MPs as well as numerous consultation submissions.

Why we need urgent action on air

- There are [40,000 early deaths](#) a year in the UK attributable to outdoor air pollution.
- **Air pollution triggers strokes and heart attacks**, worsens cardio-vascular and respiratory diseases including asthma, causes lung cancer, is associated with changes in the brain linked to dementia, can affect growth of the foetus and may be linked to premature birth.
- Air pollution particularly **affects the most vulnerable in society** – the young, whose lungs may never develop properly, and older people, as well as the most disadvantaged in society and Black and ethnic minority communities.
- **NO₂ is a toxic gas** which inflames the lining of the lungs. Fine Particulate Matter (PM) air pollution can also get deep into lungs and even the bloodstream.
- Air pollution is estimated to **cost the UK economy about [£20 billion a year](#)**.
- Tackling harmful air pollution has **co-benefits to tackling climate change emissions**.

Executive Summary

The final Air Quality Plan for NO₂ is clear on the biggest problem regarding the UK's illegal air pollution:

*"...road transport is responsible for some 80% of NO_x concentrations at roadside, with diesel vehicles the largest source in these local areas of greatest concern."*¹

That is why Friends of the Earth and many other organisations are calling for effective Clean Air Zones in our polluted towns and cities. These Zones must protect people from exposure to pollution from all vehicle types, including private cars, and especially diesels given their disproportionate contribution to the problem.

In addition the Air Quality Plan reveals the true state of the UK's air pollution problem has been effectively hidden from the public. The government has in the past used over-optimistic assumptions in its modelling. However, after the High Court ruled that the government must use more realistic assumptions, the Air Quality Plan now reveals a much worse state of affairs for the UK's air.²

In summary, the Government's final Air Quality Plan is not commensurate with the scale of the air pollution crisis and what action is proposed is too little, too late.

- 1.** The headline **ban on new sales of petrol and diesel cars and vans by 2040³ is broadly a step in the right direction, but 23 years away is too long to wait for action.** It is also unambitious: car companies are already announcing plans to end the production of internal combustion engine (ICE) vehicles far sooner than 2040.
- 2.** The **shorter term plans are too weak.** The government accepts that charging Clean Air Zones (CAZs), which require polluting vehicles to pay a charge⁴, are the most effective measure to bring down levels of air pollution.⁵ However the government's Air Quality Plan does not strengthen the existing charging CAZs planned, nor require any new ones.

Friends of the Earth's view is that we need stronger measures on air, for more places, sooner. This route should appeal to policy-makers as government expects actions to significantly benefit some of the most deprived and ethnically diverse groups. (Technical Report, Annex D).

- 3.** There are existing plans for **5 charging CAZs** and separate arrangements for an Ultra Low Emission Zone (ULEZ) in London, but these are **not strong enough^{6 7}**. The Air Quality Plan does not require that these existing measures are strengthened.

Friends of the Earth's view is that these Zones need to be strengthened to include all vehicle types and be in place by the end of 2018.

- 4.** Disappointingly, the **Air Quality Plan does not require any further charging CAZs, but only requires 23 Local Authorities to produce a Local Action Plan (LAP)^{8 9}** which must first consider whether other measures could be as effective as a charging CAZ.¹⁰

Friends of the Earth's view is that properly funded charging CAZs should be required to cover these 23 places, covering all vehicle types, and in place sooner, by the end of 2018. Local authorities should pursue the creation of Clean Air Zones where needed. 23 places is also too few – there are a total of 75 Local Authorities in England which the government says currently have illegal air. That is 82 across the UK, with Devolved Administrations being considered separately (Detailed Plan, para 92 and Annex K).

5. Not enough action is being required for places which currently have illegal air.

Friends of the Earth's view is that more properly-funded charging CAZs must be required now. These should cover all vehicle types, be in place by the end of 2018 and cover places which would otherwise still have illegal air in 2019. This would mean charging CAZs covering a further 24 places in England - beyond the 5 original CAZs and London's ULEZ, and where the 23 LAPs are proposed (see Detailed Plan, Annex K). Local authorities should pursue creation of Clean Air Zones where possible. Devolved Administrations are considered separately.

6. There are some places for which a charging CAZ would not be appropriate as air pollution is set to come within legal limits before they could be in place. Other **urgent action** is required in such places, along the lines described by the government as **non-charging CAZs**.

