

**** CHECK AGAINST DELIVERY ****

'THEY'RE POLLUTING THE PLANET FOR FREE, AND YOU'RE PAYING THE PRICE:

AMBITION FOR A WORLD IN TRANSITION'

SENATOR CHRISTINE MILNE ADDRESS TO THE SYDNEY ENVIRONMENT INSTITUTE

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I acknowledge that we meet here on land of the Gadigal people of the Eora nation, and pay my respects to their elders past and present.

I also acknowledge that we meet here at a critical time in the history of our planet and our civilization, globally and locally. Never before has one cohort of people been able to determine what life will be like for all people and all species that come after us, no matter where on Earth they live. Local, or even regional civilizations, have been decimated before from the Euphrates to the Aztecs and Incas or Easter Islanders but never before on a planetary scale. But that is the power we now possess. This is what makes it the age of the Anthropocene. It is an overwhelming responsibility and challenge. As Ronald Wright said in 2004, "now is the last chance to get the future right," yet all we have managed to do so far is waste another decade.

The key question facing us all is whether the world's political systems, nationally and globally through the United Nations, are capable of addressing the global warming emergency facing us all on a scale and in a timeframe that gives us a chance of avoiding an unliveable planet.

There is an almost complete disconnect between the physical reality of the world we live in and the political and economic constructs we have created to govern ourselves. We live on a finite planet, with a population set to be 9 billion by 2050. There is a physical limit to the capacity of the oceans, rivers and atmosphere to absorb waste whilst maintaining healthy ecosystems that can support life as we know it. There is a physical limit to the extraction and burning of non-renewable resources like fossil fuels if we are to maintain a safe climate. But politics and economics deny these realities. Instead, we have meeting after meeting and the world's political leaders are off to the 21st Conference of the Parties in Paris this December to talk about what needs to be done and then find every excuse for not doing it.

Paris is set against a backdrop of accelerating global warming. The Totten glacier in east Antarctica is melting from underneath, the West Antarctic ice sheet is disintegrating, the Arctic ice is thinning and has reached the record lowest winter extent ever, craters are opening in Siberia as the tundra melts spewing methane to atmosphere, the thermo haline ocean conveyor is slowing in the Atlantic, the Amazon is slowing in its capacity to absorb carbon dioxide, extreme weather events are more and more intense with floods, fires, droughts, cyclones ,typhoons, and heat waves killing more and more people. The oceans are becoming more acidic and the capacity of microscopic creatures to form shells is diminishing, threatening the marine food chain and coral reefs are dying. We are living in the 6th wave of extinction. All of this with only 0.8 of 1 degree of warming. We are on a path to 4 to 6 degrees of warming. Tipping points are being reached and they are irreversible. Why would anyone fly to Paris, like Prime Minister

Abbott has done this week, with a brief case full of notes on how to frustrate action on global warming on the premise that action is not in the national interest? Why indeed.

The answer is simple. Whereas it is not in the national interest of people or nations to undermine action, it is in the interests of vested corporates who are making billions in the short term from spewing greenhouse gases to atmosphere. It is in their interests to buy governments with political donations and entrench the revolving door between politics and boardrooms. It is especially so in Australia where there is a disproportionate number of resources based vested interests. That is why I have reached the conclusion that we will not win on the climate, here or anywhere, until we take our democracy back from these vested interests that have bought it. We are no longer living in a democracy in Australia, we are a plutocracy: Government by the wealthy for the wealthy.

It is why I have argued that the Abbott government is the wholly owned subsidiary of the coal industry, having torn down carbon pricing, attacked the RET, abolished the mining tax, maintained fossil fuel subsidies, attempted to abolish ARENA and CEFC, promoted the return of environmental protection powers to the states, promoted Carmichael and Galilee basin coal mines, CSG and most recently approached Bjorn Lomborg to come to UWA with a \$4m grant.

