



WWF-Australia

Submission to the Environment and

Communications References Committee Inquiry

into the Abbott Governments Direct Action Plan

20thth January 2014

Contact

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1. INTRODUCTION AND SUMMARY

WWF-Australia welcomes the opportunity to make this submission to the Environment and Communications References Committee Inquiry into the Government's Direct Action Plan.

WWF-Australia is part of the WWF international network, the world's largest and most experienced independent conservation organisation. We have 80,000 supporters in Australia, five million supporters worldwide and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural resources and to build a future in which humans live in harmony with nature.

WWF has been an advocate for national and international action to avoid dangerous climate change for more than two decades. WWF has been a strong supporter of a range of policies to support rapid emission reductions including emissions trading schemes; renewable energy target schemes; feed-in-tariffs; energy efficiency standards in homes, buildings, cars, energy sector, appliances; land clearing laws; incentives for land sector abatement; and investment in research and development.

Accelerated global warming and subsequent changes to our climate is one of the most significant threats to our planet. For example, scientists predict that a 1.5°C global temperature rise may see [25 per cent of the Earth's animals and plants disappear](#); a 3°C rise may see [30 per cent disappear](#).¹ This would be a significant loss to the world and Australia, which cannot be measured in monetary terms.

But global warming is not just a threat to our environment, but to our health, wellbeing and economic prosperity. It is a global problem that requires all countries to do their part to reduce greenhouse gas emissions.

It is widely accepted that amongst developed countries Australia has the most to lose from ongoing climate change², with significant impacts on agriculture and tourism industries, coastal communities, human health and our unique wildlife and places. It is therefore in Australia's national interest to ensure there is strong global action, which will require Australia to step up and commit to stronger 2020, 2030 and 2050 targets.

Recent analysis by European consultants, Ecofys³, and the Climate Change Authority⁴ shows that if Australia's response is to be credible, Australia should increase its unconditional 5 per cent emission reduction target and commit to a target of at least 25 per cent off 2000 levels by 2020. A shift to 25 per cent is consistent with many of our trading partners. For example, China's 2020 target is consistent with the conditions for Australia moving to its 25 per cent target⁵ and the US 2020 target is equivalent to Australia taking a 21 per cent target for 2020.⁶

Recent analysis by carbon and energy consultants RepuTex found that the Government's proposed Emissions Reduction Fund (ERF), with no penalty, would lead to domestic abatement of only 27 Mt CO₂-e per annum by 2020, with overall growth in emissions of 16 per cent from 2000 levels –

¹ IPCC (2007) Fourth Assessment Report. Working Group II: Impacts, Adaptation and Vulnerability
http://www.ipcc.ch/publications_and_data/ar4/wg2/en/ch19s19-3-4.html

² Garnaut (2011) Carbon Pricing and Reducing Australia's Emissions. Climate Change Review Update 2011: Update paper 6, pg.6. <http://www.garnautreview.org.au/update-2011/update-papers/up6-carbon-pricing-and-reducing-australias-emissions.pdf>

³ <http://www.wwf.org.au/?8180/Australia-has-nearly-blown-its-carbon-budget-already>

⁴ <http://climatechangeauthority.gov.au/Node/100>

⁵ The Climate Institute (2010), "Summary of Freedom of Information Request from The Climate Institute to the Department of Climate Change and Energy Efficiency: Documents regarding the influence of foreign emission reduction targets on Australia's emission reduction targets", Media Brief, November 2010,
http://www.climateinstitute.org.au/verve/resources/foi_request_summary.pdf

⁶ World Resources Institute (2012), *GHG Mitigation in the United States: An overview of the current policy landscape*,
http://www.wri.org/sites/default/files/pdf/ghg_mitigation_us_policy_landscape_overview.pdf

approximately 119 Mt CO₂-e above the 5 per cent emissions reduction target.⁷ RepuTex found that it would require additional funding of \$5.9 billion per year from 2015 to 2020, or an additional \$35 billion in total to achieve the 5 per cent 2020 target, and the auction price would reach around \$58 per tonne in 2020. If a penalty price was set at approximately \$54 per tonne, the 5 per cent target would be more achievable but would still require additional investment of \$14 billion more than currently budgeted. RepuTex found that none of the ERF modelling scenarios were able to achieve a 25 per cent target by 2020, with domestic abatement alone at any reasonable auction price.

In contrast, RepuTex found that with an internationally linked emissions trading scheme (ETS), the cost of achieving these targets would be approximately \$22 per tonne by 2020. Indeed the benefits of an internationally linked ETS were highlighted by [modelling by Vivid Economics and Monash University](#)⁸ which found that moving from a 5 per cent target to a 25 per cent target can be achieved at almost no additional impact on Gross Domestic Product (GDP) (0.01 per cent) and around a 0.06 per cent impact on Gross National Income.

If we revisit first principles, to be environmentally effective and economically efficient, Australia's policy framework should include the following features:

- **Annual limits** - Putting an annual limit on pollution, such as a cap and trade scheme or emission trading scheme, which caps pollution annually and restricts the number of pollution permits in the system and that can be traded.
- **Scalable** - Ability to be easily ramped up to meet stronger targets.
- **Long-term** - providing a long-term signal that gives business the certainty and confidence to plan for transition, make long-term investments and drive structural change in the economy (closely linked to this concept is stable policy, in other words not constantly dismantling and replacing policies).
- **Economically efficient** - providing least cost abatement.
- **Economically viable** – enabling stronger targets to be achieved.
- **Fairness**- holding the major emitters responsible for reducing their pollution (polluter pays principle) to facilitate change.
- **Price based** – must put a price on carbon, so as to drive investment and innovation across the economy in low emissions energy, products and services.
- **Broad coverage** – must apply to the broader economy to drive economy-wide investment, innovation and structural transition.

The research shows that market based trading mechanisms that price and limit carbon pollution such as cap and trade or emissions trading schemes embody these key elements. A robust baseline and credit scheme could also go some way to embodying these elements.

Whereas the current ERF, a Government funded model to purchase abatement from business, fails on a number of elements including no annual limit, no long-term signal, economic viability and fairness. This does not mean that the ERF could not be used in conjunction with another mechanism, just as the Clean Development Mechanism (CDM) a global scheme to purchase abatement from developing countries, works hand in hand with the European ETS. Alternatively the ERF could be modified.

⁷ RepuTex (2013), *Emissions Trading Versus Direct Action*, <http://goo.gl/BMcZZZ>

⁸ Vivid Economics (2013), *The costs and benefits of greater Australian emissions reduction ambition*, report prepared for WWF Australia, <http://www.wwf.org.au/?7020/Go-deeper-for-cheaper>

WWF-Australia has a number of questions about ERF that we would need to see resolved before it could be considered a viable effective alternative.