7. Separate to the legal requirements referred to in the above sections, Local Authorities have [requirements](#) on Objectives for NO₂ which are set at the same level as the legal requirements.

Friends of the Earth's view is that all the 255 Local Authorities with Air Quality Management Areas (AQMA) with problem levels of NO₂ should be considered for a charging CAZ - if appropriate, and if it would bring forward meeting Objectives.

8. There is **no commitment to the introduction of a scrappage scheme in the Air Quality Plan**, instead only proposals for a consultation in autumn 2017 are referred to.¹¹

Friends of the Earth's view is that a diesel scrappage scheme must include car club membership and alternatives to driving, and consider ways to help the most disadvantaged.

9. The Air Quality Plan only refers to **possible changes to taxes on diesel vehicles** in the Autumn Budget 2017.¹²

Friends of the Earth has supported the call for an increase in the Vehicle Excise Duty on registration of new vehicles – it is imperative that diesel vehicles are no longer incentivised over petrol ones, and that people are encouraged to buy the cleanest vehicles.

10. There will be a **wider Air Quality Strategy published in 2018** covering emissions of 5 pollutants.¹³ This must be a robust strategy that commits to, and sets the UK on a path to meeting, **World Health Organisation** targets for air pollution.

In depth: why the Air Quality Plan falls short

The final Air Quality Plan for NO₂ (Air Quality Plan) is clear on the biggest problem regarding the UK's illegal air pollution:

“...road transport is responsible for some 80% of NO_x concentrations at roadside, with diesel vehicles the largest source in these local areas of greatest concern.”¹⁴

NO₂ is one of the toxic pollutants that many people are breathing as they go about their day.

That is why Friends of the Earth and many other organisations are calling for effective Clean Air Zones in our polluted towns and cities. These Zones must protect people from exposure to pollution from all vehicle types, including private cars, and especially diesels given their disproportionate contribution to the problem.

In addition the Air Quality Plan reveals the true state of the UK's air pollution problem has been effectively hidden from the public. The government has in the past used over-optimistic assumptions in its modelling. However, after the High Court ruled that the government must use more realistic assumptions, the Air Quality Plan now reveals a much worse state of affairs for the UK's air.¹⁵

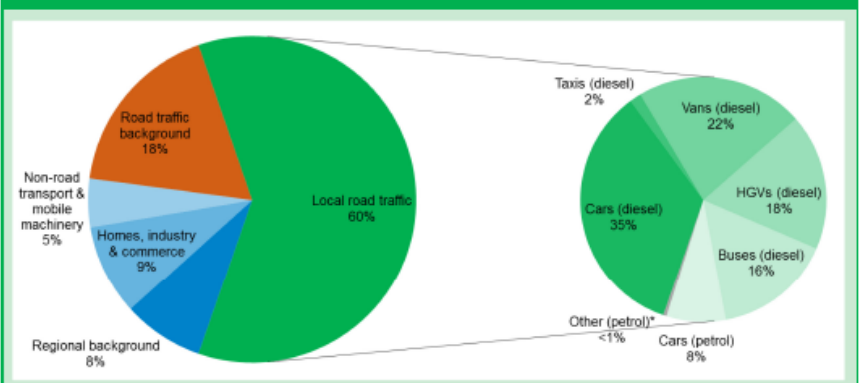
In summary - the Government's final Air Quality Plan is not commensurate with the scale of the air pollution crisis and what action is proposed is too little, too late.

1. The 2040 ban on sale of new diesel and petrol cars and vans – a cynical smokescreen

The 2040 ban on new sales of diesel and petrol cars and vans was the government's headline announcement when the Air Quality Plan was published.¹⁶ Friends of the Earth highlighted the lack of more urgent measures to clean up our country's air in the Plan. Still, the announcement of the ban represents a hardening of the government's previous “intention” to end Internal Combustion Engine (ICE) vehicle sales from 2040 and as such is welcome. However the 2040 date (23 years away) is far too distant.

Other countries are looking at more ambitious dates for ICE phase-out: Norway by 2025, the Netherlands and Germany by 2030. Manufacturers are beginning to move in the right direction too – for example all new [Volvo](#) models will have an electric engine from 2019. The consensus view is that by 2040 there will be vanishingly few ICE sales to be affected by a ban. We need action to protect people's health now.

