



## Frequently asked questions about methane gas

### What is methane gas and where does it come from?

Methane gas is a natural gas with no colour or smell. It comes from two main sources:

1. Organic matter, like leaves, that is breaking down – such as in lakes, rivers, wetlands and soils
2. Deep underground (1000-4000 metres deep) where methane gas has naturally formed under high temperatures and pressures.

### What is methane concentration?

Methane concentration is the amount of methane gas in the air. It is usually reported as parts per million (ppm) or parts per billion (ppb). This means it is a very small amount compared to the amount of air around it.

### What does flux mean?

Flux is the amount of gas flowing over time, for instance, in grams per second. The flux of methane gas from any source (like natural gas wells) can be calculated using measurements of methane concentration, wind speed and direction, and the size and shape of the methane gas cloud.

### What is a tracer gas used for?

A tracer gas is a known type of gas that can be released next to natural gas wells. Knowing the flux of the tracer gas helps CSIRO researchers to measure the flux of the methane gas from those wells.

### What are the impacts of methane gas?

Methane gas is a greenhouse gas, and it can cause a warming of the air and atmosphere. It does this by absorbing heat from the earth and then sending the heat back into the atmosphere. Methane gas is a more powerful greenhouse gas than carbon dioxide, however, it is in smaller amounts in the atmosphere (about 400 times less abundant).