Theresa Stinson

From: Melanie Pilgrim
Sent: Wednesday, 21 June 2017 10:45 AM
To: Danielle Cohen
Subject: FW: Capture and Send : AFC
Attachments: 21-06-2017_10-40-32_E176M140140_melanie.pilgrim-ministerial.qld.gov.au.pdf

-----Original Message-----
From: Equitrac@qgaaad.qld.gov.au [mailto:Equitrac@qgaaad.qld.gov.au]
Sent: Wednesday, 21 June 2017 10:42 AM
To: Melanie Pilgrim <Melanie.Pilgrim@ministerial.qld.gov.au>
Subject: Capture and Send

Scan: melanie.pilgrim@ministerial.qld.gov.au via Capture and Send:

Priorities for the Queensland Government Climate Change Policy

Context

The Australian Conservation Foundation submits the following elements to be adopted as part of a comprehensive climate change policy for announcement prior to the next state election. This document has had significant input for the Environmental Defenders Office – Qld, Solar Citizens, The Wilderness Society and GetUp.

Background

The Queensland Government has recognised the need 'both to adapt to the effects of a changing climate, and to mitigate the effects of climate change through reducing greenhouse gas emissions'.

The government has explicitly stated that 'Queensland is willing to play its part in reducing greenhouse gas emissions.' This commitment requires tangible action and legislated policy commitments that provide certain, stable, effective and predictable climate policy settings.

Climate change is already impacting the people and economy of Queensland, including through the increased incidence of extreme weather and the worst coral bleaching ever experienced on the Great Barrier Reef, which has left the entire reef system in peril.

The science is clear and has been endorsed by the international community, which through the Paris Agreement has agreed to the aim of limiting global warming to well below 2 degrees Celsius above pre-industrial global temperatures and pursuing efforts to limit the temperature increase to 1.5 degrees. Consistent with this goal is the need for all jurisdictions to reduce their greenhouse pollution to net zero before mid-century.

It is incumbent upon the State Government to take strong action consistent with keeping global warming under a 1.5 - 2-degree threshold.

CURRENT ACTIONS

We acknowledge and welcome the Queensland Government's current efforts with regards to climate change mitigation, in particular its commitment to a 50% Renewable Energy Target (RET) by 2030, noting the position of the climate movement under the auspices of the Climate Action Network Australia (CANA) is 100% renewable power by 2030. We also recognise plans to reduce emissions including supporting measures associated with renewable energy, particularly focusing on solar and a mandate for biofuels.

The government supports greater use of renewable energy, with key commitments announced under A Solar Future plan including:

- Setting a target of one million solar rooftops (3,000mw) by 2020.

- A 50% renewable energy target (http://www.qldrepanel.com.au/issues-paper) for 2030.
- Supporting up to 150 megawatts of large-scale solar power generation through the Solar 150 initiative.

These measures will complement and support the government's commitment to protect the Great Barrier Reef including to 'keep carbon in the ground' through vegetation protection measures.

QUEENSLAND CARBON POLLUTION PROJECTIONS

But more work needs to be done, particularly in the absence of coherent federal leadership to address climate change, for Queensland to keep up with leaders in South Australia and Victoria and to reap its share of the economic and employment benefits.

Carbon Pollution Projections: Queensland's Baseline Greenhouse Gas Emissions to 2030 (PDF, 640KB) (http://www.ehp.qld.gov.au/assets/documents/climate/carbon-pollution-projections.pdf) provides a clear picture of Queensland's emissions profile into the future in the absence of any new emissions policy measures.

If Queensland takes no new steps to reduce its carbon pollution, the baseline scenario projects emissions would rise by 35% by 2030. As custodians of iconic natural wonders such as the Great Barrier Reef, which supports nearly 70,000 jobs and is under threat from rising global temperatures, Queensland doing nothing will result in our emissions rising significantly over the next 15 years at the very time they need to be reduced.

The Queensland Government accepts the overwhelming scientific consensus on the causes and consequences of climate change and sees understanding the emissions generated as the important step towards developing a strategy for tackling carbon pollution in Queensland.