These questions are:

- How will the ERF deliver the minimum 5 per cent target, if there is no requirement (i.e. via a penalty price or mandated via regulation) for big polluting businesses to participate?
- Can the ERF deliver the abatement required to stay within the carbon budget and meet international obligations, that is deliver emission cuts beyond 5 per cent by 2020?
- Will the government consider purchasing overseas abatement to achieve stronger targets?
- How will the ERF drive a long-term transition towards a low-carbon economy?
- Will the abatement activities supported by the ERF be consistent with existing international rules?
- How will the government ensure all projects supported by the ERF will deliver additional abatement?
- Will the ERF only support best-practice technologies?

With significant concerns raised about the environmental effectiveness of the current Direct Action Policy, WWF-Australia is urging the Government to, at the very least, keep core elements of a price and limit on pollution as part of their Direct Action Policy.

Keeping the core elements of a price and limit mechanism will also:

- Reduce costs to businesses of restructuring their compliance and trading operations, and instead enable business to take advantage of historically low international prices for carbon permits.
- Provide certainty for businesses to invest in long-term, cost effective low emission reforms and drive large scale low carbon infrastructure change and innovation in low emission energy, products and services.
- Reduce costs to Government of dismantling one scheme, establish a new scheme to meet emissions cuts prior to 2020 and consider a new scheme to meet post 2020 cuts.
- Enable Australia to confidently increase its unconditional 2020 emissions reduction target.
- Deliver least cost abatement in sectors covered by the scheme, providing a financial incentive to find the lowest cost forms of abatement.
- Enable the market to determine where pollution reduction will occur to drive innovation and efficiency throughout the economy.
- Provide a revenue flow that can be reinvested in the economy to support the demonstration and commercialisation of clean technology, provide international finance for clean technology to developing countries, and provide targeted assistance to households and energy intensive trade exposed industries.

Further, WWF-Australia is also strongly urging the Government to delay wholesale repeal of the *Clean Energy Act* until there is an **effective** alternative mechanism – that includes a price and limit on pollution – in place to reduce greenhouse gas emissions.

This is important for good governance, sound economic management, business certainty and most importantly to ensure Australia is not left without a climate mechanism to meet our international obligations of cutting carbon pollution between 5 and 25 per cent by 2020.

The submission aims to address the individual items as set out in the Senate committee terms of reference. To complement the submission please also find attached the following relevant reports commissioned by WWF-Australia:

- RepuTex (2013) Emissions trading versus direct action: Achieving Australia's emissions reduction objectives.
- RepuTex (2013) Policy brief: Renewable Energy and the Carbon Price.
- RepuTex (2014) Unlocking land sector abatement: outlook for the emissions reduction fund.
- Vivid Economics (2013) The costs and benefits of greater Australian emissions reduction ambition.
- WWF (2013) Avoiding Dangerous Climate Change: Defining Australia's carbon budget [Annex: Ecofys (2013) Australia's carbon budget based on global effort sharing: Technical report].

2. RESPONSE TO ISSUES RAISED IN THE TERMS OF REFERENCE

2.1. Issues I and II: whether the Direct Action Plan has the capacity to deliver greenhouse gas emissions reductions consistent with Australia's fair share of the estimated global emissions budget that would constrain global warming to Australia's agreed goal of less than 2 degrees; and whether the Direct Action Plan has the capacity to reduce greenhouse gas emissions adequately and cost effectively.

In responding to the above questions the following section outlines what Australia needs to do to contribute its fair share to the global solution. Drawing on a range of recent studies, we conclude that the Direct Action Policy in its current form and on its own is not capable of achieving emissions reductions consistent with Australia's fair share of the global carbon budget to limit warming to below 2 degrees Celsius.

Australia and the rest of the world has agreed to 2 degrees

Adopted in 2010, the Cancun Accords saw the international community formally agree to the global goal of keeping global warming below 2 degrees Celsius above pre-industrial levels in order to avoid the worst impacts of climate change. Recognising that even this level of warming would have unacceptable consequences for many countries, the international community has also agreed to review the adequacy of the 2 degrees goal in 2015 and to consider moving to a 1.5°C goal, which would require even greater emission cuts.⁹

In 2011 countries adopted the Durban Platform for Enhanced Action. The Durban Platform has two key features: i) a commitment to have new global agreement – covering all countries – in place by

⁹ Conference of the Parties to the United Nations Framework Convention on Climate Change (2010), *The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, Decision 1/CP.16, <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2>

2015 and to come into force by 2020; ii) a commitment to explore ways to increase pre-2020 ambition.

Australia has also made an international commitment to limit warming to 2 degrees, and reduce its greenhouse gas emissions by between 5 and 25 per cent below 2000 levels by 2020; a target range that has received bipartisan support since 2009.¹⁰

The rest of the world is acting but more is needed

According to the [Intergovernmental Panel on Climate Change \(IPCC\) Fifth Assessment Report](#), the global average air temperature has increased by approximately 0.85°C since 1890.¹¹ By the end of this century, the IPCC projects that warming is likely to exceed 1.5°C, with the possibility of the global average temperature rising by as much as 5.4°C compared to pre-industrial levels.¹²

Exactly how much warming occurs will depend on the efforts to curtail global greenhouse gas emissions.

In recent years the international community has made some important progress in its efforts to tackle climate change. Much more is needed, but the progress that has been achieved should not be overlooked or ignored.

Below is a brief snapshot of the current state of play:

- Close to 100 countries have now pledged international emission reduction commitments for 2020, including all major economies and the world's largest emitters. Together these countries account for 80 per cent of global emissions.
- Most of these countries have a mixture of policies including investment in R&D, regulation such as energy efficiency standards or targets, renewable energy schemes and emissions trading schemes.
- During the initial Kyoto Protocol negotiations, the Howard Government joined the United States of America, to advocate for a mechanism that puts a price and limit on pollution and called for countries to implement emissions trading schemes. The EU established their ETS in 2005. There are now emissions trading schemes in operating in 35 countries and 13 states, provinces and cities, including state and provincial schemes in the US and China, with more being slated to come on line.
- In 2010, the World Bank established the Partnership for Market Readiness (PMR), a 'grant-based, global partnership to provide funding and technical assistance to investigate and pilot of market-based instruments for GHG emissions reduction'.¹³ According to Australia's Parliamentary Library, already Brazil, Chile, China, Columbia, Costa Rica, India, Indonesia, Jordan, Mexico, Morocco, Peru, South Africa, Thailand, Ukraine, Turkey and Vietnam have received PMR grants or advice.¹⁴

¹⁰ Bipartisan support was originally provided by Malcolm Turnbull (<http://www.abc.net.au/news/2009-05-26/opposition-delivers-carbon-trade-ultimatum/1694670>) and was subsequently re-affirmed by Tony Abbott (<http://www.theaustralian.com.au/news/tony-abbott-stumbles-forced-to-restate-support-for-emissions-targets/story-e6frg6n6-1225806271993>). Since the 2013 election, the Environment Minister has again re-affirmed the Government's commitment to the range (<http://www.abc.net.au/lateline/content/2013/s3854893.htm>).

