

**Table 1:** Main air pollutants, sources and effects.

Pollutant	Sources	Effects
<b>Nitrogen oxides (NO<sub>x</sub>)</b>	<p>Mainly from combustion – including emissions from vehicle exhausts as well as from power generation, industry and households.</p> <p>The main source is transport, closely followed by energy generation.</p>	<p>Harms human health (increases symptoms of chronic lung disease).</p> <p>One of the causes of acid rain –contributing to the acidification of soils and water and damaging buildings.</p> <p>Contributes to nitrogen enrichment of soils and water.</p> <p>A key component in increased levels of ground-level ozone (O<sub>3</sub>).</p>
<b>Particulate matter (PM) (fine dust)</b>	<p>Mainly from combustion – including emission from vehicles, ships, power generation and households. The main source is burning coal and solid fuel, closely followed by transport.</p> <p>Also from natural sources, such as sea salt, wind-blown soil and sand.</p>	<p>Health concerns focus on particles of less than 10 micrometres (µm) in diameter (PM<sub>10</sub>) – especially those of less than 2.5 µm across (PM<sub>2.5</sub>) – which contribute to chronic lung and heart disease.</p>
<b>Sulphur dioxide (SO<sub>2</sub>)</b>	<p>Mainly from combustion of sulphur-containing fuels, such as coal. Also from industry, shipping and households.</p>	<p>Harms human health (increases symptoms of chronic lung disease).</p> <p>One of the causes of acid rain –contributing to acidification of soils and water and damaging buildings.</p>
<b>Ammonia (NH<sub>3</sub>)</b>	<p>Mainly from agriculture – emissions from livestock farming, manure handling and the use of nitrogen fertilisers.</p>	<p>Harms human health as it contributes to the formation of secondary PM.</p> <p>Contributes to acidification and nutrient enrichment of soils and water.</p>
<b>Volatile organic compounds (VOCs)</b>	<p>Mainly from the use of solvents in products and industry, road vehicles, household heating and power generation.</p>	<p>VOCs are a key component in the formation of ground-level ozone – see below.</p>
<b>Ozone (O<sub>3</sub>)</b>	<p>A secondary pollutant produced under certain conditions in the atmosphere, including the presence of NO<sub>x</sub> and VOCs.</p>	<p>Harms human health (increases symptoms of chronic lung disease).</p> <p>Damages crops.</p> <p>Damages metals and paints.</p>

**Source:** <http://www.environment.scotland.gov.uk/get-informed/air/air-quality/>