FRAMEWORK FOR INTERNATIONAL BEST PRACTICE

The United Nations Framework Convention on Climate Change (UNFCCC) has noted best practice elements of climate change legislative frameworks including the following:

- Targets which are based on the best available scientific evidence;
- A bottom up pledge and review approach;
- A ratchet approach under which interim targets can be continually strengthened;
- Five yearly reviews to align with the UNFCCC reporting process; and
- Linking adaptation and disaster risk reduction.

Summary of Policy Recommendations to the Queensland government

RECOMMENDATIONS WITH REGARDS TO THE DELIVERY OF THE 50% BY 2030 RET

1. Implement a Fair Price for Solar by mandating a minimum feed in tariff for all solar producers. A Fair Price needs to consider the wholesale energy cost, the network savings and benefits to the society and the environment. Our modelling puts a fair price for exported solar electricity in Queensland between 10.6c and 18.2c per kWh.

2. Legislate;

    a. A target of 50% renewable electricity by 2030 as a floor and not a ceiling, and implement policies that lead to 100% renewable electricity sooner;
    b. Short, medium and long-term state renewable energy targets in five year tranches, to give communities, business and investors certainty;
    c. Reviews targets at least every five years to determine how it can be increased;
    d. The 'linear' rather than the 'ramp up' pathway considered by the Queensland Government Renewable Energy Expert Panel, to maximise cumulative carbon pollution reduction, to ensure a stable and smooth expansion of the renewable construction industry and to create more clean energy jobs sooner.

3. Legislate to ensure that the Queensland Renewable Energy Target is measured exclusive of any pro-rata share of the National RET. Increase the pre-2020 auction from the recommended 400 MWH to align Queensland state target with National target of at least 20% by 2020. We estimate this to be around 2500 MWH.

4. Ensure that policy measures to deliver the 50% RET ensure a diverse ownership structure with a mix of public, private and community ownership of renewable generation infrastructure. At minimum, public ownership of Queensland's large-scale energy generation infrastructure should be maintained at its current proportion of 60%.This position is backed by Queensland voters, who strongly oppose electricity privatisation. Polling in the seats of Mundingburra, Cooper, South Brisbane and Mt Ommaney found 39.7 to 47.1% support for new renewable generation to be entirely publicly owned, 43.6 to 47.8% support for a mix of public and private ownership, and just 7.9 to 14.3% support for new renewables to be entirely privately owned.

5. Establish a community power network and community powerhouses including a community energy grant funding program) to support the delivery of renewable energy solutions led by communities and in social and community housing, rental properties, apartment-style living and isolated regional and Indigenous communities.

6. Develop just transition and economic diversification plans to guide people who work in affected industries and their communities as they transition from coal-power to renewable energy, including financial assistance.

RECOMMENDATIONS WITH REGARDS TO BROADER CLIMATE CHANGE POLICY

1. Legislate a Queensland Climate Change Act including;

    a. A long-term target to achieve net zero greenhouse pollution by 2040 to 2050 and interim carbon pollution reduction targets;
    b. A framework for monitoring, reporting and verification is necessary to ensure transparency and accountability and drive continuous improvement;
    c. Adaptation Plans with regular review and updates.

2. Commit to a Climate Charter as part of the legislation to mainstream climate change considerations throughout government decision making, including a 'climate test' to ensure that all public authorities, when making an administrative or financial decision, assess whether that decision will enhance or reduce Queensland's ability to achieve the state's emission targets.

3. As part of making the energy transition in Queensland, announce that no further environmental approvals or mining licences will be granted for coal mines across the state.

4. Within 12 months of the election the Queensland gGovernment will develop a plan for a clean energy transition that provides a timeline for the phased, and well-managed closure of coal-burning generators by 2030. This timeframe is required to achieve net zero pollution well before 2050. The coal retirement plan must be implemented in conjunction with the plan to grow the state's renewable energy capacity, and include a process to provide just transitions for impacted workers and communities.

5. Implement via legislation a Queensland energy efficiency retailer obligation scheme, which enshrines efficiency targets for electricity retailers. Equity considerations should come into play when developing such a scheme and targeted programs should be delivered for those most in need. The state should also pursue improved building standards with mandatory disclosure at point of sale or lease, improved appliance standards, initiatives to provide accessible and affordable finance, government building upgrades, and establishment of.