¹¹ IPCC (2013) *Climate Change 2013: The Physical Science Basis, Summary for Policy Makers*, Working Group I Contribution to the IPCC Fifth Assessment Report, http://www.climatechange2013.org/images/uploads/WGIAR5-SPM_Approved27Sep2013.pdf

¹² Ibid. Note, these figures are relative to the period 1850-1900.

¹³ World Bank, 'About the PMR', Partnership for Market Readiness (PMR) website.

¹⁴ http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/EmissionsTradingSchemes

- Australia's Parliamentary Library also reports that "...within Brazil, the cities of Rio de Janeiro and Sao Paulo are said to be developing their own state carbon markets with plans to link. Taiwan is said to be exploring a carbon offset scheme, and Dubai has announced its intention to develop an emissions trading scheme (ETS). Russia is also said to be exploring ETS options but very little English-language information has been made public regarding this."¹⁵

Australia's peers and major competitors are also acting to reduce their emissions, for example:

- **China** – the world's largest emitter, second largest economy and Australia's largest trading partner – has committed to reduce the emissions intensity of its economy by 40 -45 per cent below 2005 levels by 2020. China has begun implementing this target through domestic law as part of its current Five Year Plan (2011-2015), which includes a target to reduce the emissions intensity of its economy by 17 per cent below 2005 levels by 2015. China's 2020 target is consistent with Australia taking on a 25 per cent target.¹⁶ China now has in place four sub-national emissions trading schemes in Beijing, Shanghai, Guangdong and Shenzhen, with 3 more to follow in 2014 and plans to have a national scheme by 2016.
- The **USA** – the world's second largest emitter, largest economy and Australia's third largest trading partner – has committed to reduce its emissions by 17 per cent below 2005 levels by 2020. Earlier this year President Obama outlined a plan to achieve this target, which includes a series of new regulations under the Clean Air Act. The USA's 2020 target is equivalent to Australia taking a 21 per cent target for 2020.¹⁷ California, the world's 8th largest economy, begun its ETS in 2013, and has signed an agreement to link its scheme as of 1 January 2014 to Quebec in Canada.
- **India** has committed to reducing the emissions intensity of its economy by 20 – 25 per cent below 2005 levels by 2020 and in recent years has launched a series of ambitious policies to deploy renewable energy.
- The **UK** was the first country to set legally-binding emissions reduction targets (34 per cent below 1990 levels by 2020 and 80 per cent below 1990 levels by 2050). The UK has also adopted a series of legally-binding five year carbon budgets stretching out to 2027. In addition to participating in the EU ETS, to further stimulate investment in its own low carbon sectors, in 2013 the UK Government introduced a carbon price floor, which equates to approximately AU\$26 per tonne.
- **Germany** has set a target to reduce emissions by 40 per cent below 1990 levels by 2020 and up to 95 per cent by 2050.
- **South Korea**, Australia's third largest export market, has committed to reducing emissions by 30 per cent below the expected business as usual growth levels. To put this into perspective, South Korea's emissions are about the same as Australia's, but they plan to be saving 50 per cent more carbon pollution by the end of this decade than would be saved by Australia's minimum 5 per cent target. South Korea has also passed legislation to begin an ETS from 2015.
- **South Africa** – the world's fifth largest coal exporter – has committed to reducing its emissions by 34 per cent below projected business as usual levels. Importantly, South Africa is also in the process of implementing a national carbon tax as a central tool for reducing emissions.

¹⁵ http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/EmissionsTradingSchemes

¹⁶ The Climate Institute (2010), "Summary of Freedom of Information Request from The Climate Institute to the Department of Climate Change and Energy Efficiency: Documents regarding the influence of foreign emission reduction targets on Australia's emission reduction targets", Media Brief, November 2010, http://www.climateinstitute.org.au/verve/_resources/foi_request_summary.pdf

¹⁷ World Resources Institute (2012), *GHG Mitigation in the United States: An overview of the current policy landscape*, http://www.wri.org/sites/default/files/pdf/ghg_mitigation_us_policy_landscape_overview.pdf

- **Indonesia** has committed to reduce its emissions by 26 – 41 per cent below projected business as usual levels.
- In April 2012, **Mexico's** parliament unanimously passed a national climate change law, including a legally binding target to reduce Mexico's emissions by 50 per cent by 2050.

Despite good global progress, at this stage the targets pledged are not enough to stay below 2 degrees of warming. According to the World Bank, if countries fail to implement stronger emission reduction policies, the global average temperature is likely to rise by more than 3°C above pre-industrial levels, with a possibility that 4°C of warming will be experienced this century.¹⁸

The World Bank and others have argued that countries, including Australia, must step up and commit to greater emissions reductions if we are to stay below 2 degrees.

Australia's fair share

To be internationally and scientifically credible it is vital that Australia's response to climate change is designed to keep emissions within a long-term "carbon budget" that is consistent with our fair share of the global effort required to limit global warming to no more than 2°C pre-industrial levels.

WWF-Australia commissioned leading European consulting firm, Ecofys, to define possible long-term carbon budgets for Australia, based on three effort sharing approaches.¹⁹ A detailed policy brief summarising Ecofys' findings is included as an annex to this submission. In summary, Ecofys found that Australia's maximum 'fair share' of the global carbon budget is 18 billion tonnes and Australia has already used between 66 per cent and 84 per cent, depending on the effort sharing approach applied. At current rates of emissions the remaining budget would be consumed within the next 4 to 11 years (Table 1).

Table 1: Budget allocated to Australia, used and remaining (excluding land use change & forestry)

Effort sharing approach	Total budget allocated to Australia (1990-2100) Gt CO ₂ -e	Budget used (1990-2012) Gt CO ₂ -e	Budget remaining (2013-2100) Gt CO ₂ -e	How long will the budget last at current rates of emissions?
Contraction and convergence ²⁰	18.0	11.7	6.1	11 years
Common but differentiated convergence ²¹	17.6	11.7	5.7	10.5 years
Greenhouse development rights ²²	14.1	11.7	2.3	4 years

¹⁸ World Bank (2012) *Turn Down the Heat: Why 4°C Warmer World Must be Avoided*, <http://www.worldbank.org/en/news/press-release/2012/11/18/new-report-examines-risks-of-degree-hotter-world-by-end-of-century>

¹⁹ The Ecofys analysis uses a global carbon budget of 1,800 Gt CO₂-e for the period 1990-2100, excluding land use, land use change and forestry (LULUCF). This global carbon budget is consistent with stabilising atmospheric greenhouse gas concentrations at around 450 parts per million (ppm) CO₂-e. If LULUCF is included, the global budget is reduced to 1,600 Gt CO₂-e over the period 1990-2100.

