

Media release

Monday October 16, 2017

New NSW study to understand background methane emissions sources

A NSW study by CSIRO's Gas Industry Social and Environmental Research Alliance (GISERA) to identify and quantify the major sources of background methane emissions adds to important information on background levels of methane emissions and fugitive emissions by the coal seam gas (CSG) industry.

Lead CSIRO author Dr Cindy Ong has used mobile atmospheric sampling along with other data for the Pilliga Forest and surrounds near Narrabri, NSW, to build a detailed baseline of the human-induced and naturally occurring methane emission sources.

Emission sources such as CSG infrastructure, livestock, coal mining, and legacy bore holes in the Pilliga region were estimated based on previous studies and information gathered from other research and industry documents.

These surveys, combined with earlier surveys from 2014 to 2016, have shown ambient methane concentrations mostly similar to background concentrations observed in pristine areas with no sources of human-generated methane.

Methane is a colourless, odourless, non-toxic gas, which originates from either decomposition of organic matter or from deeper beneath the Earth's surface by geochemical processes when temperature and pressure conditions are suitable.

Dr Ong says understanding the size and location of background methane emission sources helps to inform the current national energy debate, as gas has been proposed as a transition or alternative energy source due to the prospects of lower greenhouse gas emissions.

"CSIRO studies, such as this one, contribute towards developing more accurate budgets of the different sources of methane to better inform decision making, including global and national greenhouse accounting, and, the impacts of the gas industry," she says.

Dr Ong says although this preliminary study provides a strong foundation for understanding the methane sources in the Narrabri region, further work is required to better quantify and reduce uncertainties in estimates for the different sources of emissions.

CSIRO's [GISERA](#) undertakes publicly-reported independent research that addresses the socioeconomic and environmental impacts of Australia's onshore gas industries. A copy of the report is available on the GISERA website, <https://gisera.org.au/project/regional-methane-emissions-in-nsw-csg-basins/>.

CSIRO has developed a [factsheet](#) which sets out the science of methane emission sources from CSG wells, pipelines, compressors and other infrastructure associated with CSG production, and their importance in warming the earth's climate.

For further information contact: Helen Beringen M: 0437 338 298 E: helen.beringen@csiro.au