

Item 3.2

Breathable Sydney

File No: S051491

Minute by the Lord Mayor

To Council:

The World Health Organisation considers air pollution to be the single largest environmental danger to public health globally, accounting for an estimated 4.2 million deaths per year due to stroke, heart disease, lung cancer and chronic respiratory diseases.

It is an increasingly important issue for cities, as the major source of human-induced air pollution is combustion of fuels in vehicles. Nitrogen and sulfur based pollutants, and atmospheric particulate matter (PM) are of particular concern to human health.

The Australian Institute of Health and Welfare has estimated that about 3,000 deaths are attributable to urban air pollution in Australia each year, and that the health costs from mortality alone are estimated to be in the order of \$11 to 24 billion per year.

A study by Asthma Australia showed that air pollution from motor vehicles kills over 1,700 Australians per year - around 650 of those deaths occur in NSW. This study indicates that the annual health costs of air pollution from vehicles is estimated to be \$3 billion in the Sydney-Newcastle-Wollongong region.

A 2017 study conducted by the Clean Air and Urban Landscapes Hub in Sydney revealed that the average roadside concentration of PM2.5 was double that prescribed as 'acceptable' under the existing air quality standards set by the National Environmental Protection Measures (NEPM). And in October 2018, Greenpeace released their analysis of European Space Agency satellite data, which showed that Sydney is a global hotspot for nitrogen dioxide.

Reducing the impacts of air pollution on our community's health is one of the principle reasons why the City has boldly moved forward with projects that improve air quality - such as active transport, urban greening and advocating for public transport - even when it requires the sometimes unpopular step of removing parking.

It is also why, for the past two years, we have been trying to get the NSW Government to find a suitable locations for air monitoring equipment in the CBD.

The NSW Government, as the primary agency responsible for monitoring and regulating air quality, is not meeting its obligation under the National Environment Protection (Ambient Air Quality) Measure of installing performance monitoring stations at population centres.

In June 2017, then Minister for the Environment Gabrielle Upton announced: "Air quality monitoring will be reinstated in Sydney's and Parramatta's CBDs. It will also be investigated for Penrith and for Sydney's busiest roads. In addition, a long term roadside monitor will be installed in Sydney's CBD by the end of this year".

Yet there is still no measurement of the air quality in our local government area. The small number of monitors closest to the city are located in parks and don't reveal the extent of the problem where it truly matters – in our city's streets, neighbourhoods and the CBD where people live, work and commute.

After extensive negotiations between the City and NSW Government, there is no agreement on a location, or a timeline for deployment. A number of sites within the city have been considered and assessed, with most being rejected by NSW Government agencies as unsuitable or rejected with consent not being given.

We cannot wait any longer for the NSW Government to act.

When I was in London in February, Mayor Khan organised an inspection of the network of air quality monitors, known as the Breathe London network, which is celebrated as the most advanced and comprehensive network of monitors in the world.

They use a range of cutting-edge fixed and mobile sensors to build up a real-time, hyperlocal image of London's air quality, providing an unprecedented level of detail about London's air quality, which delivers insights into the sources of pollution.

They have 100 state-of-the-art fixed sensor pods mounted on lampposts and buildings close to known air quality hotspots and sensitive locations, such as schools and nurseries, as well as sensors mounted on cars that take pollution readings approximately every 30 metres at tens of thousands of locations whilst they travel through London's streets. The data generated by this network is available for the public to view on an interactive online map.

The time has come for a Breathable Sydney network, similar to Breathe London. As elected representatives, we have a duty to our community to make sure the quality of the air we are all breathing every day is safe and acceptable. We can't fulfil this if we can't measure it.

Air quality monitoring will provide invaluable data to our planners. It will provide a reliable baseline with which to measure the negative health impacts of major road projects so that we can better quantify their true cost to our community. It also provides the basis to measure the positive impact of new cycleways, urban greening, electric buses, and the impact of the light rail.

Over the coming months, the City, in partnership with UTS and supported by the Australian Government, will deliver a network of sensors as part of the TULIP project. The TULIP network will consist of 9 UTS-developed Environmental Monitoring System Instruments which will measure temperature, humidity, air quality (PM, CO, NO2, O3) and noise.

Each device will deliver data every 15 minutes, via a Long Range Wide Area Network to a fully integrated, publicly accessible data platform that will display the data in a way that is useful to the community.

Through this project, we can gain a much clearer understanding of the costs involved in setting up an air quality monitoring network. Recent technological developments have brought the price and size of reliable air quality monitors down.

The NSW Government needs to fulfil its commitments and I am asking for Council's support to continue our advocacy. But we also need to be prepared to act ourselves, so I am also asking Council to support the City staff exploring and reporting back on how the city can implement an integrated, publicly accessible air quality monitoring network.

Recommendation

It is resolved that:

- (A) Council note:
 - (i) the significant health impacts of air pollution on our communities;
 - (ii) the lack of roadside air quality data in the City of Sydney and surrounding suburbs;
 - (iii) the extensive advocacy and negotiations undertaken by the City to get the NSW Government to install air quality monitors in the local government area; and
 - (iv) the benefits that this data would bring to the City for planning and evaluating city projects;
- (B) the Lord Mayor seek an urgent meeting with the Minister for Energy and the Environment to advocate for the immediate installation of air quality monitors in the City of Sydney;
- (C) the Chief Executive Officer be requested to seek an urgent meeting with the Secretary of the NSW Office of Environment and Heritage to advocate for the immediate installation of air quality monitors in the City of Sydney; and
- (D) the Chief Executive Officer be requested to develop a report on the options (including staffing and equipment costs) associated with implementing an integrated, publicly accessible 'Breathable Sydney' air quality monitoring network, that displays data in an intuitive way and which has enough sensors to enable the City to:
 - (i) monitor high traffic areas in all of the City's villages;
 - (ii) have a number of portable units, so that the City can respond to community concern about air pollution sources in an ongoing way; and
 - (iii) monitor city assets that cater to vulnerable members of the community, such as child care centres.

COUNCILLOR CLOVER MOORE

Lord Mayor