²⁰ Under this approach all countries agree to immediately bring their per capita emissions to the same agreed level over the coming decades, ensuring that their cumulative emissions do not exceed the total global carbon budget. This approach also requires countries to converge at the same per capita emissions levels. However, unlike the previous approach, developing countries are only required to commit to a specific target once their per capita emissions meet a specific threshold.

²¹ This approach shares the global emissions budget between countries according to two key factors: capacity (income); and responsibility (for emissions since 1990). These two data sets are combined to calculate each country's share of the global carbon budget.

²² This approach shares the global emissions budget between countries according to two key factors: capacity (income); and responsibility (for emissions since 1990). These two data sets are combined to calculate each country's share of the global carbon budget, with wealthy, high polluting countries receiving a much smaller share of the budget than poorer, less polluting countries.

The Ecofys analysis highlights the inadequacy of Australia's existing target commitments (Table 2) if Australia is to make a fair contribution to staying below 2°C. Assuming a straight-line emissions trajectory and excluding forestry related emissions and removals (i.e. afforestation, reforestation and deforestation), the Ecofys analysis finds Australia would need to cut emissions by 27 per cent to 34 per cent below 2000 levels by 2020. Australia's allocation of emissions falls to 82-101 per cent below 2000 levels by 2030, while the greenhouse development rights methodology implies net negative emissions by 2030. Under all three scenarios Australia's emissions allocation is close to or below zero by 2050.²³

Table 2: Comparison of Australia's existing targets and those implied by the Ecofys analysis

Time period	Australia's existing targets % below 2000 levels	Targets implied by Ecofys analysis % below 2000 levels
2020	5 – 25%	27 – 34%
2030	No target	82 – 101%
2050	80%	98 – 106%

Indications are that Australia can't stay within the long-term carbon budget through domestic abatement alone. Ecofys found that even if Australia's emissions were reduced by 4 per cent each year (considered the upper limit of what is currently possible) Australia would still significantly exceed its emissions budget. This implies that purchasing abatement from overseas will be required.

The Ecofys analysis is largely consistent with the Climate Change Authority's draft report on targets, which was released in October 2013. While some of the analysis differs, the two studies arrived at broadly consistent findings with respect to Australia's 2020 target.

Both studies concluded that Australia's minimum 5 per cent target cannot be considered a credible contribution from Australia towards the global goal of limiting global warming to 2°C. Moreover, both studies found that only the upper end of Australia's existing target range (i.e. 25 per cent off 2000 levels by 2020) is consistent with a long-term carbon budget for Australia. The Ecofys analysis did, however, indicate that much more stringent cuts would be required post-2020 than those indicated by the Authority.

As outlined above independent analysis shows that Australia will need to reduce emissions by at least 25 per cent below 2000 levels by 2020 if we are to stay within a reasonable share of the global carbon budget required to keep global warming below 2°C.

Can Direct Action on its own deliver our fair share?

A study conducted by market analysts, RepuTex, found that a 25 per cent target could not be achieved via the Government's proposed ERF at any reasonable auction price (RepuTex capped the auction price at \$100 per tonne).

A study by SKM-MMA found that the 25 per cent target could be reached with the ERF, but would require an additional \$14 billion in funding from the government.²⁴

²³ The Ecofys analysis excludes emissions and removals from afforestation, reforestation and deforestation, whilst Australia's emissions target includes forestry related emissions and removals. If the Government's projections are used, the implied emissions cuts for 2020 do not vary significantly from Ecofys' analysis of emissions trajectories that exclude forestry emissions and removals (28 – 35% below 2000 levels, including afforestation, reforestation and deforestation).

²⁴ SKM-MMA & The Climate Institute (2013) *A Review of Subsidy and Carbon Price Approaches to Greenhouse Gas Emission Reduction*, <http://goo.gl/gmbVZo>

While our primary objective is to see a policy in place to achieve at least a 25 per cent cut in emissions, there are serious doubts as to whether the Direct Action Plan, as currently proposed, is capable of delivering even Australia's unconditional 5 per cent cut in emissions.²⁵ This is because the cost per tonne of abatement is expected to be significantly higher than has been budgeted for under the ERF. As a result the fund is expected to run out before the required level of abatement has been purchased.

According to the RepuTex study, under current policy settings, the ERF (with current levels of funding) is projected to lead to domestic abatement of 27 Mt CO₂-e per annum by 2020, with overall growth in emissions of 16 per cent from 2000 levels –approximately 119 Mt CO₂-e above the 5 per cent emissions reduction target.²⁶

Modelling undertaken by RepuTex suggests the ERF would need to support an auction price of approximately \$58 per tonne to achieve the required level of abatement in 2020.²⁷ The Climate Change Authority arrived at a similar conclusion, finding that a carbon price of approximately \$65 per tonne would be needed to support the level of domestic abatement needed to achieve a 5 per cent cut in emissions in 2020.²⁸

RepuTex found that it would require additional funding of \$5.9 billion per year from 2015 to 2020, or an additional \$35 billion in total to achieve 5 per cent 2020 target.

While some additional abatement could be secured through a well-designed baseline-and-penalty mechanism, it remains unclear if this will be sufficient to deliver the 5 per cent target. For example, RepuTex found that applying an absolute emissions baseline, as opposed to an emissions intensity baseline, will result in significantly more abatement from the baseline-and-penalty mechanism. However, the RepuTex modelling found that the penalty price will need to be set at a sufficiently high level, \$58 a tonne, to incentivise abatement activity.²⁹

Worryingly, the Government's ERF Green Paper suggests that there will be no penalty mechanism. It's hard to see why companies would invest if there is no penalty for not participating.

In contrast to the ERF, the RepuTex research found that the retention of the ETS would deliver the full 146 Mt CO₂-e of abatement necessary to meet Australia's 5 per cent emissions reduction target, with approximately 55 per cent coming from domestic abatement and 45 per cent from international abatement. Moreover, the ETS can be scaled up to meet Australia's 25 per cent target through the use of an additional 109 million tonnes of international credits, which would be purchased by liable entities. RepuTex found that under the ETS, the cost of abatement would be approximately \$22 per tonne on average over the period 2015-20.

These findings were also supported in a recent study by Vivid Economics and Monash University³⁰ which showed that under an internationally linked carbon price scheme Australia's emission reduction target could jump from 5 to 25 per cent by 2020 at very little additional cost to the economy. The research found almost no additional impact on Gross Domestic Product (GDP) (0.01 per cent) and around 0.06 per cent impact on Gross National Income. According to the report, Australia's economy would make up for the delayed growth in GDP associated with the extra emissions cuts in less than two months (see figure 1).

