Clean air BRIEFING

CONSERVATIVE ENVIRONMENT NETWORK

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CEN Councillors: Clean air briefing

1. Why should conservatives care about tackling air pollution:

- Air pollution harms the economy: Through premature deaths, lost economic productivity, and more acute health conditions, estimates show air pollution costs the economy £9-19 billion per year. There are economic benefits from solutions to pollution like public transport connecting residents with employment, given that 77% of jobseekers do not have access to a private vehicle.
- **Tackling pollution is good for local communities:** Less traffic will make communities nicer to live in by making space for features like al-fresco dining in town centres and improving quality of life, especially for the young and the elderly.
- Air pollution is a major health problem: As the largest environmental threat to human health, contributing to an estimated 28,000 to 36,000 deaths per year. In 2018, air pollution cost the NHS an estimated £157 million and by 2035 the UK could have 2.5 million new cases of air pollution related health conditions like heart disease, asthma, lung cancer, and dementia if current trajectories continue.
- Children are at particular risk from air pollution: There are estimates that as many as one in three children in the UK grows up consistently exposed to unsafe levels of air pollution. Children who are driven to school are exposed to double the level of pollution inside the vehicle than those walking on busy streets.
- Measures that tackle air pollution also cut congestion: Idling traffic and congestion are major public concerns. The Department for Transport's forecasts suggest that without intervention national traffic levels would rise by 51%, with the amount of time drivers spend in traffic rising from 7% to 16%. This would roughly equate to the average driver spending an extra nine hours in traffic per year.

Туре	What is it?	Sources (2021) (non exhaustive)
Particulate matter (PM)	PM is a mix of solids and liquids suspended in the air. PM varies in size, PM10 (particulates with a diameter of less than 10 microns, μg/m3) and PM2.5 (particulates with a diameter of less than 2.5 μg/m3). PM10 fell by 79% (143.9 thousand tonnes) and PM2.5 by 85% (83.2 thousand tonnes) between 1970 and 2021. However, between 2010	Industrial processes and combustion and energy industries account for 26% of PM2.5 and 16% of PM10. Domestic combustion accounts for 16% of PM10 and 27% of PM2.5. Road transport accounts for 12% of PM10 and 13% of PM2.5.* A recent study found that agriculture created 38% of the particle pollution in Leicester, 32% in Birmingham, and 25% in London

2. What is air pollution and what are its impacts in the UK?



	and 2020 reductions in PM stagnated and it increased between 2020 and 2021.	in 2019. And around one third (approx. 33%) is blown over from Europe.
Nitrogen oxides (NOx)	NOx are irritant gases, including nitrogen monoxide (NO), which is a colourless gas, and nitrogen dioxide (NO2), which is a reddish brown gas with a pungent, acrid odour. Since 1970, NOx levels have fallen by 77%, to 677,000 tonnes in 2021.	Road transport accounts for 27% of NOx and other forms of transport (aviation, rail, and shipping) account for 14% of NOx. The 74% reduction in NOx emissions between 2005 and 2021 was mainly due to the closure of coal-fired power stations.
Sulphur Dioxide (SO2)	SO2 is a colourless gas that has a pungent, suffocating smell. It is produced by burning sulphur-containing fuels such as coal and oil. SO2 emissions have fallen by 74% between 2012 and 2021.	Combustion in manufacturing and construction industries accounts for 30%. Domestic combustion accounts for 25%. Combustion in energy production and transformation accounts for 24%.

3. What are local councils' existing duties and powers?

- Local air quality management (LAQM): Local authorities are required to assess air pollution in their area, find out where it breaches national requirements, and implement air quality management areas (AQMA). The local authority then has to produce a local air quality action plan (AQAP) to bring down the air pollution from sources such as buildings, transport, and waste management.
- Low emission zone (LEZ) or clean air zone (CAZ): Enforced using automatic number plate recognition cameras, these zones require vehicles to meet a minimum emissions standard for NOx or pay a daily charge. Under the NO2 plan, some local authorities have been instructed by Defra to introduce a charging CAZ when NOx breaches the legal limit. The NO2 plan acknowledges that there are significant impacts on residents and businesses from these charges, and suggests that if a local authority can identify a measure that will deliver compliance as quickly as effectively it should be preferred.
- Smoke control areas: Local authorities can designate areas where residents and businesses must not buy or sell an unauthorised fuel unless it is for an exempt appliance or emits less than 3g of smoke per hour. The Environment Act banned smoky coal and restricted the sale of wet wood. And to provide more consistency for consumers, Defra's Environmental Improvement Plan proposed to match indoor burning restrictions to outdoor solid fuels.
- 4. What is the national policy picture?
- Environment Act 2021: The act includes two binding targets to improve air quality:



