



7 August 2015

Climate Change Act Review Secretariat
Department of Environment, Land, Water & Planning
PO Box 500
Melbourne VIC 8002
Via email: climatechange.act@delwp.vic.gov.au

Submission re Review of Victoria's Climate Change Act 2010

Dear Sir/ Madam,

Thank you for the opportunity to provide a submission regarding this important issue.

By every measure, Victoria's Climate Change Act 2010 is a woefully inadequate response to the urgent threat of climate change.

The key findings of the Fifth Synthesis Report of the Intergovernmental Panel on Climate Change (aka the IPCC's Fifth Assessment Report) are that:

Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems. {1}

Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen. {1.1} ¹

In fact, emerging evidence is showing that we are losing much more polar ice much faster than previously suspected. For example, according to researchers, the Totten Glacier in the Antarctic is losing an amount of ice "equivalent to 100 times the volume of Sydney Harbour every year."²

Some years ago now one of the world's most respected climate scientist, NASA Goddard Institute for Space Studies' Director, Dr James Hansen warned that continued coal use will result in "*catastrophic climate change and a 'transformed planet'*".³ Yet, old and inefficient coal-fired electricity plants still largely generate Victoria's electricity needs and our current environment protection laws are obviously not capable of transitioning our economy away from dirty fossil fuels towards zero pollution, renewable energy alternatives.⁴ With its so-called 'advanced' status and **enviable renewable energy resources (aka solar radiation and strong 'Roaring Forties' winds)**, Victoria has no excuse for remaining one of the world's largest per capita polluters.

Strong climate laws are required to transition Victoria to the Future Green Economy

By reducing emissions since 1990 while expanding its economy, the EU has successfully shown that economic growth and emission cuts are compatible. With only a fraction of our renewable energy resources, countries such as Denmark, Germany, Spain, USA, Austria and Sweden, to name

a few, are enjoying the **social and economic benefits** of a burgeoning, multi-billion dollar renewable energy industry, largely driven by determined climate protection policies and laws to back them up. In many places around the world strong emission reduction targets combined with ambitious renewable energy targets are already generating new investment and new jobs in rural and regional areas while stabilising local pollution levels and increasing **energy security**.

In terms of wind energy, according to Bloomberg New Energy Finance, after adding 20.7GW of capacity during 2014, China now has more wind power than the entire UK energy system. Meanwhile, the US added 4.7GW of new onshore wind capacity last year, a sixfold increase on the 764MW installed the previous year.⁵ As for solar energy — including household solar photovoltaic (PV) as well as utility-scale PV power plants — with costs falling and efficiencies soaring, the global industry continues its meteoric rise, creating millions of jobs in local economies.

In places with climate friendly policies, renewable energy industries are exceeding people's expectations. Germany has more than 380 000 people employed in its clean-energy industry, and this figure could rise above 500 000 by 2020.⁶ Meanwhile, more than 50 per cent of Germany's renewable energy is community-owned, which makes the business of generating and distributing the energy and the profits far more transparent and democratic.⁷ Globally, there are now more than 6.5 million people employed in renewable energy.⁸

Why would any government not strongly support a new industry that has proven to create tens of thousands of new jobs and generate tens of billions of dollars in local economies where it is growing? Why would a government resist introducing laws that would simultaneously reduce pollution and stimulate jobs and growth in the sustainable, clean-energy sector?

As the host of some of the most polluting coal fired power stations in the world, Victoria must clean up its act quickly. Unless we move now to radically reduce our greenhouse gas emissions by transitioning to zero pollution energy resources, our reliance on fossil fuels will not only continue to force dangerous climate change but will also ensure that our economy falls behind because everything coming out of Victoria will carry an enormous carbon footprint at a time when **world economies are transitioning** away from dirty technologies and practices. This is an opportunity to turn the La Trobe Valley into an R&D hub for sustainable technologies.

