

Climate Change:

“Men argue. Nature acts.” — Voltaire

Researchers have shown that admitting an unwise decision threatens the ego. To avoid that, people continue to slog on with failed courses of action despite mounting losses. The vested interests of the fossil fuel industry (for example, see [Stanmore Coal man who won't change](#)) is standing in the way of Renewable Energy. If they don't change their perspectives this will make the fossil fuel industry more prone to becoming entrapped in losing endeavours. The ego wants to keep the past alive, and hold on to history, yet thinking about the future is necessary for survival.

David Suzuki comments on this human failing: “People...especially people in positions of power...have invested a tremendous amount of effort and time to get to where they are. They really don't want to hear that we're on the wrong path, that we've got to shift gears and start thinking differently. Our future will be determined by the choices we make now to prioritize clean energy, better transit and smarter urban design.”

What Ross Garnaut thinks about the scrapping of the Carbon Tax



Ross Garnaut was the architect of the Labor government's carbon pricing scheme, which has been scrapped by the Senate.

‘For me it's probably the biggest thing I've done in a busy life for more than seven years. Yes it's sad, but what I feel doesn't matter. What matters is that Australia – for a while, at least – will now be a drag on the international effort to combat this serious problem, and that makes it a bit less likely that the world will deal with the matter satisfactorily. That's the substantive issue at stake.’

‘There's no doubt that Australia is out of step. First of all, out of step for not dealing more strongly with the issue of climate change – you can reduce emissions and play your full part in an international effort without a market-based mechanism, it's just that the alternatives are more expensive, more difficult, and less certain to deliver good results than an emissions trading scheme or broadly based carbon pricing in other forms.’

Do you have any confidence that the Direct Action plan is the right way to go and can be made to work without being incredibly expensive? ‘Not as articulated in the government's White Paper. Something called direct action could work; one could even say that what the US is doing is a form of muscular direct action. But that's not what was described to us in the White Paper.’ (See below what the UK [whose carbon price is virtually nothing] are doing to combat carbon)

Will the Renewable Energy Target (RET) and the Clean Energy Finance Corporation be retained?

‘The retention of the **Renewable Energy Target** exactly as it is – that's what the Palmer United Party agreed to and the Labor Party also supports, so if they hold by those positions there'll be no change.’ The way the numbers stack up in the Senate, if the government tries to make changes to cut the Renewable Energy Target – and Labor and the Greens and at least three minor party senators block them – the government will not be able to pass its changes.



However it appears that investment in Renewable Energy has ground to a halt and it is unlikely that a clear path forward can be achieved until the next election.

See [Abbotts RET curse PM can cripple renewables by doing nothing](#)

Without the carbon price it will be harder to raise investments for Renewable Energy, see graph. However it is not just the Carbon Tax that the LNP government is killing off, they want to get rid of anything that reduces emissions, like the RET. Virtually all of the investment in new renewable capacity in the past decade has

been driven by the RET. In combination with reducing demand for grid electricity, this increase in renewables has driven significant reductions in emissions through displacement of coal. However whether the Federal Government attempts to wind back the Renewable Energy Target or not Australia's biggest cities are setting ambitious targets to cut carbon emissions **Sydney and Melbourne going green despite RET uncertainty**

Besides that, the **Clean Energy Finance Corporation** and **Australian Renewable Energy Agency** can give us substantial emissions reduction in the electricity sector – the largest single source of emissions in Australia. And electricity is even more important than it sounds, because if you decarbonize electricity you're well on the way to decarbonizing transport through subsequent electrification of transport.

So certainly keeping those three institutions in place, together with keeping the **Climate Change Authority**, which if properly funded has the capacity to undertake research and analysis and give transparent public advice on what our targets should be – that all amounts to much more than nothing. But of course if carbon pricing were part of the mix, we'd get similar reductions in the electricity sector at somewhat lower cost.'

What they are doing in the UK

UK shows how Australia can cut emissions without a carbon tax

For example, in the power sector, a major step up in investment in wind generation has occurred, including establishing the UK as the world's largest offshore wind industry. The underlying emissions intensity of the UK's electricity grid – meaning the intensity that could be achieved if the grid were operated to minimize emissions - has dropped by around 40% since 2007.

The boom in wind generation is due to a mix of subsidies for low-carbon generators, supportive arrangements for associated infrastructure such as transmission lines, and changes to the planning system that expedited approvals. To build on this progress, a major reform of the electricity market has been designed to almost completely decarbonize power generation by 2030.

In the transport sector, EU legislation governing emissions has spurred manufacturers to deliver new cars in the UK with 20% lower emissions over a five-year period to 2012, meeting the legislated objective 2 years early.

In the longer-term a greater shift towards electric vehicles will be required. While numbers of electric vehicles sold remains low, models are now coming onto the market. Financial support towards the purchase cost is available, and infrastructure to charge electric vehicles also being developed.