²⁵ See: Department of Climate Change (2010) *Analysis of Coalition Climate Change Policy Proposal*, <http://goo.gl/lM8rzi>; SKM & The Climate Institute (2013) *A Review of Subsidy and Carbon Price Approaches to Greenhouse Gas Emission Reduction*, <http://goo.gl/gmbVZo>; Treasury Executive Minute (2011) *Economic and fiscal impacts of the Coalition's direct action plan*, <http://goo.gl/TYVxxk>; and RepuTex (2013), *Emissions Trading Versus Direct Action*, <http://goo.gl/BMcZZZ>.

²⁶ RepuTex (2013), *Emissions Trading Versus Direct Action*, <http://goo.gl/BMcZZZ>.

²⁷ RepuTex (2013), *Emissions Trading Versus Direct Action*, <http://goo.gl/BMcZZZ>.

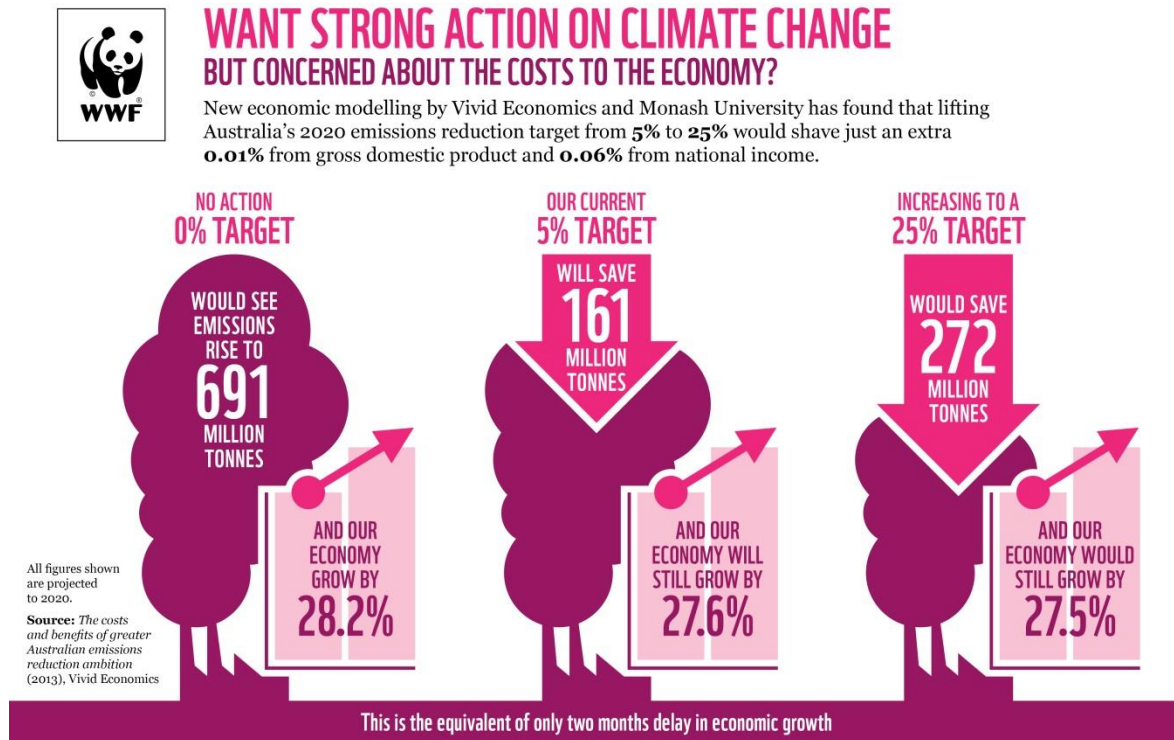
²⁸ Climate Change Authority (2013), *Targets and Progress Review Draft Report*, <http://climatechangeauthority.gov.au/>

²⁹ RepuTex (2013), *Emissions Trading Versus Direct Action*, <http://goo.gl/BMcZZZ>.

³⁰ Vivid Economics (2013), *The costs and benefits of greater Australian emissions reduction ambition*, report prepared for WWF Australia, <http://www.wwf.org.au/?7020/Go-deeper-for-cheaper>

The report showed that the economic costs of a 25 per cent target are four times lower now than estimated back in 2009 when the Government and Opposition first reached bipartisan agreement on an unconditional cut to emissions of 5 per cent.

Figure 1. Infographic showing impact of higher targets on the economy under an internationally linked emissions trading scheme.



An internationally linked ETS enables Australia to essentially take on a target that is five times stronger for virtually the same cost to GDP which is a great opportunity. It's smart for the planet, it's smart for our future, and it's smart for Australia's world standing.

The modelling shows that blocking overseas permits drives up the overall GDP cost. The implication, therefore, is that Direct Action would come at a higher price to the economy than a carbon price.

While we applaud the Coalition's interest in promoting investment at home, this should not come at the expense of being able to move to stronger pollution cuts, and we urge the Coalition to reconsider the benefits of a carbon price.

The Vivid Economics analysis in fact shows that under a carbon price, Australia could rely less on overseas emissions permits, improve domestic abatement, and still achieve a 25 per cent pollution cut with only a moderate additional impact on economic growth, shaving an extra 0.28 per cent off GDP in 2020 compared to the current 5 per cent target³¹.

The modelling shows that with a price and limit on pollution Australia can afford to get the balance right between encouraging domestic abatement, committing to an ambitious and globally credible target and economic growth. Whereas the current Direct Action Plan would come at a significant cost to the federal budget bottom line and still risk not achieving required emissions reductions.

³¹ Vivid Economics (2013), *The costs and benefits of greater Australian emissions reduction ambition*, report prepared for WWF Australia, <http://www.wwf.org.au/?7020/Go-deeper-for-cheaper>

2.2. Issue III: The effect of technical issues that arise for measuring abatement under the Direct Action Plan, including additionality and establishing emissions baselines for emitting entities and long-term monitoring and reporting arrangements.

No Penalty

The ERF Green Paper has suggested that the ERF would be designed to allow business to continue ordinary operations without penalty. This implies participation in the ERF is voluntary. It is unclear what then will be the motivation for companies to reduce their emissions if there is no penalty for not reducing emissions and what, therefore, will prevent Australia's emissions from continuing to increase.

There are a number of Australian companies that already participate in the voluntary offset market who may see the financial advantages in participating in the ERF, but it is difficult to see why other companies would be inclined to participate if they don't need to.

As noted above, the RepuTex study showed that without a penalty the ERF is projected to lead to domestic abatement of only 27 Mt CO₂-e per annum by 2020, with overall growth in emissions of 16 per cent from 2000 levels –approximately 119 Mt CO₂-e above the 5 per cent emissions reduction target.³²

Additionality

One of the risks of any project-based crediting mechanism is that it could support projects which do not deliver additional abatement. In other words, funding is provided to projects that would have gone ahead anyway, meaning that no additional abatement is actually delivered. There are many examples where additionality may be an issue, including:

- Crediting sequestration resulting from revegetation activities already required under state or federal laws;
- Crediting abatement from energy efficiency activities that have been funded through an existing state or federal program; and
- Crediting investments in energy efficient equipment when a company may have already planned to purchase this equipment.