Ending the marriage between decision makers and fossil fuel corporations

Like the Abbott Federal government, on ideological grounds, the former Napthine government systematically dismantled Victoria's emerging Green economy, including introducing extreme legislation to curtail wind farms, abolishing the 20 per cent emissions reduction target from the Climate Change Act, slashing and limiting the solar feed-in tariff, withdrawing a commitment to replace inefficient street lights with energy efficient alternatives, scrapping the solar hot water rebate and campaigning against the fixed price on pollution (aka carbon tax).⁹

As a direct result of a spirited community campaign demanding a moratorium on all new coal and gas projects, the Napthine Liberal government was forced to declare a ban on the use of dangerous chemicals in gas drilling and to declare a moratorium on the process of fracking. Seeking an escape from a policy forced on them by the community, the Napthine Liberal State government commissioned Peter Reith, the former Deputy Leader of the Liberal Party and Australia's former Minister for Defence under the Howard Liberal government, to chair a task force into Victoria's gas industry. However, it was discovered that Mr Reith was on the payroll of a

major CSG company, working as a lobbyist for the gas industry. Further to this, all eight members chosen to sit on the CSG task force were representatives of fossil fuel energy and polluting industry groups. So, it was reasonable for the community to conclude that the Government's so-called 'Inquiry' was a sham from the start. At least nobody was surprised that Reith's report recommended that the State government lift its moratorium on coal seam gas, and offer incentives to businesses to develop a gas industry in Victoria.¹⁰

In addition to assessing the global warming and other highly destructive affects of the fossil fuel industry, this Review must consider the serious health impacts associated with them. In areas where unconventional gas is being extracted appalling cases have emerged, including of young children with rashes from bathing in contaminated water, nose and ear bleeds, vomiting, dizziness, lethargy and severe headaches, all of which are known symptoms of gas exposure. In many cases where serious gas leaks have been reported to companies, years have gone by before anything has been done. According to chemical expert, Dr Mariann Lloyd-Smith, of the 23 major chemicals currently used in Australia by CSG companies, the national regulator has independently assessed only two but not for use as a fracking agent.¹¹

Meanwhile, in addition to releasing global warming greenhouse gas pollution into the atmosphere, burning coal results in toxic ash that typically contains arsenic, lead, mercury, cadmium, chromium and selenium, as well as aluminium, antimony, barium, beryllium, boron, chlorine, cobalt, manganese, molybdenum, nickel, thallium, vanadium, and zinc. As a result of these toxins, coal ash has been linked to a range of cancers, heart, lung, kidney and respiratory diseases, gastrointestinal problems, birth defects, impaired bone growth in children, nervous system disorders as well as developmental delays and behavioural problems. In short, exposures to coal ash can potentially damage all major organ systems, causing serious illness and early death.¹² Coal ash also leaches or dissolves into waterways leading to the contamination of water supplies.¹³ Given the lack of proper independent testing of the affects of coal ash, it is difficult to provide a figure that adequately reflects its true cost to the community. However, in Europe the costs of ill-health and deaths from burning coal are estimated to be as high as €42.8 billion annually.¹⁴ That's assuming it's ever really possible to put a monetary price on health and life.

In contrast, and despite the best efforts of anti-wind campaigners with investments in fossil fuel companies, no research from anywhere in the world has emerged to directly link adverse health effects to wind farms. However, findings conclusively show that 'wind turbine syndrome' is far more prevalent in communities where anti-wind energy lobbyists have been active, and appears to be a psychological phenomenon caused by the suggestion that turbines make people sick¹⁵. According to the findings of leading Professor of Public Health, Simon Champam, 'wind turbine syndrome' is a 'communicated disease' — that is a sickness spread by the claim that something is likely to make a person sick. So, in fact the symptoms are caused by the 'nocebo effect' — that is the opposite of the placebo effect. In Professor Chapman's words, 'anxiety and fear about wind turbines being spread about by anti-wind farm groups will cause some people hearing this scary stuff to feel that they are suffering symptoms'.¹⁶ In other words it's the anti-wind energy campaigners who are making people sick.

