

Dr Mehreen Faruqi
Greens Member of the NSW Legislative Council



EPA Air Policy
PO Box A290
Sydney South, NSW 1232

19/01/2017

Dear Madam/Sir

Re: Greens NSW Submission to 'Clean Air for NSW Consultation Paper'

Thank you for the opportunity to make a submission to the 'Clean Air for NSW Consultation Paper', which I make in my capacity as Greens NSW Spokesperson for the Environment.

The Greens NSW believe that access to clean air is a fundamental universal right for all people. Unfortunately, many people in NSW are denied that right because of pollution, including from coal mining, coal-fired power plants, wood smoke and motor vehicle pollution. This is further compounded by lax laws that don't appropriately punish polluters and inadequate standards that continue to permit harmful substances that impact on human health to be discharged. There should also be recognition that poor air quality has an impact not only on human health, but animal health as well, including native, domestic and agricultural animals.

Whilst the Greens NSW welcome the sentiment of the Clean Air for NSW Consultation Paper to improve air quality, it does not contain any targets or any enforceable standards or rules. Furthermore, the discussion paper is overly focused on reducing emissions at the 'end of the pipe' as opposed to 'source control' which would eliminate major sources of air pollution, for example, residential wood smoke heaters and coal-fired power plants. It is also important to consider projects based on a life-cycle assessment approach in order to calculate environmental impacts such as air pollution, throughout the entire life cycle including upsteam and downstream effects.

I urge the Clean Air Review to ensure that its aspirations are matched with concrete action and legislative changes to ensure that the EPA can achieve better air quality in NSW.

The Clean Air for NSW Consultation Paper states that "NSW cannot afford to wait on national action or market developments to support clean air". This is a strong statement, but it requires commitment and action from the NSW Government. It is important to note that NSW was the lead State in developing standards for particulate matter (PM2.5 and PM10) under the National Clean Air Agreement which was finalised in December 2015, but failed to advocate for strong standards to protect human health. The standard that was eventually adopted was below World Health Organisation recommendations and other States, such as Victoria, adopted more stringent standards unilaterally. It is our hope that this process is more successful in achieving real improvements in air quality.

Below are specific comments on the discussion paper for your consideration.

Pollution from Energy Production

The discussion paper canvasses that the EPA will manage a one-year research project focused on options for reducing emissions and will produce recommendations whilst Coal Innovation NSW (which is half funded by

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the Australian Coal Association Low Emission Technologies Ltd., a part of the coal industry group - Australian Coal Association) will produce a technical study on Greenhouse Gas Emissions which will be presented in late 2016 to the Coal Innovation NSW Ministerial Advisory Council.

Pollution from electricity production, primarily coal fired power stations forms a very substantial part of air pollution in NSW. As noted in the discussion paper, it is the third biggest producer of PM10 and by far the largest producer of both nitrogen oxides and sulfur dioxide. These pollutants cause reduced lung function and are linked to increased hospitalisation rates and increased mortality.

Strong and urgent action is essential for a transition out of fossil fuels to clean renewable energy to not only address climate change, which will worsen air quality outcomes, but also to remove a significant source of air pollutants in its own right. Aspiring to simply minimise emissions from coal-fired power stations is not enough, especially when a transition to one hundred percent renewable energy is possible. So called 'clean coal' technologies and systems are unproven, energy intensive, environmentally risky, and inferior to a transition to renewable energy.

The NSW Government must phase out existing coal and gasfired power plants, starting with the most carbon pollution intensive, while helping workers transition away from jobs in the fossil fuel sector with appropriate support, training and funding.

Covering Coal Wagons

The discussion paper canvasses activities to "increase dust capture from coal mining and transport activities" as well as an action to "consider and act on the findings of studies undertaken by the NSW Chief Scientist and Engineer of coal dust emissions in the NSW coal chain".

The Chief Scientist's Report on the Independent Review of Rail Coal Dust Emissions Management Practices in the NSW Coal Chain (August 2016) was a year-long study that concludes that there should be further studies. Meanwhile people's health is being put at risk. The health effects of PM10 are well documented, including increased lower respiratory symptoms and reduced lung function. We should be adopting the precautionary principle of protecting people from coal dust by requiring coal wagons to be covered.

Given that there is a feasible pathway to renewable energy production the NSW government should not approve new coal mines or the expansion of existing coal mines and should be planning to phase out existing coal mines and coal export, while ensuring that existing mine workers have access to retraining and high quality jobs in the emerging sustainable economy.