The ERF Green Paper notes that the Government intends to ensure abatement is additional, but it is not clear how this will be achieved. In relation to this we note that the Government has cut funding to the Energy Efficiency Opportunities program, which requires mandatory energy efficiency reporting to improve the identification, evaluation and implementation of cost effective energy savings opportunities for companies which use over 0.5PJ of energy annually (approx. 300 companies representing 56 per cent of Australia's energy use). WWF-Australia would recommend that cost effective energy efficiency opportunities already identified under this reporting framework should not now be eligible for ERF funding, so as to ensure that abatement delivered by the ERF is fully additional to business as usual.

This raises a key issue in relation to additionality which is whether ERF projects should be additional vs. historical baselines/intensities or whether they should be additional to business as usual (BAU). This is particularly critical for energy efficiency projects given recent trends for continuous

³² RepuTex (2013), *Emissions Trading Versus Direct Action*, <http://goo.gl/BMcZZZ>

improvement of performance standards for equipment, processes and buildings and also given the fact that many efficiency projects deliver positive financial returns over a relatively short time period. Put simply, many energy efficiency projects would have occurred anyway as they make good financial sense and are now very much BAU. The design of the ERF must ensure that projects that would have occurred anyway are not given priority access to government funding.

If additionality is not addressed, the ERF would not represent an efficient use of tax-payer money and will not help to accelerate Australia's transition to a low carbon economy.

Best practice emissions reduction

While it is important to encourage companies across the economy to make investments to reduce their emissions, our view is that any Government funded abatement program such as the ERF should be used to support significant step-change investments only. This means supporting sector best-practice technologies, rather than using tax-payer funds to deliver incremental improvements in the emissions intensity of certain technologies.

For example, investing in a brown coal fired power project may reduce brown coal emissions, but could increase emissions in the electricity sector if it displaced alternative low technology like gas or renewable energy. Similarly, investing in gas hot water, as suggested in the ERF Green paper, when solar hot water has a lower emissions profile would lead to a higher emissions profile.

Emissions intensity versus absolute baselines

The ERF Green Paper identifies a range of issues that will need to be addressed when setting emissions baselines for industries. This includes whether the baselines should be set according to a company's emissions intensity or absolute emissions levels. Modelling undertaken by RepuTex, suggests that setting baselines according to historical emissions intensity levels is unlikely to stimulate much new abatement directly from companies. This is because companies are already becoming less emission intensive over time. In fact, according to RepuTex:

Australia's greenhouse gas emissions intensity has been declining since 2004, falling by 64 per cent in 2010 compared with 1990 at approximately 480 tonnes CO₂-e per \$US1 million of gross domestic product (GDP).³³ At the sectoral level, this has resulted in a decline in emissions intensity in every sector – and as a result, any baseline set using emissions intensity will likely be met without significant changes from existing practices, even if overall emissions continue to rise.

RepuTex concluded that even if historic emissions intensity baselines were applied in conjunction with a high penalty price, there would unlikely be any additional abatement stimulated. This is because a "...high penalty price is irrelevant if no company exceeds their individual baseline."³⁴

The RepuTex study went on to assess the impact of applying an absolute baseline, whereby companies were required to limit absolute emissions to the average of 2008-2012 levels. RepuTex found that "[t]his approach would set a much more challenging task for companies and would make the penalty price a much more important factor in driving abatement by companies, and would reduce the cost of abatement purchased by the Government."

³³ GHG Mitigation in Australia: An Overview of the Current Policy Landscape, World Resources Institute, August 2013.

³⁴ RepuTex (2013), *Emissions Trading Versus Direct Action*, <http://goo.gl/BMcZZZ>.

Tendering process could disincentivise participation

It is intended that funding through the ERF will be disbursed through a series of reverse auctions, whereby companies bid to deliver abatement projects and lowest cost projects win the auction tender. This means funding for emissions abatement will be dependent on the outcome of successive auctions conducted over time, and not guaranteed prior to commencement.

While the Green Paper suggests that the auctions would have a benchmark price which will provide some guidance to business, there is still a risk that projects will not be successful.

The risk is that reverse auction schemes alone do not provide enough capital certainty to developers, making project planning and delivery difficult and expensive.

Internationally consistent rules and methodologies

As with the current CFI, WWF's view is that abatement projects should be consistent with the Kyoto Protocol rules. This includes the rules about permanency of land sector abatement. Any deviation from the Kyoto Protocol rules may lead to a situation where activities are credited in Australia's domestic scheme, but not recognised towards our Kyoto Protocol target. This would create a significant risk for the Government who would be required to make up any shortfall either through additional investments in Australia or by purchasing credits on the international carbon market. Or risk missing our targets and overshooting our carbon budget.

2.3. Issue IV: The impact of the absence of policy certainty derived from the Direct Action Plan to encourage long-term business investment in the clean, low carbon economy.

It appears the ERF is designed primarily to reduce emissions between now and 2020 only. While some of the investments made through the ERF will have an impact on Australia's emissions profile beyond 2020, this does not appear to be its primary objective.

Our view is that Australia needs a policy that will facilitate a much longer-term economic transition. This is particularly important in sectors of the economy which involve long-term investments, such as the power, manufacturing and mining sectors.

To provide a longer-term policy signal to investors, the ERF would need to include funding commitments beyond 2020 and a legislated baseline-and-penalty mechanism that will be in effect for decades to come. However, we note that it is highly problematic for governments to make funding commitments beyond the forward estimates, or indeed beyond the current electoral cycle. Such long-term funding announcements are unlikely to be taken seriously by investors.

A need for long-term policy certainty and a long-term price signal has been highlighted as important by Australian business in a 2013 report *Understanding the Impact of a Carbon Price on Australian Business: A Survey of Business Perspectives*³⁵ by international consultants AECOM for Businesses for a Clean Economy (B4CE).

³⁵ The survey was carried out during two weeks from May 10, 2013, using an on-line survey tool that was sent to 573 businesses. Of the 180 respondents, 81 per cent were from mainstream business, with the remaining 19 per cent from the fast-growing sector providing services to the cleaner economy. Respondents were from across all sectors of the economy including engineering, transport, manufacturing and waste. Just under 15 per cent of those responding reported that they were liable to pay the carbon price under the current carbon pricing regime. The full report *Understanding the Impact of a Carbon Price on Australian Business: A Survey of Business*

A clear insight that emerged from the AECOM survey of 180 businesses, was the negative impact policy uncertainty over whether any future climate policy would include a long-term price signal, was having on investment, strategy, and employment.

