



Managing our emissions at Stanwell Power Station

Reporting our emissions

Stanwell is committed to operating responsibly and ethically within licence limits set by the Queensland and Federal governments. These licence limits apply to a range of environmental parameters including air emissions.

The air emissions at our power stations are monitored to ensure they stay within licence limits and are reported to the regulator, the National Pollutant Inventory (NPI) and the National Greenhouse and Energy Reporting Scheme (NGERS).



As a responsible energy generator, we seek to minimise the impacts we have on the quality of air around our sites and operate within our environmental licence limits. Our continuous improvement culture allows us to drive sustainable initiatives and outcomes across our business.

We operate in a way that ensures we optimise emissions from our power station stack such as sulphur dioxide (SO₂) and nitrogen oxides (NOx), as well as reducing particulate matter (PM). By working to manage these emissions, we can minimise their impact on local communities and the environment.

When electricity is generated at the power station through the combustion of thermal coal, exhaust gasses are released into the atmosphere from the stacks and water vapour is released from the cooling towers. Stack emissions include carbon dioxide (CO₂), nitrogen oxides (NOx), sulphur dioxide (SO₂), as well as water vapour and particulate matter.

Ongoing monitoring and regular studies ensure ground level concentrations of the major air emissions released by these power stations are within national and state air quality standards.



Our systems and processes

Some of the comprehensive systems that enable us to proactively manage our emissions include:

- Electrostatic precipitators trap 99.5 per cent of ash and particulate matter from the coal burning process.
- Low NOx burners installed on all four of the units at Stanwell Power Station. Low NOx burners reduce the formation of NOx in the atmosphere, as well as local ground level concentrations of NOx.
- A combination of continuous and routine monitoring and regular independent modelling studies ensure emissions meet licence limit requirements. This also ensures ground-level concentrations of air emissions of concern are within national and state air quality standards.

- A continuous emissions monitoring system (CEMS), accurately provides real-time measured data on our emissions.
- An advanced control system to reduce emissions or trip the plant if emissions trend upwards and approach emission limits.
- Tuning of our boilers through combustion optimisation, for efficiency and therefore the lowest coal burn and emissions per megawatt (MW) of electricity.
- Ambient air monitoring stations measure air quality at some of the neighbouring properties surrounding our operations.

For more information on emissions and emissions reporting visit:

- **NGERS** - cleanenergyregulator.gov.au
- **NPI** - npi.gov.au
- **Department Environment and Science** - des.qld.gov.au