Submission
No 234

INQUIRY INTO COAL SEAM GAS

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Sharing sustainable solutions
with communities

The Hon, Robert Brown MLC
Chair, General Purpose Standing Committee No.5
Inquiry into Coal Seam Gas
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6 September 2011

Dear Mr Brown

COAL SEAM GAS INQUIRY – SUBMISSION BY PERMACULTURE SYDNEY NORTH

SUMMARY

There are very clear reasons why Coal Seam Gas Mining should be prohibited.

- Coal Seam Gas Mining will cause serious environmental damage that will be impossible to reverse
- Coal Seam Gas mining will threaten the security of our food supply
- Coal Seam Gas mining will not reduce greenhouse gas emissions

We strongly urge the Committee and the State Government to reject short term thinking and the lure of easy dollars from mining licenses and royalties. The community wants you to:

- Adopt a long term view
- Consider the wellbeing of future generations
- Apply the Precautionary Principle

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- Protect our food supply
- Prohibit Coal Seam Gas Mining.

CONTENTS

INTRODUCTION

I write to you on behalf of the members of Permaculture Sydney North (PSN). PSN currently has over 450 members drawn from the northern suburbs of Sydney and is an active organisation dedicated to promoting permaculture.

Permaculture is a design discipline for creating sustainable communities based on a sustainable agricultural base. Permaculture also teaches people positive things they can do to lead more sustainable lifestyles. To complement individual action, we would like to see the NSW government adopt a long-term perspective & promote the development of sustainable communities, cities, industries & agriculture.

In this context the members of PSN are vitally interested in the issue of whether or not Coal Seam Gas Mining will confer long term benefits on our society or whether it will create long term environmental problems that will outweigh any short term economic benefit.

Our primary concerns fall into three categories:

1. Environmental Damage
2. Food Security
3. Greenhouse Gas Emissions

In discussing Greenhouse Gas Emissions we will specifically address Terms of Reference 1(f) ***Effect on greenhouse gas and other emissions*** and 1(g) ***Relative air quality and environmental impacts compared to alternative fossil fuels***.

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ENVIRONMENTAL DAMAGE

There have been many reports of environmental damage occasioned by coal seam gas extraction in the rural press. Obvious environmental damage includes:

- extraction of large volumes of water from aquifers
- bringing large quantities of salt to the surface of the land
- significant fugitive emissions released during the extraction process, from well head failures and from pipeline leaks
- injection of chemicals, some carcinogenic, into ground water supplies

Less obvious but of possibly greater concern is the potential for permanent damage to aquifers.

The very important point that the Committee should note is that none of these forms of serious environmental damage can be 'remediated'.

- How will mining companies recharge the Great Artesian Basin?
- How can salt be returned deep under ground out of harms way?
- How can chemicals be removed from ground water?
- How can fugitive emissions be captured and safely and securely returned to the earth?
- How will a mining company repair damage to an aquifer?

In order to achieve a sustainable society we have to adopt the 'precautionary principle'. The precautionary principle states: "***If an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is NOT harmful falls on those taking the action.***"

The principle recognises there is a social responsibility to protect the public from exposure to harm, when scientific investigation has found a plausible risk. These protections can be relaxed only if further scientific findings emerge that provide sound evidence that no harm will result.

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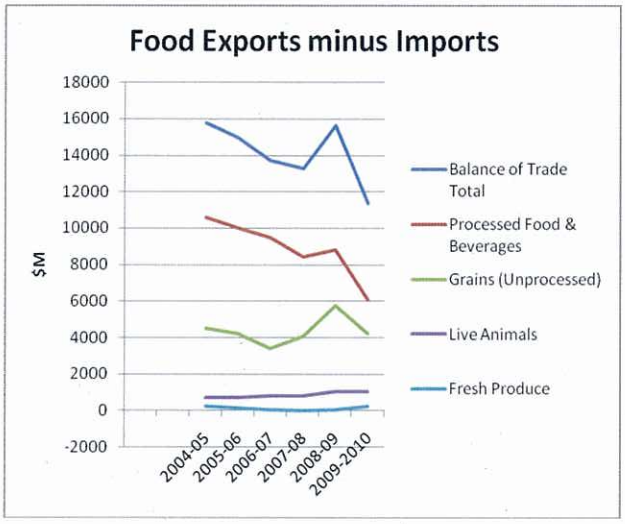
In some legal systems, as in the law of the European Union, the application of the precautionary principle has been made a statutory requirement. (Recuerda, Miguel A. (2006). "Risk and Reason in the European Union Law". *European Food and Feed Law Review* **5**.)