6. Within 12 months of election develop a transport strategy that prioritises more public and active transport, and provides for a transition to low and zero emissions vehicles.

7. Protect Queensland's forests and woodlands with new laws. This includes: preventing land clearing of all remnant vegetation; preventing clearing of high conservation value regrowth vegetation, including in the Murray-Darling Basin and Great Barrier Reef catchments; considering setting a volumetric state-wide cap on all other vegetation clearing; removing assessment exemptions for thinning, fodder harvesting and mining activities, and tightening the rules. Legislative protection of native vegetation should be consistent across all sectors that undertake land clearing, including agriculture, mining and urban development.

8. Establish land carbon fund. This involves allocating $300 million[2] over a three-year period to fund land carbon projects that also meet biodiversity and/or reef catchment health requirements, with an emphasis on providing a substantial economic boost to regional Queensland. This should include resourcing to re-establish the Queensland Herbarium's land carbon research team (three FTEs—funding was pulled under the Newman Government) and dedicated staff and resources within the Department of Environment and Heritage Protection. It should also include resources for detailed economic research into the benefits for regional Queensland.

9. Enlist voluntary actions with a pledge initiative that is similar to the Victorian Government's Take2 Pledge program, http://www.sustainability.vic.gov.au/services-and-advice/community/take2 to encourage pollution reduction from state and local government's own operations as well as ~~from key emitting sectors of the economy.~~

10. National advocacy;

- Advocate for a national market mechanism that will efficiently, effectively and predictably address greenhouse pollution and make structural adjustments to the Australian economy;
- As part of the COAG Energy Council and through further national advocacy, push for National Electricity Market reform and a national renewable energy transition plan to support the growth of renewable energy in Queensland;
- Encourage stronger national leadership on energy efficiency/productivity including an increased target to double Australia's energy productivity by 2030, improved minimum standards for appliances and performance standards for buildings, mandatory disclosure at point of sale or lease, and more energy efficient government buildings;
- Encourage the federal government to set ambitious vehicle emissions standards to start in 2017 that bring Australia into line with current European Union standards by 2020, and a further phased approach to reach the EU's 2021 standard by 2023; to set a target for 50 per cent of all new car sales in Australia to be EVs by 2026; and to introduce an Australian Electric Vehicle Strategy;
- End fossil fuel subsidies including preferential tax arrangements, concessional loans (including from the Northern Australia Infrastructure Facility - NAIF)

RECOMMENDATIONS WITH REGARDS TO THE ADANI CARMICHAEL MINE

That the Queensland government:

1. Commit to the buyback of Adani's mining licence;
2. Honour its commitment that no public money will be spent on Adani's Carmichael mine and associated infrastructure. This commitment must encompass loans provided to the Queensland Government via the Northern Australia Infrastructure Facility and investment via state bodies such as QIC;
3. Commit to securing total financial assurance from Adani for mine rehabilitation;
4. Commit to not extinguishing Traditional Owner Native Title rights.

Policy Recommendations in Depth

1. Recommendations with regards to delivery of the 50% by 2030 RET

IMPLEMENT A FAIR PRICE FOR SOLAR BY MANDATING A MINIUMUM FEED IN TARIFF

We need a minimum price paid to solar owners that reflects the benefits of rooftop solar. Solar power is more efficient, cleaner, safer and provides resilience to our electricity supply. These benefits are not calculated in the price for solar electricity.

The rules that govern electricity prices were designed to finance the investments of the past, not to build the energy system of the future. But the electricity sector is changing and our rules need to

change with it. A crucial part of this reform is to make sure that the millions of Australians who have invested in solar power get a fair price for the clean energy they feed into the grid.

Distributed renewable energy generation, including solar PV, has many benefits on top of those outlined above. These are real economic advantages even though they cannot be readily translated to a c/kWh value:

- **Reduced CO2 emissions** - Each kWh of solar PV that displaces coal-fired electricity avoids carbon pollution worth a minimum of 2.4c to 3.1c using current carbon pricing estimates.

- **Health benefits** - Based on research by the Australian Academy of Technological Sciences and Engineering, each kWh of solar PV that displaces coal fired electricity contributes 1.3c in reduced health costs.

