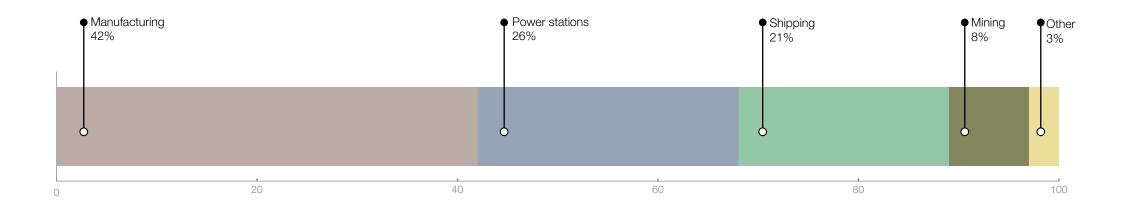
Perth Air Emissions Study 2011–2012: Sulfur dioxide (SO₂)

The Perth Air Emissions Study 2011–2012 estimated emissions from natural and man-made sources, and assessed the significance of these emissions. Emissions were also spatially allocated to identify major emission source areas.

Sulfur dioxide (SO₂) is a colourless gas with a strong odour. It is used in food and beverage manufacturing and industrial processes. SO₂ is emitted during fuel combustion.



► What is an air emissions inventory?

Air emission inventories assess the emissions that occur in an area. While some emissions are measured directly, others are estimated by combining activity data with scientifically developed emission factors.

► Biggest sulfur dioxide source?

Commercial and industrial facilities produced 75% of all SO₂ emissions.

Shipping was a significant source of SO₂ due to the use of high sulfur content fuel and high frequency of activity.

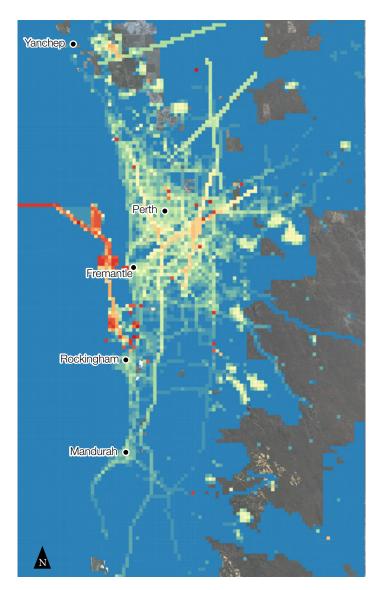
A global requirement to use low sulfur fuel oil will be implemented in 2020.

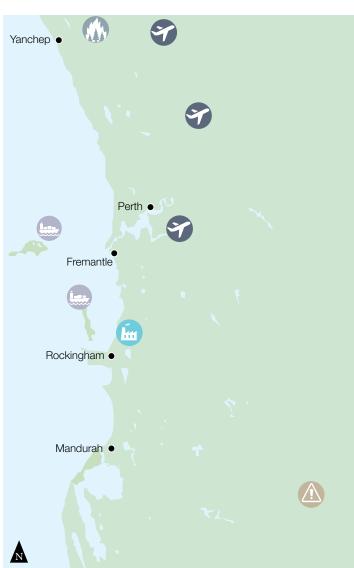
Petroleum refining and coal fired power stations contributed over 50% of SO₂ emissions in Perth.

► For more information

Visit: www.der.wa.gov.au/our-work/programs

Contact: npi@dwer.wa.gov.au





Legend



Bushfire event.



The Kwinana Industrial Area contains several heavy industries reporting to the National Pollutant Inventory, which are major sources of SO₂.



The influence of aircraft take-off and landing SO_2 emissions can be seen from some airports.



Shipping emissions are concentrated into a single channel. Anchorage zones, where ships 'park' until a berth is available, can also be seen.



Some emission estimates are based on suburb-level census data. The small amount of emissions in large suburbs outside of the main Perth metropolitan area were allocated over the entire suburb, which resulted in the map being more 'blocky' around the edges.