So the first thing we need to do to secure serious action on the climate is to restore our democracy by taking back the power from corporations. A prerequisite for action and a fundamental part of a framework to address global warming is political reform. We need proportional representation, political donations reform, stronger freedom of information and whistleblower laws, greater transparency in corporate reporting and disclosure, a national ICAC, restored funding to Environmental Defenders Offices and a stronger public service not constrained by short term contracts. We need budgets that are internally consistent to deliver to a planned outcome of emissions reduction.

At the same time we need to inspire people with a vision of what is possible, with the idea that the wave of innovation that will be necessary will touch everyone and is a huge opportunity. Just as JFK inspired America with his call to put a man on the moon in a decade in the 1960s, we need to inspire Australians to put all of our collective intelligence, creativity, innovation to work to secure net zero emissions by 2040. We can do it. The average age of Apollo 11's mission control team was 28, the youth were engaged, they transcended the ordinary limits of human existence on that mission. So too it needs to be on climate.

So what level of ambition is needed to avoid catastrophic climate change? The world decided in Copenhagen to cap global emissions at a level that would not exceed 2 degrees. To achieve that science tells us our global budget of emissions is 1,700 billion tonnes of carbon dioxide equivalent between 2000 and 2050. It sounds like a lot, but in the first twelve years of this fifty year budget we have already used up 36 per cent of that budget, making the job we have to do in the out years harder and harder. The independent Climate Change Authority concluded that Australia's global responsibility should be for 1% of that entire budget, which translates to a remaining budget for Australia of 10.1 billion tonnes from 2013 onwards. On our current pollution levels, Australia will use up its entire allocation by 2030, twenty years too early.

Unlike the government's budget pantomime, this is the very real budget emergency that Australia faces. Translating this budget into national targets and the gradient of the trajectory to meet the budget is the next critical consideration. This week the Climate Change Authority has plotted this trajectory and said that our 2025 target, just 10 years away, has to be 30% below 2000 levels and our 2030 target has to be 40-60% less.

But both the Labor Party and the Liberal Party are in furious agreement that our 2020 target is 5% below 2000 levels meaning an additional 25% gap has to be bridged in just five years. This is frankly unachievable with current settings. It is very poor foresight and very selfish. It is so frustrating because we have known since the Stern Review in 2006 that early planned transition will be cheaper than radical dislocation later.

Each year that we delay is a direct transfer of a greater and greater burden upon future generations. This is intergenerational theft on a grand scale. Ironically history will show that the people doing the most to delay action are the ones who are undermining our economic system and our way of life into the future.

While I am proud to have established the Climate Change Authority and its solid contributions to informed public debate about our national aspirations to prevent global warming, the Greens do, with great respect, take issue with some of their underlying assumptions. We do not challenge the scientific data that sits behind their work, but we do challenge the level of probability we are aiming at to avoid tipping points which trigger dangerous feedback loops in our climate system.

The work of the Climate Change Authority is based on achieving a 67% chance of avoiding runaway global warming. The Australian Greens want targets that would provide a 75% chance of stabilising global temperatures at two degrees and a 50/50 chance of stabilising at 1.5 degrees. This is especially so given the latest science and the likelihood that the IPCC will reduce the carbon budget even further and, a push from the least developed countries and small island states for a global agreement of less than 1.5 degrees.

The Climate Change Authority's targets were also based on Australia's fair share of the global pollution budget calculated at 1% of global emissions. This is down from the 1.3% it is now. Why would any other country accept that is Australia's fair share at a time when we are pushing fossil fuels upon the world with our Prime Minister out advocating coal as being good for humanity and poverty reduction?

Why would they accept a 1% contribution is not enough for a rich nation like us especially as we are the world's highest emitter on a per capita basis (26.6 tonnes per person). We are just 0.3% of the global population but we are the 13th biggest polluter out of 247 countries.

Add to that the fact that 4/5ths of the coal we dig up here is exported to other countries where it ends up on our customer's greenhouse balance sheets. If we owned up to these harmful products that we are pushing, then by 2020 our sparsely populated continent would be responsible for 4% of global emissions. We have a huge global responsibility to do our fair share.

A final component in setting targets is based on the international principles of historical responsibility and ability to finance our contributions. Given that a great proportion of our historical (and current)

wealth has derived from emissions intensive activities and the export of fossil fuels, we are a wealthy nation well equipped to leverage the opportunities of the new low carbon global economy.

