

I would like to express my deep concern about the rapid expansion of the CSG Industry in Australia. As a mother and a grandmother I just cannot comprehend how the Federal and State governments could possibly support this real threat to our air quality, our precious water and agricultural land. I feel this is one of the greatest environmental threats this country has ever faced.

This is an industry which has been allowed to expand without adequate monitoring of air and water. No amount of royalties will ensure we leave our children a healthy environment.

In a coal seam gas field in Queensland, preliminary findings show there is reason to believe fugitive emissions from CSG extraction here may be much higher than expected and in line with the latest US scientific findings, that 2-4 per cent of the gas may be escaping into the atmosphere.

In research which is still subject to peer review, Southern Cross University researchers this month took the first field measurements of fugitive emissions. If fugitive emissions are indeed that high, and are uncontrolled, given methane has much higher warming potential than coal, CSG could turn out to be a worse fossil fuel than coal. As the world faces up to the challenge of getting emissions to peak this decade, and limiting global warming to two degrees, that would undermine the entire premise that gas can be a transitional fuel.

The impact of CSG development on Australia's greenhouse gas emissions is also contentious. Coal-fired power stations are not switching to gas here – and even at \$23 a tonne, well above the international price, the carbon tax is not high enough to incentivise the switch. LNG is incredibly energy-intensive to produce and the industry is already one of the top emitters in the country, even before our production capacity triples.

Gas is cleaner-burning than coal at the point of combustion – the industry claims up to 70 per cent cleaner – but it only lowers emissions if gas substitutes for coal, and there is little evidence that is happening in Asia. Plus, there is a huge debate about the full life-cycle emissions of unconventional gas extraction, particularly once fugitive emissions (or 'leaks') from thousands of wells and from seepage – until now considered negligible – are included.

Apart from Methane, other pollutants associated with drilling and gas field development include methylene chloride, methanol, ethanol, acetone, formaldehyde, acetaldehyde and Naphthalene.

I feel an immediate moratorium should be put in place until these important conditions can be met.

State planning processes should require proper health impact assessments before coal and gas mining is approved.

There should be mandatory baseline air quality monitoring and on-going monitoring of both particulate matter and other potentially dangerous substances during coal and gas mining.

Standards in the National Environment Protection Measures (NEPM) should be improved - standards on particulates should match those set by the World Health Organisation and standards should be introduced for emissions from gas production.

No-go zones must be created to protect productive agricultural land, national tourism icons and all residential dwellings from coal and gas mining.

Federal environment laws must be strengthened to exclude coal and gas mining from important water sources, cultural heritage sites and sensitive environment areas.

National standards on coal and gas pollution must be put in place and compliance enforced.

We must stop using taxpayers' money to provide handouts to big coal and gas corporations and make the miners pay their fair share in taxes.

We should reject current development proposals for coal ports, mega-mines, dams and coal seam gas wells in significant areas.

We must conduct urgent research into greenhouse gas emissions from mining and make sure they are properly accounted and fully paid for.

A Royal Commission needs to be held to investigate the management of coal and gas resources by all Australian governments.

The Federal Government should introduce changes to enforce compliance with NEPM, possibly through their inclusion in the Environment Protection and Biodiversity Conservation Act 1999.

Many Australians are feeling seriously disillusioned and let down by their government. It is the Government's duty and responsibility to use the Cautionary Principle until all these issues are resolved.

I am heartened to hear that The Senate Community Affairs Committee is currently investigating the impacts on the health of air quality in Australia and hope that some common sense will prevail.

Sincerely

Gabrielle Mogck