Figure 1.2: UK national average NO_x roadside concentration apportioned by source of NO_x emissions, 2015



Source: National modelling 2017

Note: 'Local road traffic' in the large pie chart is the estimate of the proportion of local NO_x roadside concentrations contributed by traffic on that road and is shown in greater detail in the smaller pie chart. 'Road traffic background' is the estimate of NO_x concentrations contributed by traffic on other roads.

Note: Figures may sum to more than 100% due to rounding.

Note: HGVs = Heavy Goods Vehicles.

* Other (petrol) is made up of petrol vans and motorcycles.

Figure 1.2 from July 2017 UK Plan for tackling roadside nitrogen dioxide emissions, Technical Report, p10.

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A fully referenced copy of this briefing is available at www.foe.co.uk/clean-air/

2. Plans for immediate action are too weak – with no new charging Clean Air Zones (CAZs) proposed

The government has made clear that charging CAZs are key to tackling illegal air pollution, stating that “a network of Clean Air Zones (CAZs) is the most effective route to compliance for the majority of exceedances”.¹⁷

*“Clean Air Zones are geographic areas used as a focus for action to improve air quality” (which can include measures such as retrofitting technologies, encouraging more use of public transport, walking and cycling etc), and charging CAZs are where in addition “vehicle owners are required to pay a charge to enter, or move within, a zone if they are driving a vehicle that does not meet the particular standard for their vehicle type in that zone”. And Local Authorities “may also consider placing absolute restrictions on the access of certain types of vehicles to the Zone at all, or at specified times”.*¹⁸

However the government’s Air Quality Plan does not strengthen the existing charging CAZs planned, nor require any new ones. Friends of the Earth’s view is that we need stronger measures, for more places, required sooner. See *Table 1* below for a summary of the numbers of Local Authorities which the government modelled as having air pollution over legal limits for NO₂ in 2017, without further measures. *Table 1* shows what level of action the government proposes, compared to what Friends of the Earth proposes.

Furthermore, there is a clear social justice case for action as the government states:

*“... actions aimed at reducing the highest concentrations of NO₂ have the potential to narrow the gap and disproportionately benefit more deprived and ethnically diverse groups by reducing the extent of inequalities.”*¹⁹

3. Existing charging CAZs and arrangements for London need strengthening to deal with polluting cars

There are 5 charging CAZs already being planned as these were required in the government’s 2015 Air Quality Plan. These are in Birmingham, Leeds, Derby, Nottingham and Southampton. However none of these was required to include cars, and only Birmingham and Leeds were required to include LGVs. There are also already separate arrangements planned for London with an Ultra Low Emission Zone (ULEZ), but it is not planned to include cars across the whole of the capital.

The Air Quality Plan has not strengthened the 5 CAZs, and the government does not expect these cities to implement their CAZs until 2020.²⁰ Friends of the Earth’s view is that the 5 CAZs need to be strengthened to include all vehicle types including cars, and to come in by the end of 2018.

The government is not requiring strengthening of London’s ULEZ, and does not expect London to get air within legal limits until 2025²¹, when the Mayor’s newly proposed Zero Emission Zone for Central London is being proposed to come in. Friends of the Earth’s view is that Londoners shouldn’t have to wait longer for legal levels of air pollution than the rest of the UK. The ULEZ needs to be London-wide for all vehicles including cars, and to come in also by the end of 2018.

4. No new charging CAZs required - only 23 Local Action Plans, with barriers for Local Authorities to implementing CAZs

Disappointingly, the Air Quality Plan does not require any more charging CAZs around the country. This represents a step backwards from the draft Plan, which had modelled a further 21 charging CAZs and said that the actual places would be identified in the final Air Quality Plan.

Rather than requiring any further CAZs straight away, the government is requiring just 23 Local Authorities in England to produce a Local Action Plan (LAP).²² These are required in draft by March 2018, with final versions by the end of 2018.²³ LAPs require measures other than a charging CAZ to first be evaluated to see if these could be as effective, before a charging CAZ (and funding) would be allowed.²⁴ With this, the government's timetable does not expect CAZs to be implemented until 2021.²⁵

Friends of the Earth's view is that properly funded charging CAZs must be required to cover these 23 places. This is because LAPs risk being insufficient to deal with the problem and wouldn't bring down pollution levels in the shortest time possible, or reduce exposure as quickly as possible, as is required. All CAZs must cover all vehicle types and to be in place by the end of 2018. Local authorities should pursue the creation of Clean Air Zones where needed.

