

# How could the air quality across Sheffield be improved – and why?

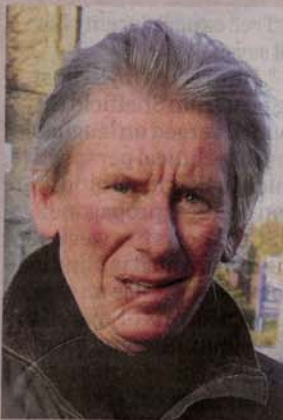
## 'Pollution has been far too low a priority'

### NEIL PARRY, EAST END QUALITY OF LIFE INITIATIVE

Poor air quality is linked to cardiovascular disease, heart attacks, strokes, cancer, respiratory diseases, dementia and neurological degeneration, low birth weight, reduced fertility and diabetes.

MPs think this is a public health emergency. Here in Sheffield air pollution is a big problem around busy roads and the motorway. The economic costs are over £540 million a year. According to the Health and Well-being Board the number of premature deaths due to air pollution has moved from the previously quoted figure of 500 to between 600 and 800 per year. Air quality has been a low priority for the city. Sorting out air pollution has wrongly been seen as anti-business by leading politicians.

Sheffield needs a Clean



Neil Parry

Air Zone now. The council has been sitting on a feasibility study for the last three years.

This would have involved, among other things, minimum emission standards for buses, taxis, light vans, encouraging 10 per cent of car users to switch from diesel to petrol cars.

The local M1 speed limit should be 60mph until pol-

lution is down to safer levels.

The car industry should be required to recall vehicles on the road that exceed the official emission test and upgrade them.

Children are the ones who are most vulnerable to the health effects of air pollution. Worryingly, recent studies drive home the extent to which their lung health is genuinely in danger. Parents should protect their infants from air pollution by using covers on prams going to and from school, playgrounds should be protected with green screens.

Schools could also consider what are the safest routes for walking to school and advise parents. Walking to school is best, the air inside a car is worse than that surrounding it. Banning parking near schools at school run times may also be worth considering.

## 'Fossil fuels are at the centre of a real crisis'

### JOAN MILLER, SECRETARY, SHEFFIELD CLIMATE ALLIANCE

Can we look fossils fuels' impact in the eye? Yes, it's fossil fuels that cause our urban air pollution problems, air pollution that is killing 500 people a year in Sheffield.

We have known about this for at least 10 years and we have a 2012 Air Quality Action Plan. Five years later, the plan has not been implemented. So what are the barriers that stopped the intended action and the possible solutions? I'm going to look at this through the lens of climate-smart, low-carbon cities.

Cities design the future and they are currently at the forefront of global leadership on climate change action. At the C40 mayors' summit in Mexico last year, Paris, Madrid, Athens and Mexico City pledged to ban diesel vehicles from the city by 2025. There is also a Global Covenant of Mayors for



Joan Miller

Climate and Energy covering 7,400 cities, and nearly 10 per cent of the global population, but is Sheffield a member?

Clean air is an early win for climate-friendly cities, starting with affordable high-quality public transport, with safe and pleasant active transport routes forming part of the design, alongside a planned transition to non-fossil fuel vehicles. Other early wins are

insulated homes for all and locally-generated clean energy, programmes which, done to scale and community-owned, create many local jobs and mean that heating is more affordable and fuel poverty can be eliminated.

For the last two years the World Economic Forum has said climate change is the greatest risk to global economy but Sheffield universities have produced a report called A Better Future Together – a 25-year prospectus for Sheffield City Region that does not mention climate change, or a major home insulation programme, adaptation to flooding, air pollution or the value of the low-carbon economy.

Fossil fuels are at the centre of an existential crisis.

Sheffield has some good intentions – but surely our sustainability plan must tie in with our 25-year prospectus.

So let's get serious.

SHEFFIELD TELEGRAM 20<sup>TH</sup> APRIL 2017  
TELEGRAM VOICES  
HOW COULD THE AIR QUALITY ACROSS SHEFFIELD  
BE IMPROVED — AND WHY? CONTD.

## 'Let's devise a strong plan and seek Government funding'

**PETER SEPHTON,  
CHAIR, SHEFFIELD CITY  
CENTRE RESIDENTS ACTION  
GROUP**

SCCRAG represents people living in the city centre, so air quality is a priority. My three-year-old granddaughter suffers breathing problems and when Sheffield's air pollution is bad, her attacks are frightening.

A recent investigation by the Guardian revealed hundreds of thousands of children exposed to illegal levels of diesel pollution near schools and nurseries. Admissions to hospital rise on high-pollution days. Premature deaths in the elderly and the sick increase due to diseases of the respiratory and cardiovascular systems.

Latterly diesel engines were encouraged as cleaner



Peter Sephton

than petrol, but both types of engines emit particulates and harmful gases. Particulates get into our bodies, lungs, bloodstream and from recent studies, probably have

relevance to cancer and dementia. Within urban areas, the pollutant contributions from road transport are particularly high and in London can reach 80 per cent. Sheffield has blackspots where pollutant levels have hardly changed over 10 years.

We all need to do something and the first challenge is public information. Where are the places we should try not to drive? How clean is the air around each school? Can we display local pollution levels, like a roadside monitor? London sets the pace — its 2020 Ultra Low Emission Zone is a central area within which all vehicles will meet strict standards or pay a daily charge to travel.

How can Sheffield encourage changes? How do we reduce emissions from cars,

taxis, buses and trucks?

Stagecoach introduced some hybrid buses. What progress on pressing others to go all-hybrid? Let's offer free parking for electric cars, encourage charging stations and fix a maximum parking rate of £1 for hybrids.

Work with operators, suppliers and car distributors to agree deals. Sadly Sheffield's recent Go Low Ultra Cities Scheme bid for £10 million failed because it 'lacked ambition on delivery'. Ten cities received a share of £14m to fund electric taxi charging points. West Yorkshire got £2 million but frustratingly Sheffield did not even submit a bid. Our city once led in cleaning the air. Let's devise a strong plan, seek government funds and make ourselves much healthier.

## 'Plants would be destroyed

**DR MARIA VAL MARTIN,  
LECTURER IN ENVIRONMENTAL  
PROTECTION,  
SHEFFIELD UNIVERSITY**

The air we breathe in Sheffield is not sufficiently clean. Sheffield is one of the five cities in the UK that do not meet the air quality standards for NO<sub>2</sub> and particles established by the European Union and the World Health Organisation to protect public health.

But NO<sub>2</sub> and particles are not the only problem: ozone is a gas produced at the ground by the reaction of nitrogen oxides and hydrocarbons emitted from car exhausts, in the presence of sunlight.

High levels of ozone are known to cause respiratory and cardiovascular problems, as well as damaging plants.

As a part of a White Rose



Maria Val Martin

collaborative project between the Universities of Sheffield, Leeds and York, we established the first Air Pollution Garden in the UK at Sheffield's Botanical Gardens — that is, an educational garden that contains plants sensitive to air pollution, and in particular, ozone.

In summer 2016, Sheffield experienced several hot and sunny days.

A DEFRA monitoring station located by the city centre, about a mile away from the garden, registered ozone levels above 100 µg/m<sup>3</sup>, large enough to destroy leaf tissues of the plants there.

The study demonstrated that air quality in Sheffield needs to be improved.

There are several things that can be done, both at the council and individual levels.

For example, the city council should seriously consider mitigation strategies such as creating low-emission zones, limiting the use of diesel vehicles, and providing incentives for public transit use.

As residents, we should drive less, choose cleaner cars such as hybrid or electric and share car rides.

by levels of gas'