

Dear Tim Groser,

My name is Sam Murphy. I recently graduated with Honours in Mechanical engineering. I have studied energy management and I have a strong understanding of our energy system and the human rights violations associated with a fossil fuel economy and of climate change. New Zealand's commitment to reducing climate change should be:

1. Global and NZ net zero carbon emissions by 2040.
2. Zero electricity from coal by 2025. Increasing our renewable fraction makes us sound angelic but it really achieving nothing unless we are simultaneously phasing out fossil fuel use.
3. Gas to be only used as a backup during peak times in winter.
4. Investment in a world class rail and public transport system.
5. \$100 million per year government funding of research in renewable energy sources and energy efficiency.
6. Energy efficiency standards to match European standards for commercial and residential buildings. (I work in the building services industry , take my word for the fact that building developers do not care about energy efficiency - They are not the ones paying the power bills.
7. All subsidies, funding to the fossil fuel industry are re-allocated to stimulate investment in renewable energy supply, organic farming and energy efficient transport. (Job opportunities here)
8. Full exploitation of geothermal resources by 2030.
9. A meaningful carbon tax. – Think about it, petrol is still so ridiculously cheap. Imagine asking a guy on a rickshaw to drive you and your bags from the airport to town for \$30.
10. Phasing out all exploration and extraction of fossil fuels within New Zealand borders by 2025.
11. Act as a voice to those small and developing countries who will be most marginalized by fossil fuel development.
12. Re-allocate funding from Roads of national significance (which is really an indirect subsidy to big business) to meaningful public transport that benefits everyone.

I urge you to show your strength by making bold and ambitious targets. I urge you to show love to the little players. I urge you to step on toes, to stand out as a point of difference and show once again that New Zealand can be a world leader in the way that it promotes the rights of all individuals, not just those with the loudest voices.