- **Direct jobs** - Research by Ernst & Young for the Climate Council has shown that generating 50% of our electricity from renewables by 2030 would lead to over 28,000 new jobs and more than 50% more employment than a business as usual scenario.

- **Industry development** - Beyond the direct jobs in solar installation, building Australia's capacity in emerging technologies such as battery storage, smart grids and demand management will create the jobs of the future as the world moves to a decentralized and decarbonized energy system.

- **Energy security** - An electricity system that is based on distributed local generation from a variety of renewable sources combined with local storage will not only reduce costs, it will make for a more robust and secure system that is less prone to failures caused by centralized infrastructure.

- **Price stability** - Renewable energy technologies have high capital costs, but very low and predictable running costs and the fuel is free of charge! This contributes to long term price stability compared with fossil fuel based alternatives.

- **Energy literacy** - Installation of solar PV gives homeowners a strong interest and motivation to better understand and manage their energy consumption. This will be an important driver of the uptake of new technologies such as local storage, demand management and integration of electric vehicle charging which can ultimately lead to a more flexible and economical electricity system.

- **Avoided transmission costs** - Retailers pass charges for the use of the transmission network on to consumers irrespective of whether the energy is sourced via the transmission networks or locally from solar photovoltaic (PV) systems. Customers pay for a service that is not provided (use of the transmission network for the proportion of their energy that comes from distributed generation). Transmission charges should only apply to the electricity actually carried on the transmission network. These savings should be shared with solar owners.

- **Reduced distribution costs** - Distributed generation can place less strain on the distribution network and thereby reduce costs in at least two ways. Firstly, exported energy from solar PV is typically used close to the point of export and therefore makes significantly less use of the 'poles and wires.' Secondly, a significant proportion of the cost of the distribution network is the transformers which convert higher voltages down to 230V. Solar inverters have this capability built in and export power at 230V. The value of solar PV in reducing costs for network operators is highly dependent on time and location, as well as the capacity and asset life cycle of local distribution infrastructure. Our maximum value saving assumes local solar avoids using the high voltage and sub-transmission parts of the distribution network, which account for over 50% of costs.

- **Wholesale price of electricity** - Regulators generally use an average wholesale price energy when calculating solar feed-in tariffs (FITs). Arguably, solar exports are worth more than the average price because (except in Tasmania) they are fed in during times when wholesale energy prices are higher than average. This is in line with the nationally agreed principle that FiTs should take into account "the time of day during which energy is exported." In Victoria, from July 2017 the solar FiT will vary based on the time of day in three bands (peak/shoulder/off-peak), as well as an additional 'critical peak' payment at times of very high wholesale prices. In addition to the avoided cost of purchasing wholesale electricity, solar PV can play a role in pushing down the wholesale price of electricity for all consumers. This is called the 'merit order effect' and it can be significant when demand and wholesale prices are high.

What needs to change?

- Implement a Fair Price for Solar by mandating a minimum feed in tariff for all solar producers. A Fair Price needs to consider the wholesale energy cost, the network savings and benefits to the society and the environment. Our modelling puts a fair price between 10.6c and 18.2c per kWh.
- The price paid to rooftop solar owners should be linked to the wholesale market. Solar is actually produced at peak times during hot days when the sun is shining and air-conditioners raise demand so it is inherently more valuable.
- Rules for network charges should be updated to reflect the fact that rooftop solar makes much less use of network infrastructure. At a minimum, solar should not be charged transmission costs.
- The retail market needs to be opened up so that rooftop solar owners can sell, share or gift their electricity on the grid with appropriate reflective cost of the grid applying.
- The environmental and health benefits of rooftop solar and other renewable sources should be recognised via the feed-in tariff or other mechanisms such as a carbon price on polluting generation.

2. Recommendations with regards to broader climate change policy

CLIMATE CHANGE ACT: LEGISLATE A LONG-TERM TARGET FOR GREENHOUSE POLLUTION REDUCTION & ESTABLISH A FRAMEWORK FOR SETTING & MEETING INTERIM TARGETS

Strong state-based climate pollution reduction targets are important to drive effective policy and send a clear message to business, investors and the community. Queensland's renewable energy policy would benefit from a commitment to a long-term legislated carbon pollution reduction target and interim targets to ensure carbon pollution is reduced year on year.