Given all that we now know about the grave dangers of mining and burning fossil fuels, it is reasonable to conclude that any leaders that continue to support fossil fuel industries at the expense of zero pollution renewable energy alternatives, and the efficient storage and distribution systems that support them, are knowingly, **wilfully waging war against the environment that supports the very people that it is their job to protect.**

Meeting 21st Century Challenges

If Victoria is to maintain living standards and quality of life for current and future generations, we must drastically reduce our emissions by immediately commencing a rapid transition away from 'old' centralised and highly polluting fossil fuel based infrastructure and energy sources towards 'new' decentralised and more sustainable alternatives, such as **wind and solar power**. In addition to drastically reducing pollution levels, the adoption of renewable energy sources located close to end power users will ensure a more **robust and secure power supply** than the current one. This is because centralised power supplies are more vulnerable to major disruptions caused by accidents, fires and storms (which are predicted by scientists to become even more frequent and ferocious), accidents and/or deliberate attacks.

Dangerous climate change is already here and our environment is already showing the predicted signs due to excessive greenhouse gas emissions in our atmosphere, as evidenced by the ongoing reports of extreme weather presenting all around the world. Further, the era of cheap crude oil for transportation is gone. Given the tyranny of distance and our increased vulnerability to draught and flooding, it is even more critical for Victoria (and Australia) to prepare itself for the changed economic and ecological circumstances that will be part of life in the 21st Century.

According to Beyond Zero Emissions widely endorsed report, *Zero Carbon Australia 2020 (ZCA2020)*—which demonstrates precisely how Australia could transition its stationary electricity system from polluting energy to **zero emission energy** using off the shelf renewable energy and energy efficiency technologies that are readily available now—**wind power could be providing 40 per cent of our stationary electricity needs within a decade**. Further to this, the report shows that such a transition would be feasible, affordable (3 to 3.5 per cent of GDP or \$8 per household per week for ten years), create an estimated **140,000 new jobs** in regional economies where they are needed most and ensure energy security for at least the next 70 years. Given the billions Australians are now spending to mop up after successive climate related natural disasters, alternative technologies such as wind power are looking cheaper and more attractive by the minute. There could be no better place to start the powerful energy transition than Victoria's La Trobe Valley.

To help secure Victoria's precious natural assets (including major tourist attractions such as the Great Otway and Wilsons Promontory National Parks), and prepare us for the future zero carbon global economy, the Victorian government should immediately strengthen its climate change laws to 1) quickly redirect all state subsidies that currently support fossil fuels to renewable energy and the storage and distribution technologies that support it, with the aim of transitioning the State's electricity grid to deliver only zero pollution energy as fast as humanly possible, 2) approve NO new coal or gas projects, 3) legislate a State based price on pollution (aka carbon tax) and ensure it's high enough to reflect its true long term damage, 4) commit to major mandatory improvements in energy efficiency across the State's economy, 5) halt land clearing and undertake major re-forestation projects, and 6) direct a rapid transition to a transport system that can run on electricity sourced from renewable energy.

A safe climate and healthy environment are the **foundations** on which all else we know and value depends. The most cited argument for slow and inadequate responses to climate change and peak oil, are driven by a combination of ignorance of the current science, greed by those with vested economic interests, fear of change and the failure to recognise the bountiful economic

opportunities that are ready to be taken up. Climate deniers (including anti-wind campaigners) typically fall into one or more of the categories above. Yet, as previously stated, with the adoption of renewable energy as a much greater proportion of our energy mix—in addition to mitigating catastrophic global warming—there will be the added benefit of a boost to our local economies and **new, more secure and sustainable ‘green collar’ jobs.**

Further, we emphasise the point that we only have to look at a few recent extreme weather events in Australia and around the world to appreciate that the cost of inaction far outweighs the cost of taking preventative measures. The more climate change we experience the more costly it will be for our State’s economy.