The uncertainty was reported to be delaying low-carbon investment across all sectors of the economy and hindering the growth of businesses supporting the transition to a cleaner economy.

Around 45 per cent of mainstream business reported the uncertainty had changed investment decisions, with 48 per cent reporting that carbon uncertainty was having a negative impact on their business. The vast majority (78 per cent) of businesses operating in the clean economy reported that the uncertainty was having a substantially negative impact on business, with 60 per cent saying they had delayed expansion into new markets, products, services or investment. Sixty per cent said the uncertainty had changed the timing of investment decisions, while 67 per cent said uncertainty had delayed the hiring of new staff.

This negative impact is likely to have carried over to other sectors which rely on the availability of lower carbon goods and services to support their own transition to a cleaner economy.

Offset providers that participated in the survey and participated in subsequent interviews, reported reduced demand for carbon offsets as businesses are not prepared to invest in long term projects to offset their emissions. The survey showed that of the 63 businesses that identified as participating in the Carbon Farming Initiative (CFI), almost 32 per cent had delayed involvement in the scheme compared to only 6.3 per cent who brought forward their involvement. A further 8 per cent of businesses were investigating international offsets.

The survey found that a significant majority of the 180 business support a price mechanism, with a preference for a market based mechanism that puts a price and limit on pollution, over Direct Action.

When asked whether they supported a price-based mechanism to reduce carbon emissions, 94 per cent of business surveyed agreed, with 65 per cent preferring an ETS with a floating price, and 29 per cent supporting a carbon tax with a fixed price.

When the businesses were asked if they support Direct Action, 7 per cent said they were supportive of the Direct Action Plan, 64 per cent said they were unsupportive, 12 per cent were undecided and 17 per cent said they did not know.

The results suggests business would prefer that any alternative scheme put forward by the Government includes a policy that has longevity and long-term price on carbon pollution, is market based with permit trading, and includes carbon pollution limits.

2.4. Issue V: The impact of the abolition of the Clean Energy Finance Corporation on the availability of capital for clean technology and industry investment.

The energy sector is the major contributor of Australia's greenhouse gas emissions and will also need to do more of the heavy lifting as some sectors like agriculture may struggle to meet required emissions reduction targets. This means the energy sector will need to undergo massive transformation over the coming decades if we are to meet our global and domestic targets. Given that energy projects have long lifespans of between 15 and 30 years, investments made now have repercussions for how the energy market will look in 20-30 years' time.

Australia will need a wide number of clean energy technologies and resources into the energy market as early as possible to create a diverse, competitive, and reliable energy market that can decarbonise faster if science and governments deem necessary. This requires governments to foster concurrent development of renewable industries now and not waiting for each technology to become 'cost competitive' in their own time.

Transitioning to a low carbon economy and investing earlier in a mix of technologies and resources will require an unprecedented level of capital investment where returns may not be evident for decades. Unfortunately our current financial systems are not suited to taking such a long-term view. Investors expect a return within a couple of years. However research shows that there are benefits to investing earlier, even at small scale. For example, investment at a comparatively small-scale now leads to exponential growth in installed capacity and reduces the chance of delay to large-scale capacity. Furthermore, the International Energy Agency (IEA) argues that for every \$1 of investment in low carbon transition between 2011 and 2020, avoids an additional \$4.3 in required expenditure between 2021 and 2035 to compensate for the increased emissions.³⁶

It is unclear how, if at all, the Governments proposed Direct Action Plan will support transformation of the electricity sector. It is therefore important to retain schemes, such as the Clean Energy Finance Corporation (CEFC) and the Renewable Energy Target (RET) that can fill this gap.

Even if some form of carbon price remains, it is the case that the carbon price and the RET will only support the cheapest clean technologies as they become cost competitive with coal, so for example in the early years carbon price will support primarily gas and the RET will support wind. A gap will still exist for currently feasible large-scale technologies such as large-scale solar PV and building integrated PV, and emerging technologies such as solar thermal, geothermal and wave. Investing in these technologies and resources now will help provide experience that can reduce the cost or risk of future deployments at scale; drive competition; improve market reliability and security; and accelerate transition.

The CEFC helps overcome capital market barriers that hinder the financing, commercialisation and deployment of renewable energy, energy efficiency and low emissions technologies. The CEFC also helps to reduce risk for private investments and increase capital flows. A well designed CEFC could unlock billions of dollars in private finance for a range of projects and develop a range of renewable technologies and resources. If the CEFC is clever with the money it could catalyse significant investment domestically and transform Australia's economy.

Modelling commissioned by WWF and the Australian Solar Council and undertaken by AECOM³⁷ justifies the establishment of the CEFC. It finds the CEFC could help deliver a big solar energy boom in Australia and quadruple geothermal output by 2030.

Although Australia is a world leader in solar research and development and leads the world in residential solar, Australia does not have a single project amongst the 200 biggest solar projects in the world. The CEFC could deliver more than 11.2 gigawatts of big solar – large scale solar PV and solar thermal - by 2030, as opposed to only 1.8 GW without the CEFC.

By 2030 the CEFC could also drive down wholesale electricity prices from the projected \$125 MWh down to \$117 MWh and slightly reduce retail prices for consumers down from the projected 36 cents kWh to 35 cents kWh.

³⁶ IEA World Energy Outlook, 2011 www.worldenergyoutlook.org

³⁷ AECOM (2012) Modelling of the Clean Energy Finance Corporation
http://awsassets.wwf.org.au/downloads/fso63_modelling_of_the_clean_energy_finance_corporation_13nov12.pdf

We can also expect to see the CEFC to lead to greater job creation with a possible 6,000 more jobs by 2020 and 12,000 more jobs by 2030.

To this end WWF supports retaining the CEFC.

While strongly supportive of the CEFC, WWF believes that improvements can be made to make it more transformational.

WWF believes the investments made through the CEFC should support projects that will deliver renewable energy above and beyond the current 20 per cent Renewable Energy Target (RET).

Currently there is no guarantee this will happen.

WWF-Australia is concerned with the current arrangement where CEFC projects are eligible for but not additional to the current RET, for the following reasons:

1. The 20 per cent RET target will act as a “cap” on renewable energy deployment, so CEFC projects will effectively just displace current planned renewable projects, meaning there would not be additional renewable in the grid beyond the 20 per cent. This is likely to be the case if the carbon price remains low out to and beyond 2020; and
2. It could create price uncertainty in the RET and add additional barriers and uncertainty to planned investment.

However, if the CEFC is additional to the RET, Australia could reap the benefits of increased private investment, more jobs and a faster transition to a clean energy future.

According to the AECOM modelling³⁸, if the RET target was increased to accommodate new projects generated under the CEFC, by 2020 there could be 37 per cent more large-scale renewables, 5,000 more jobs, and substantially less emissions (10 MtCo₂-e).

