

CLIMATE CHANGE ACTION PLAN

FACT SHEET

laborsclimatechangeactionplan.org.au

CLIMATE CHANGE ACTION PLAN OVERVIEW

Labor accepts the science that human activity has increased average global temperatures, leading to climate change. Labor endorses the commitment by the world's nations in Paris in 2015 to keep global warming well below two degrees Celsius as well as a more qualified commitment in the agreement around a 1.5 degree threshold.

The Paris commitment reflects the overwhelming advice from scientists that global warming beyond two degrees Celsius will be particularly damaging to economies and ecosystems, and impose a huge burden on future generations.

The consequences of refusing to take real action on climate change will be devastating for Australia and our economy. We will experience more extreme weather events and face heightened instability in our region.

Labor will cut pollution through the best available pathway and in the most economically efficient way to protect our strong economy and the environment. We will transform our energy markets, to cleaner, more efficient sources and deliver 50 per cent renewable energy by 2030.

Only Labor will build an Emissions Trading Scheme and a suite of energy efficiency and transition measures underpinned by a pollution reduction target of net zero pollution by 2050. We will put a cap on pollution and create new opportunities for Australian firms to trade and engage with other ETS jurisdictions – already 40 per cent of the world's economy.

Labor has an economic and environmental plan to combat climate change by getting Australia's pollution levels back under control and ensuring that Australian business and workers are in the best position possible to benefit from the huge investment and job opportunities that will flow from a renewable energy and clean technology future.

Labor's plan does not include a carbon tax or a fixed price on pollution. Our Climate Change Action Plan provides a pathway for an orderly transition to a low pollution economy through six key elements:

- 1. **Make Australia a Leading Renewable Energy Economy** by ensuring that 50 per cent of the nation's electricity is sourced from renewable energy by 2030, providing the Clean Energy Finance Corporation with more certainty and more flexibility with less red tape and more technology options, and developing new community power projects.
- 2. **Cleaner Power Generation** ensuring that the transition in Australia's electricity generation from old heavy polluting coal fired power stations to modern clean energy is an orderly transition, with concrete support for workers and communities.
- 3. **Build Jobs and Industry** maximising the job opportunities from clean energy and clean technology, while also securing the future of critical Australian industries through a Strategic Industries Taskforce. This will be supported by a Strategic Industries Reserve Fund of \$300 million to support the transition of key industries to 2020.
- 4. **Cut Pollution** through an Emissions Trading Scheme, placing a legal cap on pollution from large polluters through a cap and offsets scheme, while supporting industry by ensuring access to international carbon offsets.
- 5. **Capture Carbon on the Land** by reinvigorating the Carbon Farming Initiative to encourage carbon storage on the land and in agriculture, and taking decisive action to deal with broad scale land clearing.
- 6. **Increased Energy Efficiency** doubling Australia's national energy productivity by 2030 and implementing new emissions standards for motor vehicles to cut pollution on our roads.

Why We Must Take Action

Labor's Climate Change Action Plan will help secure Australia's economic future in the 21st century and beyond. Failure to take real action on climate change will make Australia less attractive to investors and hinder economic growth.

Without real action, we will see more extreme weather events. An increase in drought frequency alone will cost our economy \$7.3 billion a year – shrinking growth in our economy by a full percentage point of GDP. Just a 1.1 metre rise in the sea level, would cause \$226 billion in damage to coastal property and infrastructure – that's 250,000 homes, 1,800 bridges, 120 seaports, Sydney and Brisbane Airports.

The CSIRO has said that the current warming of over one degree Celsius is already costing the nation. We are seeing significant challenges to the Great Barrier Reef hurting tourism, impacting \$5.7 billion in tourism dollars from the Reef and 65,000 jobs in regional towns. We are experiencing increased annual rainfall variability and dangerous water shortages. On top of that, there are higher fire risks through changes in temperature, more heatwaves impacting our health, dangerous water shortages and large areas of agricultural land taken out of

Our plan will help grow the economy while creating and securing the jobs of the future. It is underpinned by Labor's fundamental commitment to fairness, ensuring that Australians are supported through this transition and no one is left behind.

Pollution Reduction Targets

production.

The science is beyond doubt - human activity since the industrial revolution has increased average global temperatures, leading to climate change. Labor endorses the commitment by 195 nations as part of Paris Agreement to keep global warming well below two degrees Celsius.