Hazard Reduction Burning

Whilst recognising the need for hazard reduction burning in certain situations, it is undeniably a major cause of air pollution. For example, a study in the Medical Journal of Australia¹ found that hazard reduction burning in May 2016 contributed to the deaths of at least 13 people and the hospitalisation of dozens more.

There needs to be more focus on hazard reduction burning when necessary and using alternative methods of hazard reduction, such as manual and machine clearing, as well as greater investment in and timely planning of hazard reduction burning to minimise health and environmental impacts.

¹ https://www.mja.com.au/system/files/issues/205_09/10.5694mja16.00895.pdf

Importantly, climate change is expected to increase the number of days with very high and extreme fire weather and bushfire severity and intensity is expected to increase substantially in coming decades because of this. The six key findings of the 2014 report of the Climate Council of Australia entitled “Be prepared: Climate change and the NSW bush fire threat” clearly point to the increase in extreme fire weather, dry conditions and an increased frequency and severity of bushfires because of climate change. Hot, dry conditions have a major influence on bushfires. Climate change is making hot days hotter, and heatwaves longer and more frequent, with increasing drought conditions in Australia’s south-east. These conditions are driving up the likelihood of very high fire danger weather in the State.

It is crucial that the NSW Government commits to strong targets for cutting greenhouse gas emissions; and work with States and through the Council of Australian Governments (COAG) to ensure that Australia cuts emissions deeply to reduce the risk of even more extreme events, including bushfires. Related to this is the issue of burning of debris by the Forestry Corporation of NSW following the harvesting of wood. This is a deeply damaging and completely unnecessary process that should be banned. For example, out of control windrow burning at the Tarkeeth Forest in late 2016 resulted in a significant amount of air pollution that is damaging for residents living in surrounding areas as well as the environment.

Electric Vehicles

I welcome the commitment to examine policies and incentives that could be adopted by the NSW Government to increase the uptake of electric vehicles. Electric vehicles offer significant environmental benefits and can mean less carbon emissions, less air pollution, and less noise pollution.

The Greens NSW have previously proposed² that the NSW Government implement the following incentives for five years to encourage the adoption of plug-in electric cars. Similar incentives have been successfully adopted in other jurisdictions around the world.

- Allow the use of transit lanes, which would provide electric vehicle owners with a convenient advantage over other vehicles.
- Waive stamp duty to reduce the purchase cost of electric vehicles by between \$1,200 and \$6,000.
- 50% reduction in registration cost which will reduce the cost of annual registration by between \$130-\$170 per year.
- Require government procurement of electric vehicles as a proportion of the fleet where feasible.
- Work with industry to install electric vehicle charging stations throughout the State.

It should also be noted that ideally, power to charge electric vehicles should be generated from renewable sources, otherwise the externality of electric vehicles with regards to greenhouse gas emissions is merely shifted on to communities near coal mines and coal power stations.

Wood Smoke

Residential wood heating is the second biggest source of PM 2.5 emissions in NSW and the largest source of PM 10 pollutants. The Greens NSW has previously made a submission³ to the ‘Proposed Wood Smoke Control Framework/Protection of the Environment Operations (Clean Air) Amendment (Heaters and Fireplaces) Regulation 2015’. In this submission we called for phasing out all solid fuel appliances, especially in urban areas and a move towards alternative heating sources for households. In recognition of the

² <http://www.mehreenfaruqi.org.au/wp-content/uploads/2016/04/Electric-car-incentives-for-NSW-Final.pdf>

³ <http://www.mehreenfaruqi.org.au/wp-content/uploads/2013/09/Submission-to-EPA-PEOA-Clean-Air-Amendment-Regulation-2015.pdf>

dependence of some communities on wood fired heating, stringent regulations should be paired with support for a retrofitting program and/or subsidies to reduce the economic burden and assist those in the community most at risk from harmful wood smoke emissions.

Pollution from Transport

The OECD report “Cost of Air Pollution—Health Impacts of Road Transport in 2014” notes that 50% of deaths from outdoor air pollution are now caused by road transport and that while air pollution related deaths declined in most OECD countries, they increased, alarmingly, by 68% in Australia.

The discussion paper canvasses ways to address traffic congestion, which is a significant contributor to air pollution. It then goes on to say that Westconnex will “remove through traffic from local roads, easing congestion and reducing vehicle emissions across Sydney”. This is patently untrue. The Government’s own modelling for the M4 widening predicts an increase in congestion on surrounding roads, such as Parramatta Road and Victoria Road. Residents living in the Inner West will see increased emissions from increased car movements through their suburbs. The phenomenon of induced traffic will also increase the number of vehicles on the road once Westconnex is complete.