Science papers out daily, paint an even grimmer picture. Things are getting worse not better and adjustments are likely to be for greater cuts. The Authority has considered this, but by its very nature it is subjective and not reducible to hard science. For these reasons, (75% probability; 0.3% of global population; historical responsibility) and human and resource capacity to act, the Greens are announcing targets that are more ambitious.

To lift our ambition in this crucial global contract, and to provide enormous economic opportunities to new industries and innovators, the Greens post-2020 targets are for 40-50% by 2025 and 60-80% by 2030 taking us on a steady trajectory to reach net-zero pollution by 2040.

Many more nations will submit their targets in May. These aspirations have to be compiled and analysed in preparation for the Paris Summit to see whether each individual country's proposals when added together meet our global budget.

Australia has signaled it will announce its post-2020 target about the time of the UN meeting in Bonn, Germany in June. When this occurs, be ready for all sorts of accounting trickery which Australia is now famous for since John Howard successfully inserted "the Australia Clause" into the Kyoto protocol which allowed our total emissions to increase by 8% on the basis of halting land clearing that Peter Beattie's Queensland had already announced they would do.

When they eventually do announce our post 2020 target there will be many tricks to watch out for. Firstly, they will move the baseline year from 2000 to 2005 because that was the year of maximum pollution so comparing a 2020 target to 2005 makes it look bigger. By magic we go from a woefully inadequate 5% reduction on 2000 levels to a woefully inadequate 13% reduction on 2005 levels but it looks better.

Secondly, they will repeat what the Labor government did by offering a range based on conditions being satisfied. This is a tool simply to negate criticism and pretend its aspiration and political will is higher than what it really is. The Rudd government committed Australia to 5-25% by 2020 with the higher target to be achieved if there was international action. Those conditions Australia laid down were met by the Cancun and Copenhagen agreements, but any talk higher than 5% has been completely ignored by the media and the two political parties in lock-step on climate ambition. It served its purpose as a temporary distraction.

The Greens targets are ambitious, 40-50% by 2025, 60-80% by 2030, and net-zero pollution by 2040, but they are achievable and more importantly, they are essential. We spend billions on foreign wars allegedly to keep Australia safe when the greatest challenge to our security and well-being is runaway global warming.

Getting to zero pollution by 2040 is not the tale of woe, laden with costs, lost-jobs and heartache as the Abbott government and mining industry would have us all believe. Rapidly decarbonising our society is an opportunity to address what we don't like about the way we live and replace it with what we want, with the jobs to go with it, it is the greatest enabling wake-up call I can imagine.

But it's not enough to just have a destination, a goal, you have to have a pathway to get there and the Greens ambitious targets are accompanied by a clear pathway that will deliver not only emissions reductions but more resilient ecosystems that protect our precious plants, animals, forests, reefs, wetlands, rivers, that give us fresh water, clean air, uncontaminated soils. Plus it enables better educated, healthier, happier more productive, connected communities. What's not to love about that?

Transforming our economy will be the biggest driver of economic prosperity, job creation and innovation over the coming decades. Fighting global warming now, creates prosperity now.

The Greens pathway to achieve our national targets can be best described against those areas where highest levels of pollution occur. 50% of our 547 million tonnes of pollution each year come from our energy sector. So this is obviously the priority.

We need to keep the RET at 41,000 gigawatt hours by 2020. This would deliver 26-28% of Australia's energy and lift it massively into the future to achieve 100% renewable energy by 2030. As this new renewable energy supply comes on line, we can take more of the old coal generation offline. With such a staged, well-planned transition, we can prepare the transition from coal jobs into the jobs of the 21st century now. If we do nothing, these jobs will go anyway, but the decisions will be abrupt and throw people out of work without capacity to adjust. Already solar jobs outnumber coal jobs across Australia. The energy revolution has been won by renewables and solar has won.