To ensure that Australia does its fair share along with other nations to deliver on the 2015 Paris Agreement, Labor has committed to the following:

- Net Zero Pollution by 2050 consistent with the Paris agreement to achieve a balance between emissions generated and those offset, sequestered or removed in the second half of this century.
- 45 per cent emissions reduction on 2005 levels by 2030, consistent with advice from the Climate Change Authority.
- 2025 emissions reduction target released within one year of being elected.
- Five yearly reviews which will ensure that our policy goals are continually updated and consistent with the latest science and actions of other nations.



Putting in place long-term policies to ensure that Australia produces net zero pollution by 2050 includes setting a pathway to provide certainty. This will provide investment certainty and stimulate jobs growth.

MAKE AUSTRALIA A LEADING RENEWABLE ENERGY ECONOMY

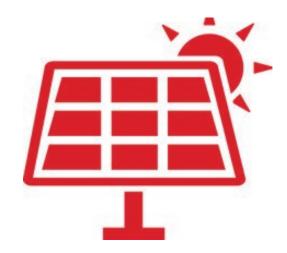
To achieve this, a Shorten Labor Government will:

- Ensure that 50 per cent of the nation's electricity is sourced from renewable energy by 2030;
- » More certainty and flexibility with less red tape and more technology options for the Clean Energy Finance Corporation,
- » Invest \$206.6m in ARENA to support a specific Concentrated Solar Thermal funding round;
- » Invest \$98.7m to establish a Community Power Network and Regional Hubs;
- » Ensure the Federal Government leads by example as a direct purchaser of renewable energy.

Climate change is driving the most profound restructuring of the world economy this century - the transition from fossil fuel based energy to renewable energy. The transition is happening now and it is accelerating. With the right plans, the renewable energy sector provides immense opportunities: it will drive jobs creation, drive manufacturing investment and put downward pressure on power prices for families and small businesses.

Labor understands the fundamental importance of renewable energy and the massive opportunities this transition brings. A strong renewable energy sector must be at the centre of Australia's response to the challenges of climate change. This will create jobs, drive investment and push down power bills for families and small businesses.

The Liberal Government has done everything in its power to try and destroy Australia's share in one of the world's fastest growing industries with devastating consequences for our country. In the last two years more than two million renewable energy jobs were added to the global economy, but over the same period 2,900 jobs were lost in Australia.



We will restore a functioning renewable energy market and partner with our scientists and inventors to support new ideas and technologies.

CEFC

Labor will also restore flexibility to the CEFC by broadening the Investment Mandate to make it technology neutral and setting appropriate targets for investments. We will also provide certainty in that Investment Mandate by locking it in for the full course of the next term of Parliament.

50% of electricity generation by 2030

Labor Government will engage with industry, experts, investors, scientists, researchers and consumers to put in place the most appropriate policy settings for the period 2020-2030. Labor in Government will announce the proposed design details by 1 October 2017 with legislation governing post-2020 arrangements to be introduced to Parliament in late 2017. This process will ensure that Labor implements the best mechanism to achieve 50 per cent renewable energy by 2030.

ARENA

Given the turmoil created by the Liberal government for ARENA over the past three years, including significant cuts, Labor will work with the newly appointed Board based on the core principles and original intent of ARENA.

In addition, to assist in catching up on the lost opportunities over the duration of the Abbott Turnbull governments Labor will inject \$206.6 million for a specific Concentrated Solar Thermal round of funding.

Our continent is blessed with some of the greatest renewable energy assets in the world. We have the highest average solar radiation per square metre of any continent in the world. We are also one of the windiest places on earth. We must harness the power of these natural assets to grow our economy.

Community Power Network

Labor will develop a **Community Power Network** to deal with the challenges of implementing renewable energy solutions in social and community housing, rental properties and apartment-style living. The Network will oversee the development of Community Power Hubs that will work in communities to support the development of local projects to address local needs.

The Community Power Network will:

- be a solution broker
- develop a series of regional hubs
- bring legal and technical expertise to the passion of community ideas.
- provide start-up funding to help kick-start clean energy projects across Australia.
- develop an online community of ideas and support.

FAQ

Is 50 per cent renewable energy target achievable?

Yes. Depending on assumptions about electricity demand in 2030, 50 per cent of renewable energy is likely to require 1500-2000 MW of large-scale renewable energy generation to be built each year in the 2020s.

By way of comparison, Australia built 1000MW of wind power in 2013. In the past two years, China has added about 50,000MW of renewable energy each year.

Labor's plan for renewable energy is ambitious, but achievable. The cost of renewable technology continues to come down. And Labor's policy will create many thousands of jobs and attract billions of dollars in investment.