Both South Australia and Victoria have committed to a state-based long-term greenhouse gas emissions reduction target of net zero by 2050. In both cases, long-term targets will be supported by interim targets (e.g., in Victoria, five-yearly interim targets will be established), which will ensure an orderly and manageable transition, while also ensuring the long-term target is met.

A long-term target to achieve net zero greenhouse pollution by 2040 to 2050 and interim carbon pollution reduction targets should be legislated by the Queensland government to send a strong signal about the state government's intentions. Enshrining targets in legislation communicates that the government is genuinely committed to achieving emissions reduction and provides clear emissions reduction benchmarks for the Queensland community and certainty for businesses. Interim targets should be based on independent expert advice, should each be more ambitious than the previous, and should be consistent with achieving net zero greenhouse pollution by 2050.

Regular reviews also need to ensure the targets are in line with updated science, new technology developments, reduced costs of climate solutions and other factors that allow for higher ambition.

As part of the Climate Change Act, a framework for monitoring, reporting and verification is necessary to ensure transparency and accountability and drive continuous improvement. This needs to include regular greenhouse pollution reporting and independent audits.

Queensland's commitment to adaptation plans should be embedded in the Act and should be tied to climate science reviews that draw on the most up to date information about climate science and its impacts. The Adaptation Plans need regular (5-yearly) updates and must be worked out with local government and communities. In Victoria, the Act devolves responsibility to relevant portfolio Ministers.

CLIMATE CHANGE CHARTER THAT APPLIES TO ALL GOVERNMENT DECISIONS

Climate change principles and objectives should be considered in all plans, policies, programs and operations decision making across government. An effective means of mainstreaming climate change mitigation and adaptation into policymaking and decisions across whole of government is to commit to a 'Climate Charter' as part of climate change legislation. A similar proposal was made to the Victorian State Government and taken up by the Climate Change Act Independent Review Panel. For more info on this recommendation, see the Review Panel's Report which can be found here:http://www.parliament.vic.gov.au/file_uploads/Independent_Review_of_the_Climate_Change_Act_2010_Bcx0JW19.pdf

The Climate Charter should include a 'climate test' to ensure the Climate Charter not only mandate consideration of climate change in government decisions but also leads to emissions reductions. A climate test would provide that all public authorities, when making an administrative decision or financial decision, must assess whether that decision will enhance or reduce Queensland's ability to

achieve the state's emission targets. If the effect of making the decision would be to reduce the state's ability to meet the targets, the subject of the decision would need to be modified until it did not reduce Queensland's ability to achieve the short-term and long-term targets.

This climate test would be the primary tool in a Climate Change Act to ensure that climate change considerations and the achievement of the emissions reduction targets are embedded in government decision-making. The test provides a clear mechanism that links government decisions and emission reduction targets.

COAL CLOSURE PLAN

Eleven coal generators have closed across Australia in the past decade. The state government has an important role to play in helping to plan and manage future closures and to provide early economic transition assistance for communities that will be impacted. Queensland does not have the nation's dirtiest power stations, which will likely be the national priorities for closure. However, with the majority of electricity generation in Queensland currently sourced from coal-fired power stations in central and south east Queensland, future closures are an inevitable part of achieving net zero greenhouse pollution and transitioning to clean renewable energy.

To genuinely curb the state's contribution to climate change, a plan for coal closure needs to be developed and implemented in conjunction with the plan to grow the state's renewable energy capacity. This plan should start with a moratorium on new coal mines and expansion of existing coal mines as a first step to ending all future approvals and curbing scope 3 emissions.

In addition, the state government should include a direct and clear legislative requirement for scope 3 emissions in Environmental Authority assessment processes under the Environmental Protection Act 1994 (EP Act) and give sufficient weight to scope 3 emissions in light of the impact on climate change.