The weight of evidence available indicates that coal seam gas mining will almost certainly cause long term irrevocable damage to the environment. **We urge the Committee to apply the precautionary principle and prohibit that all coal seam gas mining in NSW.**

FOOD SECURITY

The Committee should note that Australia's excess of food exports over imports has been in steady decline for a number of years, as illustrated by the following graph. (Data used to construct the graph was sourced from the Australian Bureau of Statistics.)



It should be noted that our Food Surplus has declined from $16B in 2004-05 to $11.6B in 2009-10. At the same time large tracts of Australian farmland have been purchased by overseas countries to bolster their own food security. This topic has been the subject of a large number of articles in the rural press in the past year and there are calls for the Commonwealth and State governments to develop a register of foreign land ownership.

Australia is faced with:

- A declining food surplus
- A rapidly growing population

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- Rapidly increasing foreign ownership of prime Australian agricultural land
- Declining rainfall
- A host of Climate Change induced adverse climatic factors that will decrease agricultural output

In this environment the very last thing we should be doing is endangering productive agricultural land for the sake of short term profits for investors backing coal seam gas companies. We need healthy farmland and healthy aquifers in perpetuity.

GREENHOUSE GAS EMISSIONS

There has been a lot of misinformation and propaganda, in the press and in advertisements, promoting gas as a 'clean' source of energy. The proponents of coal seam gas mining would have us believe that we could dramatically reduce greenhouse gas emissions by replacing coal fired electricity generators with gas fired generators. These claimed benefits of gas are at best grossly exaggerated and in worst case scenarios simply untrue.

Gas, whether natural gas, coal seam gas or gas produced from coal by pyrolysis, is not a renewable energy source. Gas from these sources, which represents 99.99% of all the gas we use or export, is a finite resource and it is undeniably a dirty fossil fuel.

Burning one tonne of high grade black coal produces approximately 3.6 tonnes of CO2. Burning the energy equivalent amount of gas produces approximately 2 tonnes of CO2.

We would currently be producing a lower level of greenhouse gas emissions if our existing coal fired power stations had been built to run on gas in the first place. However, there is no logic in converting existing generators to gas or in building new gas fired generators now.

We should be investing in true renewable clean energy generation, either; solar thermal, wind, hot rock, wave or photovoltaic. The Intergovernmental Panel on Climate Change (IPCC) has told us that we need to reduce greenhouse gas emissions by between **80%** and **95%**, on 1990 levels, by 2050 to avert dangerous levels of global warming. **There is no room in this equation for gas or any other fossil fuel.** We don't have time for phoney 'interim solutions'. We need to start right now to rapidly transform our economy to 100% renewable energy use.

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Indeed the rush to mine coal seam gas suggests that the proponents have a larger market in mind than simply replacement of coal as an energy source in existing power stations. If gas is used in new power stations or in new industrial applications then it is conceivable that coal seam gas extraction will increase, rather than decrease, total greenhouse gas emissions.

Trying to tell the community that gas is good for climate change, compared to coal, makes as much sense as a cardiologist or oncologist recommending that a smoker switch to 'low tar' cigarettes!

These points address Terms of Reference; 1(f) ***Effect on greenhouse gas and other emissions*** and 1(g) ***Relative air quality and environmental impacts compared to alternative fossil fuels.***

CONCLUSION

There are very clear reasons why Coal Seam Gas Mining should be prohibited.

- Coal Seam Gas Mining will cause serious environmental damage that will be impossible to reverse
- Coal Seam Gas mining will threaten the security of our food supply
- Coal Seam Gas will not reduce greenhouse gas emissions. Arguments in favour of using gas to generate electricity are a dangerous diversion from the real task of converting our energy generating infrastructure to zero emission renewable energy sources

The only possible reason the State Government might want to see Coal Seam Gas mining proceed would be a desire to obtain a short term monetary gain from mining licenses and royalties

We strongly urge the Committee to resist short term thinking and the lure of an easy dollar. Adopt a long term view. Consider the wellbeing of future generations. Apply the Precautionary Principle. Protect our food supply. Prohibit Coal Seam Gas Mining.

Yours Sincerely

Barry Hadaway

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