Leading by example

The Federal Government is a significant energy user and it can play a role in expanding Australia's renewable energy industry. To directly drive investment in renewable energy, a Labor Government will, from 2018, work with energy providers to enter into Power Purchase Agreements (PPA) equal to bringing Commonwealth energy use up to 50 per cent renewable energy by 2030. These would be 10-15 year contracts, and would provide the certainty needed for long term investment in the renewable energy sector.

WHY

With \$2.5 trillion to be invested to 2030 in renewables in the Asia Pacific region, what we need is a Government that is focussed on capturing the jobs and investments from this opportunity. In 2015, new renewable energy investment outstripped combined investment in coal, gas, nuclear and hydro power for the first time globally. The shift to renewables is already happening and we need to position our country for a large share of the enormous jobs and investment opportunities that flow from a clean energy future.

CLEANER POWER GENERATION

To achieve this, a Shorten Labor Government will:

- Ensure the National Electricity Market meets the needs of 21st century consumers through an Electricity Modernisation Review
- » Develop a long-term plan to ensure the orderly transition of Australia's energy generation from polluting coal-fired power stations to renewable and clean energy, with a core focus on supporting workers and communities
- » Implement an electricity emissions trading scheme

A transition is needed to modernise Australia's electricity sector. Labor's plan will establish an orderly pathway for this transition. Australia's electricity generation sector is the largest source of carbon pollution in the economy, producing around one third of the nation's pollution. It simply must get cleaner.

Orderly Transition

A cap on emissions is not on its own sufficient to manage the transition in our electricity sector from high emissions production in an orderly way.

Labor's plan will guide the orderly transition of generation from old coal fired power stations to new clean energy. The transition is already underway – and our plan will ensure there is proper support and assistance for impacted workers and communities. The principles for this transition are laid out on page 9.

Electricity Modernisation Review

A broad review of the National Electricity Market (NEM) will ensure that its Objective, law, rules and operations are consistent with the needs of Australian consumers in the 21st Century. In particular, the review will:

- ensure the system takes proper account of the need to reduce pollution levels in electricity generation; and of modern trends in electricity, including distribution and storage;
- ensure the orderly transition of Australia's generation capacity from old and heavily polluting coal power to modern sources of clean renewable energy.

Labor will work with the COAG Energy Council, NEM agencies, industry, unions and energy users throughout the Electricity Modernisation Review.



The Australian Energy Market Commission (AEMC) notes that: 'Overall, wholesale electricity prices, and the resultant effects on consumers, are minimised under this approach. This is because low emissions generators are rewarded with an additional source of revenue every time they generate, which will be reflected in lower offer prices due to an incentive to ensure they are dispatched in order to create credits. Importantly, however, high emissions generators are only penalised to the extent their emissions intensity is above the baseline'.

Electricity ETS

Under Labor, electricity generation will be covered by a "cap" on carbon pollution that reflects a proportional share of the overall emissions reduction task set for the broader ETS. Each generator will be allocated a baseline that is calculated according to a sector-wide emissions intensity baseline.

Labor will implement the model proposed by the Australian Energy Market Commission for electricity generators. This scheme provides for a fully internal market in carbon, which according to the AEMC will operate "without a significant effect on absolute price levels faced by consumers".

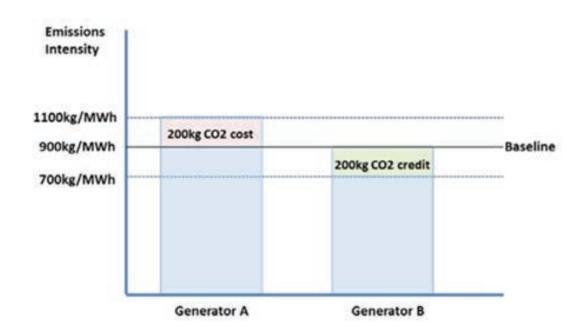
FAQ

When will the Electricity Modernisation Review be done?

The EMR will commence by the end of 2016 and will report within 12 months on:

-The NEM framework to ensure it is consistent with the needs of consumers in the 21st century and takes proper account of the objectives of decarbonising the electricity sector consistent with national emission reduction targets

A framework to modernise the electricity industry to ensure continual supply as we transition from coal-fired power to modern, clean power sources.



WHY

Labor recognises that the electricity sector is unique to the economy, and so this package of measures has been structured to best meet our climate change targets in the most efficient way. Labor has designed policy settings to strengthen energy security, apply downward pressure on power prices, and drive the transition to clean sources of power.

Australia has one of the most emissions-intensive electricity sectors in the world, with more than 75 per cent of electricity generated from coal.