TAKE FULL ADVANTAGE OF ENERGY EFFICIENCY

Energy efficiency measures offer some of the cheapest forms of carbon abatement, and can in many cases be cost negative. Policies to improve energy efficiency offer an important complement to renewable energy policies. Energy efficiency offers cost savings, carbon pollution reduction, improved community health and well-being and better energy management including reduction in peak electricity demand. Energy efficiency can off-set additional costs that may come with the initial investment in higher levels of renewable energy.

In considering the national opportunity presented by energy efficiency, the Australian Alliance to Save Energy maintains that doubling Australia's energy productivity by 2030 would save energy consumers $30 billion per year by 2030 while increasing growth and reducing carbon pollution by 25 per cent compared to business as usual. In addition, commitment to greater energy efficiency will create jobs. For example, in Victoria it was estimated that upgrading the state's housing stock to an average 5-star standard by 2025 would support an estimated 13,000 jobs over ten years and 8500

ongoing jobs.[1] The Energy Efficiency Council notes that improving energy efficiency will also offer the opportunity to tap into a global energy efficiency market worth $470 billion per year.[2]

The Queensland government must take full advantage of the carbon reduction and cost savings opportunities offered by energy efficiency including through improved building and appliance standards, initiatives to provide accessible finance, government building upgrades, and establishment of a state-based program such as an energy efficiency retailer obligation.

State-based programs such as energy efficiency retailer obligations have been successful in NSW, Victoria, South Australia and ACT. While scheme design differs from state to state, most involve the setting of energy efficiency targets for electricity retailers, who are required to pay for third parties to provide energy efficiency services or products to households and businesses. The costs of the schemes are passed on to consumers through their bills.

Equity considerations should come into play when developing such a scheme. Some schemes, such as the South Australia Residential Energy Efficiency Scheme, have addressed equity issues through setting participation targets for pensioner concession card or health care cardholders.

TRANSPORT STRATEGY THAT SUPPORTS MORE PUBLIC & ACTIVE TRANSPORT & A TRANSITION TO LOW & ZERO EMISSIONS VEHICLES

In addition to policies that support low and zero emission vehicles, the state's planning processes should support strong growth in public transport and work to transition transport systems to renewable energy sources. Public transport infrastructure should be given preference before construction of new motorways wherever possible, and support should be provided for active transport infrastructure as well as priority traffic measures such as bus lanes, transit lanes and bicycle lanes.

Support the uptake of Electric Vehicles (EVs) requires national advocacy for Federal initiatives, preferential registration fees for low and zero emission vehicles, conversion of Government fleets to low and zero emissions, and roll out of EV infrastructure charge points in high traffic areas. Public and active transport must be a priority in all relevant planning processes.

Introduce transparent and independent analysis of the social, economic and environmental costs and benefit

LAND SECTOR: VALUE CARBON RETAINED IN THE LANDSACPE & CURB LAND CLEARING

Ecosystem disturbance from a range of activities across the resource sector remain largely unaddressed in Queensland's carbon accounting. The value of carbon retained within the landscape and offsetting areas and emissions from clearing for resource development remain an underutilised mechanism for both biodiversity conservation and carbon abatement outcomes.

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[1] Environment Victoria, *Six Steps to Efficiency Leadership: the path to Energy and Water Efficient Homes and Businesses*, November 2015.
[2] Energy Efficiency Council, Australian Energy Efficiency Policy Handbook, July 2016.

Land clearing is a major biodiversity, wildlife, Great Barrier Reef health, landscape and river health, and the climate. Next to climate change and the extraction and burning of fossil fuels, it is Queensland's largest environmental challenge. Land clearing rates have surged following the weakening of regulations and enforcement by the Newman Government. In 2009–2010, the clearing rate was 77,590 hectares, which tripled to 296,000 in 2014–2015.1 An area the size of the MCG is now cleared every three minutes in Queensland—this is an environmental crisis.

Queensland, of all of the states, stands to gain the most from a booming land carbon sector. A sector where landholders are paid to draw down significant quantities of carbon from the atmosphere or reduce greenhouse gas emissions through better land management—at the same time as improving biodiversity. Queensland researchers have highlighted that, at even a low carbon price of $20/tonne, it would be more profitable for many Queensland landholders to farm carbon rather than cattle or sheep, or at least diversify their business with some carbon farming.

