# Other Industries Contributing to Air Pollution

**Introduction**

The main source of air pollution is road traffic emissions[[1]](#footnote-0) especially from diesel vehicles but there are several other causes of air pollution. Various industries such as agriculture, energy, mining and manufacturing industries are all sources of air pollution. These industries release particulate matter and harmful gases such as sulfur dioxide, nitrogen dioxide and carbon monoxide into the air thus contaminating it and making it a health hazard particularly to people with asthma and COPD.

**Agriculture**

Most agriculture today, both animal and crop farming, is large-scale, commercialized and heavily mechanized. The increase in population in most cities had led to high demand for food, which in turn has seen the exponential increase in factory farming. Factory farming – large-scale industrialized and intensive agriculture that is focused on profit with animals kept indoors and restricted in mobility- is a major source of air pollution to an extent such that the air pollution levels at some animal sites are higher than in most polluted cities[[2]](#footnote-1). Farming alone contributes about 14-25% of global greenhouse gases. For instance, livestock farming accounts for 40% of global ammonia emissions[[3]](#footnote-2), mineral fertilizers 16% and burning of plant biomass 18%. Apart from ammonia, agriculture also leads to emission of other harmful gases such as carbon dioxide, nitrogen dioxide and smoke particles, which are all health hazards. These are emitted from the use of nitrogen fertilizers, burning of vegetation cover and large-scale animal farming. Mechanization of agriculture also involves use of machinery that runs on combustible fuels thus increasing air pollution.

**Energy Industry**

The energy sector is one of the main sources of sulfur dioxide found in the air. Most sources of energy such as coal, petroleum and other fuels contain impurities such as sulfur and carbon compounds. The combustion of these substances leads to formation of the harmful gases such as sulfur dioxide and carbon dioxide. Coal-fired power plants are actually said to be the biggest source of sulfur dioxide[[4]](#footnote-3). Power plants are also a source of nitrogen dioxide, which is one of the main air pollutants. Additionally, most power plants use heavy machinery whose engine emits carbon dioxide into the air.

**Mining**

The magnitude and significance of air pollution from mining depends on method of mining scale and concentration of mining activities[[5]](#footnote-4)[[6]](#footnote-5).[5] It is without doubt that mining leads to air pollution through emission of particulate matter and other gaseous pollutants. For example, in the mining of coal, which is one of the fossil fuels mined in UK, there are a lot of chemicals released in the air. During combustion, sulfur dioxide, carbon dioxide and nitrogen dioxide are released into the air. The wet cooling plants in coal-powered plants also emit drift and fog that contains particulate matter (PM).

It is however important to note that most of these industries are not located within London but are instead in the outskirts and therefore their contribution to air pollution may not significantly affect London air.

1. <http://www.bexley.gov.uk/article/3714/The-main-sources-of-air-pollution> [↑](#footnote-ref-0)
2. <http://www.jeremycollerfoundation.org/images/uploads/Global_Sustainability_-_Animal_Factory_Farming_-_Summer_2015.pdf> [↑](#footnote-ref-1)
3. <http://www.fertilizer.org/imis20/images/Library_Downloads/2000_ifa_unep_use.pdf?WebsiteKey=411e9724-4bda-422f-abfc-8152ed74f306&=404%3bhttp%3a%2f%2fwww.fertilizer.org%3a80%2fen%2fimages%2fLibrary_Downloads%2f2000_ifa_unep_use.pdf> [↑](#footnote-ref-2)
4. <http://www.explainthatstuff.com/air-pollution-introduction.html> [↑](#footnote-ref-3)
5. <http://nopr.niscair.res.in/bitstream/123456789/26535/1/JSIR%2060(10)%20786-797.pdf> [↑](#footnote-ref-4)
6. <http://www.sciencedirect.com/science/article/pii/S0301479703001737> [↑](#footnote-ref-5)