Air quality - clean air outside

There are many outdoor air pollutants, but the major pollutants of concern are: Carbon Monoxide, Volatile Organic Compounds (VOCs), nitrogen oxides, sulphur dioxide and particulates.
In Brisbane the main sources of outdoor air pollutants are motor vehicles, industry, bushfires and controlled and domestic burning. Some of these pollutants combine in the atmosphere to cause smog.

Smog

Brisbane is more prone to photo-chemical smog than any other Australian capital city except for Perth (which has a similar environment).
Smog often appears as a brown haze on the horizon. It forms when sunlight chemically changes pollutants in the atmosphere, such as exhaust fumes from cars and emissions from industry. Ozone is part of the smog mixture.
In the upper atmosphere, ozone protects us from the sun's radiation, but at ground level, it is bad for our health.

Pollution from cars

Cars are the greatest source of air pollution in Brisbane and are responsible for more than 70% of smog forming gases.
By 2011, about three million people are expected to be living in the Brisbane region. This means there will be more motor vehicles on the road and a 60% increase in the number of kilometres cars travel each year. This traffic, which will be mostly private car trips, is likely to increase pollution levels by 115 tonnes per day.

Health issues

Air pollution adversely affects human health, particularly in children, older people and people with allergic and respiratory conditions such as asthma, hay fever and sinusitis. The table below outlines possible health problems that exposure to air pollutants can cause.

Pollutant	Percentage from motor vehicles	Health problems
Nitrogen oxides	63%	Bronchitis and lung damage, more frequent asthma attacks
Fine particles	9%	Aggravates respiratory illnesses such as asthma, bronchitis and emphysema, aggravates heart conditions, lung disease (with acid gases), premature death in very sensitive people, some particles can cause cancer
Ozone (at ground level)	Depends on nitrogen oxides, hydrocarbon, emissions and weather	Irritates eyes, nose, throat and lungs, causes coughing, wheezing and bronchial restriction, aggravates heart conditions
Carbon monoxide	67%	Coordination and concentration problems, aggravates angina, increased risk of heart attack
Volatile Organic Compounds (VOCs)	22%	Irritates eyes and respiratory systems, some compounds cause cancer

How to help

You can help to protect our air quality by:

- planning ahead and combining shorter car trips into one
- walking or cycling instead of driving
- catching public transport wherever you can
- purchasing the smallest car suitable for your needs - you'll use less fuel and create less air pollution
- keeping your tyres pumped up to reduce fuel consumption
- using a clean source of heating in your home - avoid using wood heaters and ensure gas appliances are flued to the outside