Only requiring LAPs of 23 Local Authorities is also far too few. There are a total of 75 Local Authorities in England which the Air Quality Plan indicate as having illegal levels of NO₂ air pollution in 2017 (totalling 82 Local Authorities across the UK – see *Table 1* below).²⁶ The Devolved Administrations are considered separately, but there are 4 Local Authorities among them which seem to meet the criteria for the government requiring a LAP.

5. Friends of the Earth calls for more charging CAZs, with all to be in place by the end of 2018

The government is proposing only some more general action to bring down air pollution in the shortest time possible for all the other places with illegal levels of air pollution in 2017. This would be for all those beyond the original 5 CAZ cities and London's ULEZ, or where the 23 LAPs are required – i.e. the rest of the 75 Local Authorities in England with currently illegal levels of air pollution.

Friends of the Earth's view however is that properly funded charging CAZs are required in many more of these places. These CAZs should cover all vehicle types and be in place by the end of 2018, and cover all those places which would otherwise still have illegal air in 2019. This is what the government should have mandated in its Air Quality Plan. Nevertheless, local authorities should pursue the creation of Clean Air Zones where needed.

This would mean charging CAZs in a further 24 Local Authorities in England (beyond the 5 original CAZ cities and London's ULEZ, and where the 23 LAPs are proposed).²⁷ In the Devolved Administrations there are an additional 2 places which would fit these criteria.

In total, this would mean 53 Local Authorities in England where, in Friends of the Earth's view, there should be coverage by properly funded charging CAZs, including all vehicle types, and in place by the end of 2018. This includes the original 5 CAZ cities, plus London's ULEZ, the 23 where the government expects LAPs, and the further 24 where the government is not even requiring an LAP but which would otherwise still have illegal air pollution in 2019. Across the UK, if Devolved Administrations are included, this would see 59 Local Authorities fitting the criteria. See *Table 1 below*.

6. Action for other places with illegal air is also needed

There are some places on the government's list of those Local Authorities which currently have illegal levels of air pollution where it would not be appropriate to require a charging CAZ. This is because their air pollution is predicted to fall within legal levels by the end of 2018. Other urgent action, along the lines

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described by the government as a non-charging CAZ, would be most appropriate for these other 22 places in England. This would be those of the 75 in England with currently illegal air pollution beyond the original 5 CAZ cities and London's ULEZ, and those which should be covered by a charging CAZ in Friends of the Earth's view. Within the Devolved Administrations there is 1 place these criteria would apply to.

7. Consideration of a charging CAZ for places with an Air Quality Management Area (AQMA) for NO₂

Separate from the legal requirements of meeting EU Limit Values, to which the above sections refer, Local Authorities have [requirements](#) regarding Objective Levels for NO₂. These are set at the same level of 40 micrograms/metre³ as the legal Limit Values. Air Quality Management Areas are required to be declared if Objectives would not be attained.

Friends of the Earth's view is that a charging CAZ should be considered for the 255 UK Local Authorities where an [AQMA](#) has been declared for NO₂ (beyond those covered above), if one would be appropriate and if by the end of 2018 it could bring forward meeting Objective levels.

8. Failure to commit to a comprehensive scrappage scheme

The Air Quality Plan has no firm commitment to a scrappage scheme – such a scheme will just be included in an autumn 2017 consultation.²⁸

Friends of the Earth believes a carefully-designed scrappage scheme is essential, particularly to help people out of diesel vehicles, which many will have bought in good faith. Such a scheme must offer not only clean vehicles but should also offer car club membership and alternatives to driving such as rail season tickets and support to buy electric bikes. There should be significant consideration of ways to focus help towards the most disadvantaged. Furthermore, car manufacturers who have played such a part in the illegal NO₂ problem should help pay for such a scheme through a 'diesel-gate levy'.

9. Only potential road tax/VED changes in the Autumn Budget

The Air Quality Plan still only refers to how the appropriate tax treatment for diesel vehicles will be considered in the Autumn Budget 2017.²⁹

Friends of the Earth has supported the call for an increase in the VED on registration of new vehicles. It is imperative that diesel vehicles are no longer incentivised, and that people are encouraged to buy the cleanest vehicles possible.

10. A wider Air Quality Plan is landing in 2018

The Air Quality Plan states that the government will publish a wider Air Quality Strategy in 2018. This will cover the emissions of 5 key pollutants, as required to meet reductions for 2020 and 2030 under the EU's National Emissions Ceiling Directive (NECD).³⁰

Friends of the Earth looks forward to what must be a robust strategy, which must commit to, and set the UK on a path to meeting World Health Organisation targets for air pollution.