A "Just Transition" Out of Coal-Fired Power

If Australia is to achieve its international commitments to reduce pollution levels - and to achieve net zero pollution by 2050 - it is essential to develop a methodical and structured process to decarbonise the electricity sector. This process requires a transition from heavily polluting coal-fired power to modern, clean power sources - particularly renewable energy.

Labor will introduce a framework to begin to withdraw the older, heaviest polluting generators from the market consistent with the principles set out below. Labor will also develop a longer term framework to drive that transition, based on advice from the Electricity Modernisation Review. Given the excess capacity in the market, the age and emissions intensity of some generators, and the need to reduce pollution levels from the electricity sector, the electricity sector itself is increasingly supportive of such a framework being developed and implemented.

Labor considers that such a framework should include the following principles, to be developed further with the industry, unions, user groups and State governments, as part of the Electricity Modernisation Review.



Over many years, Australia has consistently demonstrated we have some of the best minds and some of the most innovative businesses that are hungry to drive the transition to a clean energy future

Case study

Alinta's announcement of the closure of its two power stations at Port Augusta in South Australia and the associated coal mine at Leigh Creek involved minimal notice, no broader planning, and little consideration of the community and worker impacts. It took months for the Turnbull Government to respond at all to that announcement and, in the end, its response amounted to a Structural Adjustment Package capped at just \$1.3 million for 450 workers.

This is far from ideal. Labor's methodical process will minimise the chances of similar events occurring in the future.

Framework Principles

- 1. Labor considers that any withdrawal of an existing generation plant should be subject to an orderly process that focuses in particular on;
- the emissions intensity of that plant, and
- the overall reliability and affordability of supply in the market.
- 2. Consistent with the decision of the COAG Energy Council of December 2014, Labor **will not** use taxpayers' money to pay companies to withdraw generation from the market. Labor's focus in government will be on supporting workers and communities affected by any such closures.
- 3. Labor prefers a **market-based approach** to ensuring an orderly process of withdrawing the heavy polluting plants. Various ideas are currently being explored and advocated within academic and industry circles. One example is set out in the 2015 ANU Working Paper by Frank Jotzo and Salim Mazouz, which while requiring further development and consideration:
- Avoids the pitfalls of government payments for closure and the information asymmetries inherent in such a payment system; and
- Places the responsibility of funding the costs associated with such closure on the industry (which benefits ultimately from this orderly approach) and not taxpayers through the Federal Budget.
- 4. A central principle of the Paris Agreement signed by Malcolm Turnbull on behalf of Australia is that Government must ensure that the transition to a clean energy future is a **"Just Transition"** for impacted workers and communities.
- The "Just Transition" commitment is consistent with Labor's longstanding approval to dealing with the impact of economic change on workers and communities, exemplified by the Hawke and Keating governments.
- Labor will establish a Just Transition Unit in the Department of Environment to co-ordinate the work of different Commonwealth agencies to the implementation of that element of the Paris Agreement.
- The unit's work will focus initially on transition in the electricity sector, and will draw on advice from a tripartite Council that brings together governments (including local government), industry and unions.
- 5. The management of an orderly process of withdrawing a generation plant and any directly-associated assets (such as mines) should be seen as a matter for the entire industry within an identifiable region; rather than just for individual companies and their separate workforces.
- In the same way that the framework for determining an orderly approach to closure should be an industry-wide framework, so too should be the approach to dealing with the employment and community consequences of such closure.
- 6. As part of the "Just Transition" commitment, Labor will develop a regional approach to employment issues associated with the withdrawal of generation capacity, which groups all generators within each identifiable region. Our approach is based on communities. It will see:
- opportunities for redundancies arising from any closure spread across all generators/mines in the region with a pooled or brokered process and funding arrangement.
- ongoing staff from the closing generator/mine offered redeployment to the remaining generators consistent with the overall impact on job numbers, and with pooled or brokered arrangements dealing with matters such as continuity of service.
- 7. Other employment impacts associated with Labor's plan to transition our energy mix (such as access to retraining and relocation and the impact on superannuation and pension entitlements) would be considered by Government on the basis of advice from the Just Transitions Advisory Council, consistent as far as possible with the principle of shared obligations and opportunities.
- 8. Just Transition also demands a proactive program of economic diversification for impacted regions and communities.
- Labor will work with relevant State and Local Governments and business to develop these programs which will be factored in to the market-based approach.

