

What is lignite?

- Lignite is the lowest quality form of coal.
- Very low energy, low carbon and a very high water content.
- Lignite processing is one of the largest contributors to greenhouse gas emissions (much HIGHER than black coal).

What is Solid Energy proposing?

- A plant to convert lignite into briquettes, ALREADY APPROVED AND DUE TO START SOON!
- Larger open-cast mining of lignite.
- Lignite to diesel conversion plant.
- Lignite to urea conversion plant.

This will release 17 MILLION TONNES OF CO₂, increasing NZ's entire emissions by 20%!

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Kelly A et al.
'Lignite mining and Processing in Southland New Zealand'
2011.

For a full copy of this document go to:
<http://www.msga.org.nz/?p=127>

PROTECT THE MATAURA VALLEY FROM BROWN COAL (LIGNITE) PROJECTS



Why is this bad for NZ?

- Locks New Zealand into an extremely dirty method of generating energy.
- New Zealand will lose its 'CLEAN GREEN IMAGE' and contribute heavily to global warming.

Local environmental effects:

- Heavy water pollution (e.g Acid Mine Drainage) similar to what has already occurred in Solid Energy's Stockton Mine.
- Destruction of Southland's fertile farming areas – impossible to replace the topsoil. **FARMING LAND WILL NEVER BE THE SAME AGAIN.**
- John Key: *"Southland will be the ENGINE ROOM of NZ."* This means replacing fertile farm lands with the largest and dirtiest industry in NZ!

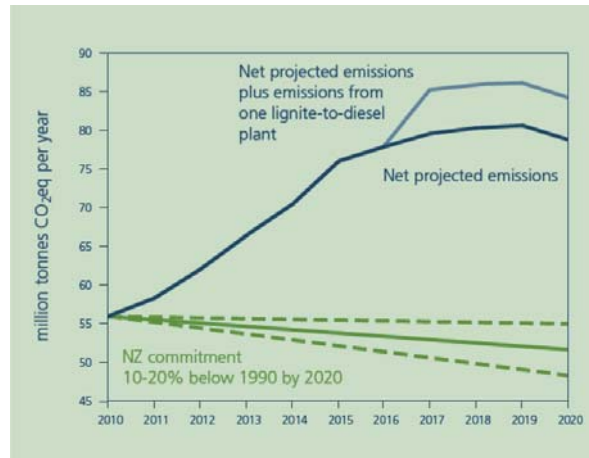
Local health effects:

- If these projects proceed, the scale of mining that would be required could expose the local community to significant air and water pollution.
- Research has shown that coal mining communities have higher rates of cancer, heart, lung and kidney disease and higher death rates.
- To transport the mining products it is estimated that an extra 300 trucks per day will be operating on Southland's roads = higher risk of crash fatalities and a huge increase in local air and noise pollution.

NZ's legal obligations

NZ signed the Kyoto Protocol which legally enforces us to reduce our average annual greenhouse gas emissions for the 2008-2012 period to the 1990 level. NZ will just meet this commitment **only because we have sufficient forestry.**

Kyoto Protocol expires in 2012. To ensure the world continues to reduce emissions, at the Copenhagen Conference (2009) 170 countries made commitments to reduce their emissions. NZ committed to 10-20% below 1990 levels by 2020. **Even without the lignite projects NZ's emissions are going to be 30% ABOVE 1990 levels.** See graph below.



Estimates show that NZ has been increasing its emissions from 1990. The lignite projects will drastically increase our emissions and push us further away from our Copenhagen commitments.

The Intergovernmental Panel for Climate Change (panel of over 1000 scientists) state that drastic changes to the earth's climate system will occur if countries do not commit to an international agreement to reduce greenhouse gas emissions. These changes will produce catastrophic and irreversible events on earth.

What is Solid Energy saying?

More jobs

- Only 12 jobs are estimated for the pilot plant.
- And... Employment is relatively high in Southland anyway.

Economic gain

- No estimates on profits have been given.
- No estimates on how these profits will benefit the NZ economy.
- Will cost NZ huge amounts of money to set up. Estimated to cost:
 - Pilot briquette plant = \$25 million.
 - Lignite-to-diesel plant = \$1-2 billion.
 - Lignite-to-urea plant = \$1.5 billion
- Also, the NZ public will be required to pay for the greenhouse gas emissions under our Emissions Trading Scheme. The diesel plant will produce 35,000 barrels per day; this will cost the public upwards of \$300 million.
- PLUS... It is widely reported that a foreign-owned company may purchase **47% of Solid Energy - where will our profits go then??**

Invest in RENEWABLE ENERGY instead – still achieve the things above, eliminate the need to pay for the carbon emissions and ensure NZ meets its KYOTO PROTOCOL commitments. These projects are only for the next 5-10 years. What happens after that? Southland is left with a **HUGE INFERTILE HOLE IN THE GROUND WITH LITTLE PROSPECT FOR FARMING.**