In buildings, too, policy instruments go well beyond carbon pricing. Regulations were tightened in 2010 and again in 2013 to prepare for all new homes to be zero carbon by 2016. Also, the renewable heat incentive is the world first feed in tariff for low-carbon heating systems, which if taken up could put the UK on track to installing around 4 million heat pumps in homes by 2030.

What India are doing!

India's finance minister has doubled the tax on coal imported to or mined in the country, raising the tariff from \$0.83 to \$1.67 per metric ton, with plans to use the revenue to fund a host of renewable energy projects over the next decade. **India doubles coal tax to fund ambitious clean energy initiative**

Yet with the **Adani Carmichael coal mine in the Galilee Basin** approved by Mr Hunt, that may mean a lot of coal being burnt in the Indian atmosphere, is it worth it? Adani still have to find \$16B to finance the project, and the Carmichael mine cannot go ahead without the financial support of one the big four Australian banks. Greenpeace will make sure every Australian knows that any bank cutting a cheque for Carmichael is making possible a monster mine that will endanger our Reef and our climate. If our political leaders won't govern in the national interest, Greenpeace will ensure Carmichael mine becomes 'a dead cat' in the in-tray of anyone involved with it. **Adani Carmichael Coal Mine approved**

Some GOOD NEWS: from the Clean Energy Finance Corporation (CEFC)

South Australia's Tindo Solar, an Australian solar PV company, has received up to \$20 million senior debt finance from the Clean Energy Finance Corporation (CEFC). The funding will allow Tindo to locally manufacture, install and own rooftop solar arrays and sell the power to the building occupants under a new power purchase agreement (PPA) program.



Australia's only solar panel manufacturer receives grant for solar arrays from New South Wales

Recently New South Wales Environment Minister Rob Stokes has said the state could be Australia's answer to California as he launched a new resource efficiency policy that will see government agencies pursuing solar leasing, energy efficiency projects including lighting upgrades, minimum 4.5 star NABERS ratings and environmental upgrade agreements. Dr Stokes also reaffirmed his government's commitment to the Renewable Energy Target as it stood. "We certainly support the 41,000 gigawatt-hour target. We think 41,000 gigawatt-hours is where we should go, but that is only the beginning," he said.

NSW wants to be the "California of Australia" on energy and environment

and Lord Howe Island turns to renewables to wean off diesel

A one megawatt, \$11.6 million renewable energy project with storage will see Lord Howe Island reduce its diesel consumption by 70 per cent, thanks to \$4.5 million in funding by the Australian Renewable Energy Agency. The hybrid system will feature wind, solar, battery storage as well as demand management technology. Lord Howe weans off Diesel The Lord Howe Island Board, which manages the island's infrastructure and services, has been awarded a multi-million dollar grant by the ARENA to create a 1MW hybrid renewable project harnessing and storing wind and solar power, with a target of achieving a 70 per cent renewable energy power system by 2018. If successful, the project is likely to serve as a strong, practical example of how renewable energy can be directly translated into hard economic benefits.



Self-sufficiency is a serious business when you live on an island 600kms east of the NSW mainland and a boat comes in once a fortnight from Port Macquarie with supplies that includes diesel for the island's generator to provide power to 350 residents and 400 tourists. It costs around \$1.70 per litre to ship diesel in, compared with an average NSW price of \$1.58 per litre and the island's board subsidizes electricity for islanders due to the high cost of generation. If the renewable hybrid power project goes ahead, a study by Powercorp on the island's energy supply says it expects the cost of a unit of energy to plummet to less than half of the cost of supplying it solely by diesel generation.

Carbon Farming

Some of Australia's leading carbon farming specialists have visited CQ University to hear of the latest relevant research in their field. Carbon farming encompasses a range of processes enabling organic material to be locked into the soil, or even boosted, thus improving soil quality while reducing carbon leakage into the atmosphere. **CQ Uni researchers involved in healthy soils field day**

However a number of scientists, including from the state-run Commonwealth Scientific and Industrial Research Organisation (CSIRO), have criticised the government for exaggerating soil carbon's potential.



"Soil carbon in agricultural zones is likely to provide low levels of greenhouse gas abatement," CSIRO said recently in a submission to a Senate inquiry into the government's climate policies. Read more?

Carbon economy graziers now able to tap carbon farming

Sustainable Central Queensland an initiative of CCC welcomes contributions on energy efficiency; technological options and actions individuals and groups can take help CQ lead the transition to a sustainable future. Opinions may not necessarily represent the policy of Capricorn Conservation Council.

Explaining climate change science & rebutting global warming misinformation

Scientific skepticism is healthy. Scientists should always challenge themselves to improve their understanding. Yet this isn't what happens with climate change denial. Skeptics vigorously criticise any evidence that supports man-made global warming and yet embrace any argument, op-ed, blog or study that purports to refute global warming. This website gets skeptical about global warming skepticism. Do their arguments have any scientific basis? What does the peer reviewed scientific literature say? <http://www.skepticalscience.com/>