In concluding we wish to emphasize that this submission has been prepared to voice the deep climate concerns of private citizens associated with ClimActs (an independent, non profit climate change action group). In other words, we have no vested interests, nobody is paying or compensating us in any way and there is nothing covert about ClimAct’s access to our democratically elected representatives.

Thank you for your attention to this submission. We would welcome the opportunity to discuss any part of this submission with you.

Yours faithfully

Deborah Hart
Co-convenor
ClimActs
Website: <http://climacts.org.au>

Dr Liz Conor
Co-convenor
ClimActs

¹ http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_SPMcorr2.pdf ‘Climate Change 2014 Synthesis Report: Summary for Policy Makers’

² <http://www.washingtonpost.com/news/energy-environment/wp/2015/03/16/the-melting-of-antarctica-was-already-really-bad-it-just-got-worse/> ‘The melting of Antarctica was already really bad. It just got worse.’ By Chris Mooney, *The Washington Post*, 16 March 2015

³ David Spratt and Phillip Sutton, *Climate Code Red* (Scribe Publications, 2008)

⁴ <https://www.climatecouncil.org.au/australia-s-electricity-sector-ageing-inefficient-and-unprepared> ‘Australia’s Electricity Sector: Ageing, Inefficient and Unprepared’ by Andrew Stock, A Report by the Climate Council, released 16 June 2014

⁵ <http://www.businessgreen.com/bg/news/2391764/chinas-wind-power-capacity-now-bigger-than-uks-total-energy-supply> ‘China’s wind power capacity now bigger than UK’s total electricity supply’ by Will Nichols, *businessGreen Sustainable thinking*, 23 January 2015

⁶ <http://www.unendlich-viel-energie.de/en/economy/current-facts-and-figures.html> German Renewable Energies Agency Information Platform, Current facts and figures webpage

⁷ <http://www.dw.de/denmark-leads-the-charge-in-renewable-energy/a-17603695> ‘Denmark leads the charge in renewable energy’ by Helle Jeppesen, *Deutsche Welle*, 2 May 2014

⁸ <http://reneweconomy.com.au/2014/graph-of-the-day-global-green-jobs-surge-to-6-5-mln-99651> ‘Graph of the Day: Global green jobs surge to 6.5 mln’ by Silvio Maracci, *ReNew Economy*, 14 May 2014

⁹ <http://www.theage.com.au/victoria/naphthine-government-accused-of-attacking-renewable-energy-incentives-20140831-10an0u.html> ‘Naphthine government accused of attacking renewable energy incentives’ by Josh Gordon, *The Age*, 31 August 2014

¹⁰ <http://www.news.com.au/national/breaking-news/victorian-govt-to-consult-on-csg/story-e6frfku9-1226765110097> ‘Lift ban on Vic gas fracking, report says’, *News.com.au*, 21 November 2013

¹¹ <http://www.ntn.org.au/stop-csg/call-for-moratorium-as-report-finds-fracking-chemicals-have-never-been-tested-for-safety> 'Fracking chemicals have never been tested for safety' A report for the National Toxics Network

¹² <http://www.psr.org/assets/pdfs/coal-ash.pdf> 'Coal Ash: The toxic threat to our health and environment' A Report from Physicians For Social Responsibility and Earth Justice by Barbara Gottlieb with Steven G. Gilbert, PhD, DABT and Lisa Gollin Evans, September 2010

¹³ *ibid.*

¹⁴ http://www.env-health.org/IMG/pdf/heal_report_the_unpaid_health_bill_how_coal_power_plants_make_us_sick_final.pdf 'The Unpaid Health Bill: How coal power plants make us sick' A report from the Health and Environment Alliance, March 2013

¹⁵ 'New Study: wind turbine syndrome is spread by scaremongers' by Simon Chapman, *The Conversation*, 15 March 2013

¹⁶ *ibid*