BUILD JOBS AND INDUSTRY

To achieve this, a Shorten Labor Government will:

- **»** Establish a Strategic Industries Taskforce to undertake in-depth engagement with emissions intensive, trade exposed (EITE) industries and identify options to support their future competitiveness.
- >> The Taskforce will explore the specific challenges and opportunities in each industry, and systematically review both the domestic and global markets they operate within.
- >> Ensure that the Taskforce provides advice to government which is grounded in practical industry thinking and tailored to the unique needs of each sector.

The recommendations of the Taskforce will help inform the design process and rules for the Emissions Trading Scheme commencing in 2020. During phase one of Labor's ETS (2018-2020), Labor will support the global competitiveness of EITE industries through full access to international carbon offsets.

Labor is focused on the jobs of today and building the jobs of tomorrow, investing in the skills and knowledge that will underpin our future industries.

Labor knows that we need to chart a course to dramatically reduce our carbon pollution levels along with the rest of the world to keep global warming to well below two degrees Celsius. All serious economic modelling demonstrates that this can be done in a way that continues Australia's economic prosperity.

We do recognise that there will be uneven impacts across Australia, with some industries and regions impacted by change; especially those with a heavy reliance on fossil fuels, like the Latrobe Valley, Illawarra, Hunter and the Collie River Valley and other emissions intensive trade exposed sectors.

To demonstrate our commitment to working with businesses and communities to transition to more sustainable, long term industries, Labor will establish a Strategic Industries Reserve Fund with an initial funding profile of \$300m over three years. This Fund will support the ongoing competitiveness of our strategic industries during Australia's transition to a low-carbon economy. This type of fund would be one of the mechanisms for delivering on the recommendations of the Strategic Industries Taskforce, for example in relation to support for affected workers in emissions intensive regions, targeted assistance to modernise and invest in low emissions technologies, additional research and development, new market identification and measures to improve efficiency and productivity.



Strategic industries

There are sectors of Australia's economy that are of critical strategic importance; industries like steel, cement, aluminium and others. These industries must stay in Australia - no global environmental purpose is served by such operations closing in Australia and being picked up by another nation. Such "carbon leakage" also has obvious economic and jobs impacts in Australian communities. Labor will support the competitiveness of emissions intensive industries that are strategically important to this country's future. We understand that maintaining strong and viable local industries like steel and aluminium is vital for Australia's economic development and our successful transition to a low-pollution future.

Strategic Industry Taskforce

Labor will establish a Strategic Industries
Taskforce to undertake in-depth engagement
with emissions intensive, trade exposed
industries and identify options to support
their future competitiveness. The Taskforce
will engage with individual firms, peak bodies
and research groups to explore the specific
challenges and opportunities in each industry,
and systematically review both the domestic
and global markets they operate within. This
will ensure that the Taskforce provides advice
to government which is grounded in practical
industry thinking and tailored to the needs of
each sector. This would include:

- Targeted assistance to enable firms to:
 - o invest in energy efficient capital equipment and low emissions technologies;
 - o invest in processes and products to reduce their carbon emissions;
 - o maintain their international competitiveness,
 - o manufacture new products and supply new markets.
- Clean energy procurement policy that maximises local content in clean technologies and the renewables sector.
- Investment in science and research to ensure we are in a position to create and commercialise the next wave of innovation in renewables and clean technology

FAQ

Will your policy be the end of Emissions Intensive Trade Exposed industries?

No. Labor is committed to supporting jobs in Australia's manufacturing industry. We will work with industry through the Strategic Industries
Taskforce to ensure that those jobs are supported while Australia works to cut its overall pollution levels.

Phase one of Labor's ETS has been designed to ensure Australia achieves the bipartisan target to reduce carbon pollution by 5% on 2000 levels by 2020 – while protecting jobs in emissions intensive, trade exposed industries like steel and aluminium.

There will be no direct carbon price imposed on those companies. Any EITE company that breaches its pollution cap will be able to purchase carbon offsets – on the international market, at minimal cost. Any breach would result in an effective carbon price of a few cents per tonne of total carbon pollution.

EITEs will be able to purchase 100% of any offsets they may require as a consequence of breaching their cap on the international market. EITES will have access to 100% international permits.

WHY

Labor's guiding philosophy for more than a century has been that a stable job, with decent pay and conditions, is the bedrock of a decent life. Saving for a home, raising a family, having financial security in retirement are only possible when you have a decent job.

The transition of Australia's economy to a clean energy future is not negotiable. Labor knows that we need to chart a course to dramatically reduce our pollution levels along with the rest of the world to keep global warming to well below two degrees Celsius. All serious economic modelling demonstrates that this can be done in a way that preserves Australia's economic prosperity.

That's why Labor has put full employment at the centre of its economic plan for the nation.