We can immediately close down the 9000 megawatts of coal fired power that Australia's independent energy market operator has said that right now we don't even need. The Greens have a plan to remove our most polluting and redundant coal power stations. Hazelwood and Alcoa's Anglesea power station in Victoria, Callide and Stanwell in QLD and Lidell and Wallerawang in NSW.

The Greens support an emissions trading scheme which would send an economy wide price signal to shepherd investment towards cleaner activities and away from dirtier ones. But on its own, an ETS is no panacea to all the problems we face. The words Emissions Trading Scheme should not be seen as stand-alone code for climate action. The devil is in the detail and the extent to which it is effective relates to the severity of the cap, i.e. the target, and the generosity of the exemptions and the extent to which it drives transformation here at home through restriction of overseas permits. A trading scheme is one part in a policy mosaic.

We also need to make sure that there is consistency across policy. No political party can be serious about climate action, support an ETS to reduce emissions whilst supporting expansion in the coal and coal seam gas mining industries, maintaining fossil fuel subsidies or the logging of native forests.

The National Electricity Market is a case in point. It was designed for a previous era and is broken. We need new legislation to meet the needs of a low-carbon economy. Firstly, it needs an environmental objective in line with our greenhouse gas reduction target so that it is a tool to deliver Australia's agreed targets in international agreements. Secondly, there is currently a big financial incentive for companies to build more and more infrastructure which is why we have seen our bills go up with transmission and distribution now more than 50% of power bills. We have spent \$45 billion over the last five years on this – more than what the NBN was expected to cost. This has happened at the same time as we are all using less energy – so this gold-plated infrastructure will never be needed. The era of centralised power being carried hundreds of kilometres to its customer is coming largely to a close. The rise of locally generated, stored and distributed energy is inevitable and the electricity market must change. The fastest growing area of pollution in recent years has been in fugitive emissions created from coal mining and coal seam gas, now at 8%.

We must also leave coal and coal seam gas in the ground. The Greens do not support opening up new coal mines like the massive mines in the Galilee Basin, nor do we support the coal seam gas industry. The International Energy Agency has stated that the majority of the world's fossil fuel reserves cannot be burned. Our own scientists have said the same, with Professor Will Steffen out last week saying 88% of reserves have to stay in the ground.

For existing mines, we need to put a price on pollution for the dirty fuels we use at home, and we need to end fossil fuel subsidies and have a price on the pollution we export. Last election, the Greens said there must be a \$2 per tonne levy on fossil fuel exports with the money raised directed into a National Disaster Resilience Fund to cover the loss of community infrastructure and adaptation measures from the extreme weather events already occurring.

The citizens movement worldwide to take action against fossil fuels is gaining momentum especially as economic projections add to the case that fossil fuels are not only bad for the climate but bad for investments and will lead to stranded assets. The latest study by Beyond Zero Emissions suggests that the Australian federal budget will have a \$100 billion shortfall by 2030 because of the collapse of coal and gas exports.

We have seen a very exciting surge in citizens, institutions and religious organisations divesting from fossil fuels in Australia and around the world. ANU's divestment was met with hostility from the Abbott government, the Murdoch press and the Australian Financial Review. But ANU were vindicated when the shares they sold started to fall and the University realized a strong "return on divestment."

The Greens, through concerted public pressure forced the government's investment institution, the Future Fund to divest from tobacco. Now it is time for the Future Fund to get out of fossil fuels. When our country relies so much on coal and gas export revenues, further public investment in them is just pure exposure to climate and financial risk. The Future Fund must divest and re-invest in the emerging and profitable innovative renewable energy and low carbon industries of the future.

Not only do we need to rapidly clean up energy generation, but we also have to hasten this process already well underway to reduce the use of power. Again, there is huge job-creation potential in urban and industrial design, architecture and energy efficiency measures for households and businesses, as well as reducing waste. This needs to be coupled with providing incentives, as well as regulation, for product manufacturers and incentivizing them to invest in energy productivity research. We remain committed to a national energy efficiency target and a white certificate trading scheme to drive greater energy efficiency in the built environment.

We need to reshape our built environment, lift building standards which save occupants money over time. We need to break down the barriers that stop large commercial buildings and hospitals that generate their own power from trading energy with each other.