There is an historic opportunity for the Queensland Government to package together a forward-looking solution to land protection and regional development. This is centred on addressing the entrenched and protracted land clearing dispute, and supporting and building a land carbon sector. By including a much greater emphasis on land carbon, this will provide an opportunity to promote regional jobs and highlight the myriad deficiencies and contradictions of the Federal Government's approach to climate policy and the land sector.

ENLIST VOLUNTARY ACTIONS WITH A PLEDGE INITIATIVE

Like the Victorian Government's recently launched Take2 Pledge program, the Queensland government needs to encourage pollution reduction from state and local government's own operations as well as from key emitting sectors of the economy. A pledge-based initiative that enlists voluntary actions as part of the overall climate strategy should be implemented.

3. Recommendations with regards to the Adani Carmichael coal mine

"I want to lead a government that puts the future of our reef beyond any doubt".

Annastacia Palaszczuck - ALP campaign launch event, 19th January 2015

If built, Adani's Carmichael mine will be the biggest coal mine built in the Southern Hemisphere and represents a critical tipping point in the worldwide effort to limit global warming to 2 degrees. Queensland has a moral and economic responsibility to protect what is left of the Great Barrier Reef. It is now widely accepted the opening up of new coal mines and continued burning of additional coal is incompatible with the Reef having a future.

It will produce an estimated 4.7 billion tonnes of emissions from the burning of its coal. These emissions are over 0.5% of the remaining carbon budget to have a likely chance of limiting global temperature rises to 2 degrees Celsius above pre-industrial levels.

The mine requires a railway line and the expansion of Abbot Point Port on the Great Barrier Reef coast. The building of this infrastructure would pave the way for other projects in the Galilee

Basin. If all the mines planned for the Basin proceed, the coal burned will use up an estimated 6.7% of the global carbon budget to 2050.

Further, it presents an imminent and significant threat to threatened species, especially the Black Throated Finch, and to groundwater supplies, as well as directly to the Great Barrier Reef.

Since 2015 Premier Palaszczuk has been unequivocal that public money will not be used to facilitate mining projects, and it is critical that the Queensland government honour its commitment that no public money will be spent on Adani's Carmichael mine and associated infrastructure.

This commitment must include loans provided to the Queensland Government via the Northern Australia Infrastructure Facility and investment via state bodies such as QIC.

We note that the Queensland government:

1. Can veto any NAIF loan proposed by the federal government of the NAIF Board;
2. As the primary shareholder, can introduce for QIC a clear investment mandate similar to that being introduced in commercial banks that guides investment way from fossil fuels such as greenfield coal projects.

The Adani Carmichael Mine will be the largest coal mine in the State's and Australia's history. Rehabilitating a mine of this size has never been contemplated before. The level of financial assurance (FA) needed to protect the interests of the QLD tax payer will be at least double that of any current financial assurance held for a coal mine in Queensland.

Due to the parlous financial state of Adani Mining Pty Ltd (the proponent of the coal mine) which is only solvent due to support from its parent company in India, they should be required to provide a full upfront cash bond to ensure that funds will be available if needed to complete rehabilitation and closure of the mine. This is necessary because Adani Mining Pty Ltd is a company without substantial on-going equity bases in Australia, and thus represents a substantial default risk in relation to rehabilitation costs.

While cash bonds is a departure from the norm it is not unprecedented in Queensland. In early 2016 Rio Tinto lodged $80m in cash in a Government escrow account to cover part of the cost of rehabilitating the Blair Athol mine in an attempt to facilitate the transfer of the mining lease to junior miner TerraCom.

A transparent, independent expert review of the required financial assurance must also be conducted based on best practice industry standards for calculating closure costs. There should be no discounts and Adani must not be able to use its own calculator. This is needed due to the unprecedented size of the project and the known current failings of the financial assurance system.

Any financial assurance must also include a contingency of 40% in the first Plan of Operations period due to the incompleteness of this concept level closure and rehabilitation plan and the size and complexity of the project. This is consistent with standard engineering project cost assessment.

For further information contact ACF's National Program Manager – Climate Change & Clean Energy, Gavan McFadzean e: gavan.mcfadzean@acf.org.au m: 0414 754 023