CUT POLLUTION

To achieve this, a Shorten Labor Government will:

- Introduce a domestic emissions trading scheme that will have two distinct phases. The first phase is designed to get Australia's pollution levels back under control and to establish the architecture for an enduring ETS. The second phase will then drive the long-term transition in our economy.
- » Phase one of the ETS will operate for two years, from 1 July 2018 until 30 June 2020 to align with the second (and final) commitment period of the Kyoto Protocol.
- Phase two of the ETS will operate from 1 July 2020. Pollution levels will be capped and reduced over the course of the decade in line with Australia's international commitments under the Paris agreement.
 - There will be no fixed price or carbon tax.

The broader ETS does not apply to the electricity sector. The scheme will allow business to work out the cheapest and most effective way to operate and will not involve taxpayers handing over billions of dollars to Australia's large polluters as occurs now.

When China's national scheme comes online, one in every three people in the world will live under an ETS. Rejecting an ETS means isolation from the global marketplace.

Phase 1 ETS: 2018 -2020

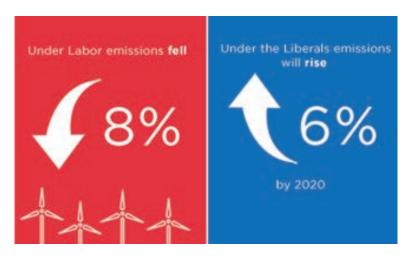
The first phase of the ETS will cover facilities emitting more than 25,000 tonnes of carbon pollution per year ("liable entities"), returning to the scope of coverage reflected in the Clean Energy Act. The Interim ETS will impose a "cap" on carbon pollution produced by liable entities. This "cap" will reflect an appropriate proportion of the limits on pollution required to achieve the bipartisan commitment to ensure that carbon pollution levels in 2020 are 5% lower than 2000. These arrangements will be finalised in Government and implemented by the Clean Energy Regulator (CER).

No price will be imposed by Government on carbon pollution under the first phase of the ETS. Liable entities will not be required to purchase or receive permits to operate. But, where a liable entity breaches or exceeds its "cap", it will be required to provide the CER with an equivalent number of "carbon offsets" for that year

Phase 2 ETS: 2020

Labor will introduce an ongoing Emissions Trading Scheme from 1 July 2020. Under this ETS, pollution levels will be capped and reduced over the course of the decade in line with Australia's international commitments under the Paris agreement and any additional Government policy to reduce pollution levels.

The design of the 2020 ETS will be finalised during the 2016-2019 Parliament, to commence after the 2019 election. Those details will include rules governing the allocation of caps to liable entities, access to international markets (including the possibility of formal linkage to other schemes), the operation of the domestic offsets market and the like. The design process will also take account of the impact of the 2020 ETS on households, industry (especially emissions intensive, trade exposed sectors or "EITES") and Australia's overall competitiveness, including advice from the Strategic Industries Taskforce.



...an environmental figleaf to cover a determination to do nothing

...Malcolm Turnbull describing the Liberals' climate change policy in 2009

Carbon offsets

The Clean Energy Regulator (CER) will publish rules governing the types of offsets that are eligible under the phase one of the ETS. This will include access to international offsets approved under the UN's Clean Development Mechanism as well as Australian offsets approved through mechanisms like the Carbon Farming Initiative (CFI).

The CFI was a Labor initiative that created a market supplying offsets from a diverse range of carbon reduction projects in the land sector - including re-afforestation, savannah burning and much more. Labor is committed to reviving that market.

In order to support a vibrant domestic offsets market, Labor will work with relevant stakeholders in Government to develop arrangements around limits on access to international offsets. Given that Australia's emissions intensive, trade-exposed (EITE) sector competes in global markets, those companies will be allowed full access to approved international offsets under phase one of the ETS.

We risk missing out on the global mega-trend towards clean energy technologies and renewable energy. In 2014, clean energy investment grew in China (32 per cent), the US (8 per cent), Japan (12 per cent), Germany (3 per cent) and the UK (3 per cent). At the same time, investment in large-scale renewables dropped by 88 per cent in Australia. In the last two years more than 2 million renewable energy jobs were added to the global economy; in the same period Australia lost 2,600 jobs in that industry.

Retaining the climate change authority

To support an independent expert-driven advice to Government, Labor will commit \$17.4 million over the forward estimates to reverse the Government's abolition of the Climate Change Authority and ensure that it continues to be appropriately resourced to achieve its role.