- 1. Reduce the annual average level of PM2.5 to 10 μg/m3 across England by 2040. In 2022 the average level of PM2.5 in the UK was 18μg/m3.
- 2. Reduce population exposure to PM2.5 by 35% by 2040 (compared to 2018).
 - The Act also includes measures to allow local authorities to issue fines between £175 and £300 for breaches in a smoke control zone. It also makes breaching the smoke control zone a civil offence so local authorities can easily issue the fines.
- Environmental Improvement Plan (EIP) 2023: In 2018 the government published the 25-Year Environment Plan. After the Environment Act became law, the government committed to refreshing the plan every five years with the EIP. The EIP sets out how the government intends to support local authorities with guidance, funding, and tools to help reach its clean air targets. On air quality the EIP commits to:
 - $\circ~$ An interim target of 12µg/m3 of PM2.5 by 2028 to the 10µg/m3 of PM2.5 by 2040 target enshrined in the Environment Act.
 - Strengthened smoke control legislation by reducing maximum smoke limits on new stoves installed in smoke controlled zones.
 - Re-aligning regional air quality zones with local government boundaries.
- Clean Air Strategy 2019: The strategy sets out the cross government and society actions required to improve air quality. It includes:
 - A goal to halve the number of people living in locations exposed to fine particulate matter above 10µg/m3.
 - The creation of the UK Air Information Resource national monitoring site (UK-Air) that collates the Environment Agency's monitoring sites.
 - Domestic burning guidance to share with local authorities to increase compliance in smoke controlled areas.
- Gear Change, 2020: The report set out £2 billion in new funding for local authorities to improve walking and cycling provision in towns and cities.
 - In the strategy, the government pledged to:
 - Create financial support for purchasing e-bikes.
 - Provide more cycling racks, mandatory bike registration and proficiency courses.
 - Give guidance to GPs to provide bikes and prescriptions for cycling.
 - Since the strategy publication, the government has implemented:
 - End funding for cosmetic road changes (e.g. path paintings to create cycle lanes) in favour of better active travel infrastructure (implemented).
 - Strengthen the highway code. This includes a 'hierarchy of road users' that prioritises those most at risk on our roads (pedestrians, cyclists, horse riders, motorcyclists, cars and taxis, vans and minibuses, then HGVs) so those who



can do the greatest harm have the greatest responsibility to reduce danger to others.

For more information on walking and cycling, please see our Active travel briefing.

- **Bus Strategy 2021:** The strategy sets out a plan to create cheaper, more reliable, frequent and safe bus networks across the country. Policies include:
 - Creating simple routes with high frequency trunk services that are the same in the evening and weekends as they are in the daytime;
 - Requiring all services to offer multi-operator tickets, use the same route number and show each others' timetables;
 - Making railway stations hubs for connecting services, with bus stops close by;
 - Expanding park and ride schemes and including bike space in rural services.

For more information on buses, please see our Bus briefing.

- **Transport Decarbonisation Plan 2021:** The plan looks to cut congestion, noise and air pollution whilst reducing our emissions from transport. Policies in the plan included a Zero Emission Vehicle mandate, to accelerate the transition away from petrol and diesel cars and require car companies to sell a rising number of zero-emission vehicles.
- Air quality grant scheme: Local authorities are allocated funding to implement measures that improve air quality to benefit schools, business, and communities such as low emission transport and education programmes for healthcare professionals. Projects funded include schemes to boost e-bikes, support for anti-idling and education campaigns, and cutting domestic burning. The government is keen to support local authorities with this funding to find air quality solutions that suit their individual communities. Between 2022 and 2023, Defra awarded £10.7 million of funding to 44 projects.
- 5. What more can be done to tackle air pollution and what action have Conservative councils taken?
- Domestic burning:
 - 'Safer' burning alternatives: With four million UK households not connected to the main gas grid (approx. 15%), Defra's 'Ready to Burn' guidance gives tips to help people produce as little pollution as possible.
 - **Publicise non-authorised fuels at the point of sale:** CEN alumnus Robert Lagan convinced local retailers not to sell disposable BBQs near the High Peak peatlands to avoid wildfires. Councils can lead similar campaigns with non-authorised fuels in smoke controlled areas and flag where it is an offence to burn a type of fuel at the point of sale.
 - Energy efficiency case study:



Wiltshire Council, Housing Energy Efficiency Programme: Wiltshire Council has installed insulation, window and door upgrades, heat pumps, and roof-mounted solar panels on some of its social housing stock. As of April 2022, 90 properties across Wiltshire have had energy efficiency measures installed. The scheme focused on homes off the gas grid and those with low energy performance to reduce reliance on heating like domestic burning. You can read more here.