We need to restore the Australian Renewable Energy Agency's \$700m that was removed by the Abbott government and Clive Palmer, so that we can export knowledge and capacity building as well as cutting edge clean energy technologies to the world. We need to use our skills as a smart manufacturer to build high end products that can't simply be duplicated in countries with strengths in low cost manufacturing.

Our next biggest area of pollution which needs addressing to reach our necessarily ambitious targets is in transport – currently responsible for **17%** of our national greenhouse accounts. What has been identified as one of the lowest cost opportunities in the short term is mandatory fuel efficiency for vehicles. The Greens introduced legislation on this last year – it would match the current standards that the European Union have for vehicles sold there, but with a short delay so that car dealerships could adjust their import plans and to ensure there was no adverse impact on Australia's exiting car industry. This is ultimately a temporary measure as the rollout of electric vehicles by established car companies and emerging ones like Tesla together with battery storage technology is a major disruptor. It is fantastic that in my lifetime cars have gone from being for transport to now being part of the energy system and a potential net generator of wealth and electricity.

But this needs to be accompanied by major job creator that is massive investment in world class public transport systems around Australia. Government borrowing rates are at record lows right now and we should be capturing this opportunity to build for the future. We should have a public transport plan and investment.

Imagine our nation's major cities linked by high speed rail. No bigger road projects like West Connex and Melbourne's East West Link. We need the Melbourne Metro and the Parramatta Light Rail, reinstating the North Coast Rail lines from Casino to Murwillumbah and expanding bus and rail services right across this heavily congested city. Redesigned cities lead to less wasted time, more productivity, better health and better connected communities.

Agriculture and forestry is currently the next biggest emitter, at **15%** of our national greenhouse accounts. That is why we designed the Carbon Farming Initiative as part of the Clean Energy Package. It was designed to keep and enhance carbon in the landscape and led to generation of new jobs in Aboriginal communities through savannah burning for example. It was linked to the emissions trading system so that the big polluters paid for the permits generated by reducing emissions on farm and avoiding deforestation in the landscape. Research by ANU and ClimateWorks made it clear that this is an incredible opportunity is available for Australia to export credits, with farmers selling permits in the international market.

Australia's natural environment desperately needs to be supported by climate policy. Stopping logging of our native forests right now should be legislated. The latest science shows that our old growth forests are enormous carbon stores and it is critical that these are not released to atmosphere. The public purse has just thrown millions of dollars into native forest logging. Saving forests is good for the climate, biodiversity and the budget. Plantation estates have already been established through managed investment schemes and other incentives. It is time for Australia to add value to those plantation estates in a more environmentally sustainable way, create more jobs and reduce emissions at the same time. We are losing money and carbon sinks by logging our remaining forests.

Finally, it is also incumbent on governments around the country to lead by example in adjusting their procurement policies. President Obama has just done this and they are set to drive public sector emissions down by 40 percent by 2025 from 2008 levels. They are doing this through measures such as energy productivity retrofits of buildings, directly contracting renewable energy projects and lifting vehicle fuel efficiency standards used by the public service which not only reduces operating costs and saves taxpayers money, but it boosts domestic economic activity while driving down pollution.

The Greens have set strong, ambitious but absolutely necessary targets to reach the goal of less than two degrees of warming. We must be ambitious. We must reach 40-50% by 2025 and 60-80% by 2030 taking us on a steady trajectory to reach net-zero pollution by 2040. It seems arduous and overwhelming but Australia is perfectly placed to achieve all of these things. We are smart, have great natural resources. We are wealthy, generous and an endless enthusiasm to adopt new opportunities that present themselves.

The Australian Greens know what is at stake in facing global warming. We have the courage to say what needs to be said, and provide hope for our future, and the Abbott government and those who support it, focus on the past and give people nothing but despair.

"The stone age did not end for lack of stone" Nor will the fossil fuel age end for lack of fossil fuels. But political rethink is necessary. Those institutions based on the vested interests of the past are not capable

of delivering the changes that are necessary. That's where the Greens come in. The future is here, embrace it.

Thank you.