The London mayor's views on sustainability

Every year, thousands of Londoners lose their lives prematurely because of our city's filthy air. Toxic air hampers children's lung development and is linked to health problems such as cancer, dementia and heart disease.

Health professionals know this better than anyone because they see the consequences of our filthy air first hand in many of their patients. I am one of those patients myself, having been diagnosed with asthma only a few years ago.

Analysis from King's College found that most of London's NHS facilities, including hospitals and GP surgeries, are in areas where air pollution is well above legal limits. This harms patients and health workers alike.

I refuse to stand idly by while Londoners' health is threatened in this way. I have made air quality one of my top priorities, implementing the most ambitious clean-air strategy of any city in the world. My package of hard-hitting measures includes a new T-charge to deter the dirtiest vehicles from central London, an expansion of the Ultra-Low Emission Zone, and £800 million to tackle air pollution — nearly doubling previous budgets.

Right now, I'm prioritising the most-polluted areas with Low-Emission Bus Zones. Electric buses are being rolled out and all 9,000 London buses will be running at a clean standard by 2020, with a full, zero-emission bus network by 2037. We are also requiring new taxis to be zero-emission capable, and delivering electric vehicle charge points across London. In the longer run, I'm aiming for a wholly zero-emission transport system by 2050. My new alerts system means that when air pollution is set to get particularly bad, alerts are sent out online and displayed at locations across the city, including at thousands of bus stops and all Tube stations. This enables Londoners to take action to protect themselves. We're also working with air quality specialists to ensure that care homes, schools and GP surgeries get more detailed information too.

In the NHS, I'm working with the NHS Confederation to clean up ambulance emissions, move hospitals' backup diesel generators to batteries, and we're looking at using the 1,000 acres of NHS land in London to generate solar power. Many of these policies also have the effect of lowering our carbon emissions, reducing London's climate change impact and helping reach our goal of a zero-carbon city by 2050.

But I can't fix this by myself. The government still hasn't grasped how serious the problem is. The assumption seems to be that because this toxic killer is invisible, they don't have to deal with it.

Take the government's flagship air quality policy, the Clean Air Fund. Despite the capital being home to 40% of the dirtiest roads in the UK, ministers have deliberately excluded London from the fund. They have refused to implement a national diesel scrappage scheme for the dirtiest vehicles. A genuinely ambitious government would do this, and deliver a Clean Air Act for the 21st century. Ministers could also grant London real powers to reduce air pollution from other sources, such as building sites, river traffic, and domestic stoves and boilers.

But even City Hall and Westminster working together won't be enough. We know that really cleaning up our air will require a collective effort from all Londoners, including healthcare professionals. Many working on the frontline of the NHS will be based at hospitals and clinics in central locations. They can play their part by switching to public transport or starting to cycle or walk in to work. And advice to patients can reduce air pollution too. We know that health professionals are rightly some of the most trusted people in the UK. Where appropriate, they can recommend patients cycle and walk more. If every Londoner walked or cycled for 20 minutes a day, it's estimated that it would save the NHS £1.7 billion in treatment costs over the next 25 years — without even counting the improved air quality.

We've seen how well action at this level can work. Great Ormond Street Hospital took the lead, and ran a successful campaign to lower local pollution. Ambulances no longer idle while waiting outside, and the hospital has shifted to ordering hybrid and electric cabs instead of diesel.

Air quality is one of the biggest problems facing London and cities across the world. Along with climate change, it can seem daunting to fix. The problems are deeply embedded and solutions are indeed complex.

But these issues are not impossible to solve – we can do something about them, with collective ambition and action from governments, health professionals and everyone across the country.

Sadiq Khan Mayor of London