• Active travel:

- **Walking and cycling strategies:** A new and updated walking and cycling strategy is an opportunity to transform, protect and improve a local community. Good examples include: Kent Council, Suffolk Council, the West Midlands Combined Authority and Adur & Worthing Council.
- **School streets:** Encouraging pupils and parents to walk, cycle or scoot to school will support them to incorporate exercise into their daily routine. Kensington and Chelsea Council has introduced school streets throughout the borough.
- **Pre-consultation with residents on active travel infrastructure:** Engaging with local residents in the design process of altering road layouts can show that active travel is a useful intervention rather than an imposition to reach an abstract environmental target. It can help to improve resident engagement with the larger consultation after the design process.
- **Bike storage and security:** Installing secure bike storage in the local area, particularly around transport hubs (e.g. bus shelters and train stations) and flats, will help more residents choose an active commute. Councils can work with local police forces, which have access to the national cycle database, to set up and promote bike marking to help reduce thefts.
- Active travel case study:
 - Essex County Council, sustainable school travel design guide: The council wanted to improve road safety and tackle air pollution outside schools and encourage children and teenagers to adopt walking and cycling as part of their daily lives. This led to a consultation to create a set of principles for new schools to have active travel access. The design guide includes transport zones formed of concentric circles around the school that have a hierarchy of modes. You can read more here.

• Public transport:

• **Park and ride services:** Park and ride services can reduce congestion on roads leading to and within city centres, and are well placed for EV charging points.



- **Local bus companies:** Enhanced partnerships, where a local transport authority takes over registering a bus service to allow multi-operator ticketing or synchronised timetabling, can improve services.
- **Planning policy to increase bus use:** Councils with influence over local spatial planning can set requirements for new developments, including proximity to reliable public transport options to limit congestion.
- **On-demand transport services in rural areas:** Passengers are able to book journeys in advance using an app which matches with passengers travelling in a similar direction, using small minibuses. It introduces a workable public transport network to rural areas, such as Tees Valley's 'Tees Flex' as an on-demand bus service.
- Public transport case study:
 - Case study Tees Valley Combined Authority, Tees Flex Bus Service: Tees Flex is an on-demand bus service that looks to serve residents in the Tees Valley who live in rural areas not well served by current bus routes. It aims to strike a balance between overrunning on mileage and serving as many people as possible with a convenient service. You can read more here.
- Private cars and taxis:
 - \circ Local charging infrastructure to encourage electric vehicle (EV) usage: The Electric Vehicle Infrastructure Strategy announced that local authorities will have to develop and implement local charging strategies, subject to a consultation. This will be delivered through the £500 million local infrastructure support programme and the new £10 million pilot to fund local projects that increase the number of charge-points.
 - Working with the private sector: Other measures to improve uptake include putting contracts out for tender to attract investment, engaging with local enterprise partnerships, and streamlining the planning process for small-scale installations.
 - **Installing safe EV charging infrastructure:** CEN MP Stephen Hammond has been leading a campaign to allow councils to change local byelaws so residents can safely run EV cables across pavements via cable gullies, as utility companies do, to eliminate pavement clutter and make charging easy and convenient.
 - **Taxi licensing:** The ZEMO Partnership has produced a low emission taxi guide. The Department for Transport held a consultation (closed March 2022) on support for transitioning to a cleaner fleet, retrofitting older vehicles, fuel recommendations and vehicle age limits.
 - Electric vehicle case study:



• Essex County Council, UK's first electric vehicle forecourt: Essex County Council put out a contract for tender to supply 36 electric vehicle charging bays, a multi megawatt on-site battery storage and solar PV canopy. The chargers can deliver up to 350kW charging power and can give users up to 200 miles range in 20 minutes. The forecourt is powered by the solar power canopies above the chargers, and a network of hybrid solar farms operated by the project partner GRIDSERVE. This means that the forecourt runs on 100% renewable energy. You can read more here.

• Buildings and construction:

- **Code of construction practice (CoCP):** Councils can also make compliance with a code of standards a prerequisite of planning permission like the formerly Conservative-controlled Westminster Council. The Westminster CoCP includes site management measures to reduce local people's exposure to dust, emissions standards for construction vehicles, and traffic plans to minimise congestion.
- Air quality task group case study:
 - Westminster City Council (Conservative until May 2022), Air Quality Task Group Report: The report makes a number of recommendations to reduce pollution from the borough's building stock as it found that, without any intervention, emissions would continue on the same trajectory. These create best practice guidelines for retrofitting listed and heritage buildings; working to encourage businesses to not install and rely on diesel generators, and requiring vehicles involved in construction to be as clean as possible.

If you would like to read about more Conservative councils successfully reducing air pollution in their community, use this link to look at our case study map.

6. Useful organisations and resources

- Living Streets
- Create Streets
- Mums for Lungs
- Asthma and Lung UK
- Clean Air Parents' Network
- Campaign for Better Transport
- UK Health Alliance on Climate Change

- UK100
- British Heart Foundation
- Local Government Association
- Chief Medical Officer
- Clean Air Fund
- Impact on Urban Health
- Grantham Institute
- ZEMO Partnership

• Sustrans

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