WHY

Given Australia is one of highest per capita emitters in the developed world, accessing approved international offsets helps ensure that Australia can achieve its emissions reductions at least cost to the economy, which is good for jobs and growth. We know that unabated climate change will cause huge upheaval in financial markets across the world, markets which underpin the wealth of Australians and the retirement incomes of Australia's ageing population.

Recent studies have put the cost of unmitigated climate change to investors around the world at US\$2.4-US\$24 trillion. There is a long-standing consensus amongst economists and public policy experts that market based mechanisms such as emissions trading schemes should be part of any climate mitigation policy toolkit. This is because they provide an incentive for businesses to adjust their behaviour and switch to producing their goods and services with cleaner technologies and processes.

CAPTURE CARBON ON THE LAND

To achieve this, a Shorten Labor Government will:

- Work with stakeholders to develop an appropriate "trigger" in federal environmental protection laws to cover Australia's national and international commitments around climate change.
- » Require the adoption of consistent reporting of land and tree clearing across States and the Commonwealth
- » Reinvigorate the COAG National Vegetation Management Framework
- » Reinvigorate the Carbon Farming Initiative

Climate trigger

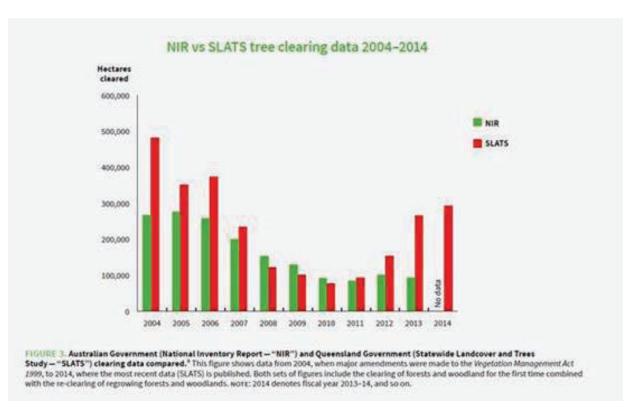
Labor will legislate to include a Climate Trigger in federal legislation to allow the Commonwealth to regulate broad-scale land clearing across the nation. This will ensure proper and rigorous investigation of broad-scale land clearing impact on Australia's ability to meet its agreed climate change commitment to keeping global warming well below 2 degrees Celsius.

Orderly Transition

Labor will ensure that State land clearing laws are consistent with Australia's international obligations and commitments. This will require the adoption of consistent reporting of land and tree clearing across States and the Commonwealth, in line with best practice in this area.

There are significant discrepancies between the Australian Government's tree clearing data and that of Queensland. Queensland's data generally shows much higher clearing (see graph) and emissions. The Australian Government data is based on desktop analysis, while the Queensland Government complements desktop analysis with extensive field validation.

Labor will bring the rest of the country in line with Queensland's reporting of land clearing by implementing the state's ground-tested SLATS system nationwide.



Source: The Wilderness Society

Carbon Farming Initiative

In order to support a strong domestic offsets market, Labor will work with relevant stakeholders to develop arrangements to reinvigorate the Carbon Farming Initiative (CFI). CFI was a Labor initiative that created market supplying offsets from a diverse range of carbon reduction projects in the land sector – including re-afforestation, savannah burning and much more.

It is in the national interest that the agricultural sector be able to exploit the new, enhanced export opportunities in a way that is consistent with responsible land management. The land and agricultural sector represent Australia's largest opportunity in coming years to sequester carbon pollution (through soil carbon methods, re-afforestation, avoided deforestation and more). Labor in Government will continue to support the sector in these areas.

National Vegetation Management Framework

Labor in Government will explore other ways of ensuring that State land clearing laws are consistent with Australia's international obligations and commitments; including by re-invigorating COAG's National Vegetation Management Framework. We will work with State and Territory governments to update the Framework to set clear targets for tree clearing reductions.

FAQ

Is land clearing an issue anywhere else? Shouldn't it just be left to QLD to figure out?

While it is particularly problematic in Queensland it is also happening elsewhere.

Australia's emissions are a national issue and we can't seriously reduce our emissions without reigning in land clearing.



WHY

Australia's land sector emissions were around 135 million tonnes CO2e in 1990 or around one quarter of the national total; in 2012, they were just 13 million tonnes. That huge reduction was overwhelmingly due to land clearing restrictions introduced in Queensland over time between 1999 and 2009 (supported by John Howard who understood the benefits in achieving the Kyoto commitment). Not only was this reduction enormously important from a climate perspective; it also had a huge impact on biodiversity in the region. But that great work is being undone. After Campbell Newman scrapped land clearing restrictions in Queensland, emissions from tree clearing in the state in 2013-14 soared to 36 MtCO2e.