Notes and References

Note: This briefing has been produced by Friends of the Earth (England, Wales and Northern Ireland). While it contains some reference to Devolved Administrations, which would include Scotland, please refer to Friends of the Earth Scotland's [active air pollution campaign](#) for their view on what's needed to clean up Scotland's air.

Table 1. Showing numbers for Local Authorities which the government modelled as having air pollution over legal limits for NO₂ in 2017 without further measures – with the different levels of action which the government and Friends of the Earth propose. *Table 1* is based on Annex K of the Detailed AQ Plan.

	England	England	Devolved Administrations	Devolved Administrations	Totals
Local Authority areas	Government action planned	Friends of the Earth recommend	Would fit Government criteria	Would fit Friends of the Earth's criteria	
Existing 5 charging CAZ cities + London's ULEZ	5 + 1	should be strengthened to cover all vehicles			
Government require LAPs	23	should be funded charging CAZs	4		
(Totals fitting government criteria for possible charging CAZs)	(29)		(4)		(33)
Friends of the Earth's view should additionally be covered by funded charging CAZs (would otherwise still have illegal air in 2019)		24		2	
(Totals fitting Friends of the Earth criteria for charging CAZs)		(53)		(6)	(59)
Appropriate for other action / non-charging CAZs	46	22	3	1	
Totals with illegal air in 2017	75	75	7	7	82

Note on Table 1: The 82 total includes Belfast, which is not listed in Annex K but is featured with a map in Annex L.

References for the [Air Quality Plan for NO₂](#)

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- ¹ Road transport/diesel/cars the biggest problem – Detailed Plan, para 19
 - ² More realistic modelling – Technical Report, para 2.1.3
 - ³ 2040 pledge - Detailed Plan, para 6
 - ⁴ CAZ definitions - Detailed Plan, para 104 and 108
 - ⁵ CAZs being most effective - Technical Report, section 1.6, referring to draft Air Quality Plan
 - ⁶ Implementation dates – Detailed Plan, para 111 (and 112)
 - ⁷ London not expected to get legal air until 2025 - Detailed Plan, para 139
 - ⁸ 23 Local Authorities required to produce Local Action Plans – Detailed Plan, para 93
 - ⁹ Dates Local Action Plans required – Detailed Plan, para 111
 - ¹⁰ Requirement to consider alternatives to charging CAZs first – Detailed Plan – para 95 and 96
 - ¹¹ Scrappage scheme – Detailed Plan, para 119
 - ¹² Possible diesel tax changes - Detailed Plan, para 82
 - ¹³ Wider AQ Strategy – Detailed Plan, para 185 (Annex A)
 - ¹⁴ Road transport/diesel/cars the biggest problem – Detailed Plan, para 19
 - ¹⁵ More realistic modelling – Technical Report, para 2.1.3
 - ¹⁶ 2040 pledge - Detailed Plan, para 6
 - ¹⁷ CAZs being most effective - Technical Report, section 1.6, referring to draft Air Quality Plan
 - ¹⁸ CAZ definitions - Detailed Plan, para 104 and 108
 - ¹⁹ Disproportionately benefitting the most disadvantaged - Technical Report, Annex D
 - ²⁰ Implementation dates – Detailed Plan, para 111 (and 112)
 - ²¹ London not expected to get legal air until 2025 - Detailed Plan, para 139
 - ²² 23 Local Authorities required to produce Local Action Plans – Detailed Plan, para 93
 - ²³ Dates Local Action Plans required – Detailed Plan, para 111
 - ²⁴ Requirement to consider alternatives to charging CAZs first – Detailed Plan – para 95 and 96
 - ²⁵ Implementation dates – Detailed Plan, para 111 (and 112)
 - ²⁶ Local Authorities with air pollution modelled to be over EU limits - Detailed Plan, Annex K)
 - ²⁷ 24 further Local Authorities which need coverage by CAZs in Friends of the Earth's view – Detailed Plan, Annex K
 - ²⁸ Scrappage scheme – Detailed Plan, para 119
 - ²⁹ Possible diesel tax changes - Detailed Plan, para 82
 - ³⁰ Wider AQ Strategy – Detailed Plan, para 185 (Annex A)