It is irresponsible for an otherwise credible discussion to be used to promote a project such as WestConnex which will increase congestion and air pollution.

There has been much concern with regards to the pollution impacts of Northconnex and Westconnex both having exhaust stacks near homes. While Northconnex may reduce pollution along Pennant Hills road, the total amount of pollution emitted by vehicles will not be reduced. Ventilating the tunnels just shifts the pollution to new locations and relies on atmospheric dispersion to protect the local community from hazardous levels of nitrogen dioxide and particulate matter less than 10 microns (PM10) or 2.5 microns (PM2.5). Many doctors and community groups have expressed their concerns about this pollution.

Much better alternatives would be to get freight trucks off the road by funding improvement to our freight rail network. At the moment, a vast majority of projects (two-thirds) in the NSW Freight and Ports Strategy (Nov 2013) are road-freight projects with 73% of the fully funded projects also being road-freight. A government committed to removing freight trucks from our roads has to be prioritised over funding rail-freight projects.

As a shorter term measure, the successfully trialled diesel retrofit program should be applied to the 5,000 trucks that travel on Pennant Hills road in order to reduce pollution.

Investing billions of dollars in polluting and traffic-inducing tollroads such as Westconnex and Northconnex is not a solution to reducing air pollution, greenhouse gas emissions or congestion. Public transport and rail-freight alternatives to toll roads must be investigated and implemented.

Under the NSW 2021 Plan, released in 2012, the NSW Government set targets for public transport use in many parts of NSW which incorporated a target of 28% of all journeys to work across Sydney to be taken by public transport by 2016, including 80% of peak-hour journeys to and from Sydney CBD, and 20% of peak-hour journeys to and from Newcastle CBD. However, in September 2015, the Baird government scrapped these targets, replacing them with a narrow list of transport project priorities, none of which have publicly released business cases, cost-benefit analyses, or comparisons with alternatives.

Setting transport targets is vital for planning and tracking an effective integrated transport system and is highly recommended.

While, the consultation paper acknowledges active transport contributing to improved environmental outcomes, the NSW Government is doing very little to encourage more people to use cycling as a mode of transport. In fact, more barriers have been erected with the exorbitant increase in fines for cyclists and the ripping up of the College Street cycleway in Sydney. As with public transport, mode share targets for active transport need to be set and the provision of cycling infrastructure must be an integral part of any transport project being considered in the State.

There must be a much greater focus on high quality, safe, affordable and convenient public and active transport networks as well as increasing the amount of freight on rail and off the roads.

Urban Trees and Air Pollution

Higher levels of urban trees and urban forestry are associated with lower levels of air pollution. A modeling study in the United States demonstrated that urban trees remove large amounts of air pollution that consequently improve urban air quality and that management of urban tree canopy cover could be a viable strategy to improve air quality and help meet clean air standards (Nowak DJ, 1994⁴). A recent study (Igra PJ, Burchett MD and Torpy FR, 2015⁵) from the University of Technology Sydney found that trees and canopy density are important factors in reducing air pollution and particulates as they help with the deposition and dispersal of particulate pollution.

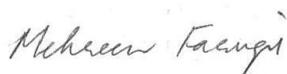
Moreover, as climate change causes hotter days, and more of them result in 'heat-islands' and increased use of energy, this inevitably leads to increased GHG and particulate emissions. Trees and vegetation in urban areas can off-set or reverse 'heat island' effects, shade buildings and reduce energy use by decreasing the demand for air conditioning.

While it is clear that trees play a vital role in controlling temperature, improving air quality and reducing GHG emissions, the NSW Government has recently chopped down thousands of trees in Sydney to make way for infrastructure projects. Moreover, weaker environmental laws such as the 10/50 clearing rule has also allowed the removal of thousands of trees in urban areas.

Such practices and policies are counter-productive to improving air quality in NSW and must be reversed.

Thank you for the opportunity to comment and please do not hesitate to contact me or my office for further information on any of the matters discussed above.

Kind Regards



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Greens NSW MP

⁴ https://www.nrs.fs.fed.us/pubs/gtr/gtr_ne186.pdf

⁵ <http://newsroom.uts.edu.au/news/2015/09/more-trees-please-greening-cities-reduces-air-pollution-0>