INCREASED ENERGY EFFICIENCY

To achieve this, a Shorten Labor Government will:

- » Double Australia's energy productivity by 2030
- Introduce new emissions standards for motor vehicles to reduce emissions in the transport sector
- Support policies that reduce per capita environmental impacts in our cities, including more efficient building design and public transport systems
- » Broaden Infrastructure Australia's role to include new assessment criteria of smart infrastructure and sustainability

Light vehicle standards

Labor is committed to the introduction of mandatory light vehicle standards consistent with advice from the Climate Change Authority. We will reduce the emissions intensity for all light vehicles from the current 192g CO2/km to 105g CO2/km in 2025 through the implementation of mandatory standards that align with standards being introduced in the United States. These standards will be phased-in from 2020.

The CCA predicts that such changes would:

- Deliver fuel savings of \$830 in the first year
- Save \$8,500 in fuel costs over the life of the car
- Save Australia \$580 for each tonne of CO2 avoided

ACCI supports measures to rapidly improve Australia's energy productivity... Achieving 2XEP would deliver a GDP increase of \$3000/person by 2030 and would cost effectively reduce greenhouse gas emissions by 25% from the current forecast

Orderly Transition

A coordinated and integrated approach to urban policy development can improve the productivity, sustainability and liveability of major cities in Australia.

We support investing in active transport solutions which connect up with public transport, education and employment hubs.

We also believe in supporting renewable energy including buildings and precincts that produce their own power in new developments.

Increasing the resilience of our cities does more than simply prepare them for the potentially devastating effects of climate change. It also ensures they play their part in addressing the shift to a carbon-constrained economy.

Doubling Australia's energy productivity

Labor is committed to doubling Australia's energy productivity by 2030 (on 2010 levels) by building on the COAG Energy Council's National Energy Productivity Plan 2015-2030 and drawing on the work of Local Governments, the Green Building council and 2XEP Alliance which includes business groups such as BCA, ACCI and AIG.

Case Study

In the United States, price reductions in LED bulbs have transformed the economics of the industry. Adoption of standards and incentives are helping to drive up LED deployment and drive down costs. Since 2008, cost per lumen has dropped almost 90%. Current LED bulbs are up to seven times more efficient than incandescent bulbs while lasting about 25 times longer.

Growth of low emissions Vehicles

In addition to developing light vehicle standards, a Shorten Labor Government will put in place policies to promote and encourage the growth of low emissions vehicles such as those powered by electricity or Hydrogen. These would include consideration of policies such as:

- » Working with the states to provide incentives such as registration fee holidays
- Accelerate the development of standards to harmonise charging stations and billing methods
- » Reduce barriers to electric vehicle charging in homes
- Coordinate efforts with State Governments, Councils, and the private sector for required infrastructure

Infrastructure

It makes sense that projects submitted to Infrastructure Australia demonstrate sustainable infrastructure. Commercial and residential buildings alone are responsible for approximately 23 per cent of our greenhouse gas emissions. Labor has already announced that sustainability would be considered by new projects submitted to Infrastructure Australia under a Shorten Labor Government.

In March 2016 it was announced that a Labor government would toughen assessment of proposed major infrastructure projects by requiring the incorporation of smart infrastructure technology and sustainability measures before projects qualify for Commonwealth funding. Under current arrangements, the independent Infrastructure Australia advises the Commonwealth on major projects in terms of cost-benefits analysis and whether they fit in with existing infrastructure.

"A Labor Government will broaden Infrastructure Australia's role, adding new assessment criteria of smart infrastructure and sustainability to increase value for public money and take action to improve liveability of major cities." Anthony Albanese



FAQ Is doubling energy efficiency by 2030 too much?

No. Doubling energy efficiency is fully supported by key business peak bodies such as BCA, ACCI and AIG.

Will putting emissions standards on cars just increase the cost?

No. The proposals we've canvassed are supported by the Federal Chamber of Automotive Industries and recommended by the Climate Change Authority.

In fact the CCA research shows a net saving of \$7,000 in fuel costs over the life of an average car. (Increase cost of car purchase \$1,500. Save \$830 on fuel in first year and \$8,500 fuel save over life of the car)

Australia has one of weakest vehicle emissions standards in the developed world and this will be bring us more into line with the United States.

WHY

Australia remains a relatively energy-intensive economy by OECD standards. Energy productivity improvements in recent years have been poor, against both OECD and G2O averages. Over the past two decades, for example, China has improved its energy productivity twice as fast as Australia. We currently sit in the bottom quartile of OECD nations on this important economic measure.