The wind projects predicted to be displaced by solar projects supported by the CEFC would come back into the system helping to drive down wholesale prices from \$90 MWh to \$87 MWh, and offsetting any potential increase to retail prices of increasing the RET.

By 2030 we could also expect 18.5 per cent more large scale renewables, 2,000 more jobs, and even further reductions in emissions, than what would otherwise have occurred with just the CEFC, again at no additional cost to consumers.

So for the same \$10 billion, the Government could help create more renewables energy, jobs, and emission reductions, at potentially no additional cost to consumers, if they increased the RET target.

It makes sense to ensure the CEFC does not interfere with the current RET investment pipeline.

Rather it should be invested in technologies where private sector investment is not flowing, with emphasis on emerging technologies, which will help make the RET, the carbon price (or alternative scheme), as well as the energy market, more efficient and cost effective in the longer term.

There are at least two clear options to ensure that CEFC projects are above and beyond the 20 per cent target:

- Option 1: Replace RECs for CEFC funded projects: For each REC provided to a CEFC project, the government ‘tops up’ a REC back into the scheme to ensure the integrity of the 20 per cent target. This mechanism already exists for waste coal mine gas projects under the RET.
- Option 2: Expand and extend the RET target: CEFC projects generate RECs and the RET target is expanded to reflect this investment.

³⁸ AECOM (2012) Modelling of the Clean Energy Finance Corporation
http://awsassets.wwf.org.au/downloads/fs063_modelling_of_the_clean_energy_finance_corporation_13nov12.pdf

2.5. Issue VI: The repeal of the Clean Energy Package and the Direct Action Plan's impact on, and interaction with, the Carbon Farming Initiative.

WWF believes the CFI has an important role to play in reducing carbon emissions from agriculture, as well as boosting the levels of carbon stored in the landscape. However, ultimately the CFI will only be effective if someone is willing to buy the credits generated by CFI projects at a commercially attractive price. In other words, project developers and landholders, need to be confident that they will be able to earn a return on the investment required to establish the projects. Moreover, given that many types of CFI projects will deliver the bulk of their abatement well beyond 2020, project developers need the confidence that demand will be sustained over the long-term.

WWF commissioned RepuTex to assess the implications of the Government's proposed ERF on the CFI. A full copy of the RepuTex report has been included as an annex to this submission. The key findings are summarised below:

- To date the CFI has been dominated by waste sector projects, with only a relatively small number of credits issued for land-sector sequestration projects.
- The ERF, as currently proposed, is unlikely to deliver a significant amount of abatement credits from the land sector, due to competition from larger and cheaper sources of non-land sector abatement. Instead it is anticipated that the ERF will be dominated by lower cost forms of abatement, with short payback periods (e.g. energy efficiency), crowding out other more costly forms of abatement. Reforestation and other land sector activities are likely to be constrained by the relatively high cost of implementation, versus the low forecast auction prices driven by the ERF.
- Increasing the price paid for abatement under the ERF is likely to significantly boost abatement from the land sector. Even under the high auction price scenarios, however, the land sector is projected to deliver only a small fraction of the total abatement required to achieve Australia's 2020 emission reduction goals.
- For the CFI to unlock more substantial levels of abatement from the land sector, potential investors and project developers will need a long-term investment signal. Indeed, most land-use projects require an income stream of at least 10 years to become economically viable.
- Continuing the legislated price and limit on carbon emissions provides a longer-term price signal for land sector projects under the CFI than would be provided under the ERF as currently proposed. Under the current carbon price mechanism, however, the full potential of the CFI has not been realised due to uncertainty about whether the carbon price will be retained, as well as short to medium term price uncertainty.

2.6. Issue VII: The fiscal and economic impact of the Direct Action Plan.

There have been a number of separate assessments of the potential fiscal impact of the Direct Action Plan (see Table 3). Assuming a perfect implementation of all the projects supported by the proposed ERF, SKM-MMA found that the Government would need to allocate around \$10 billion out to 2020 to achieve a 5 per cent reduction Australia's emissions. RepuTex, on the other hand, took into account the real world barriers to project delivery and found that achieving the 5 per cent target through the Direct Action Plan would cost as much as \$41 billion, which is \$35 billion more than the government

plans to spend out to 2020.³⁹ Work by the Grattan Institute suggests that using grant tendering, as proposed by the Direct Action Plan, could cost as much as \$100 billion out to 2020.

Table 3: Comparison of Cumulative Budget Impact Estimates of the Direct Action Plan

	Cost Estimate of 5% target (A\$ billion)	Notes on methodology
The Coalition's Direct Action Plan (2010)	3.2	Based on fixed budget over 4 years
RepuTex (2013)	6 - 41	Intensity & absolute baseline scenarios
SKM-MMA & Monash (2013)	10	Assumes perfect implementation
The Australia Institute (2011)	28.5-100	Based on the average cost of GGAP scheme
DCCEE (2011)	30	Assumes tender based policies achieve only one third of potential abatement
Treasury (2011)	39	RTX estimate of Treasury analysis.
Grattan Institute (2011)	100	Based on average of previous grant-tendering schemes

The 2013 report *Understanding the Impact of a Carbon Price on Australian Business: A Survey of Business Perspectives*⁴⁰ by international consultants AECOM, suggests that repealing the carbon price and replacing it with a vastly different short-term scheme would incur costs to business. The results indicate that the introduction of a price on carbon into the Australian economy in July 2012 has already started to change business decision-making in relation to strategy, investment, operations, supplier contracts and future employment decisions, as businesses factor in the cost of carbon.

In short Australian businesses have invested time, operational funds, capital and other resources in order to respond to the carbon price.

The Government must therefore be mindful of the costs to business and ultimately the cost flow through to the economy of dismantling the current scheme and establishing a vastly different scheme, especially if the intention is to introduce yet another scheme post 2020 to achieve higher emission reductions.

The AECOM survey results would suggest that business would benefit if the alternative scheme retained similar framework to the current carbon pricing scheme.

³⁹

⁴⁰ <http://www.b4ce.com.au/wp-content/uploads/2013/08/20130816CarbonPrice.pdf>

2.7. Issue VIII: The impact of repealing the Clean Energy Package on Australia's ability to systemically address climate change.

In our view there is no doubt that the absence of a price and limit on carbon pollution will undermine Australia's ability to address climate change in an effective and efficient manner. While not perfect, the Clean Energy Package provided the basis for a long-term response to the challenge of climate change, which is exactly what is needed if Australia is to contribute to global efforts to avoid dangerous levels of global warming. Most importantly, the Clean Energy Package includes both a price and a limit on carbon pollution, which WWF believes are the two core elements of an effective response to climate change. The limit allows the government to set that trajectory towards a zero-carbon economy, while the carbon price provides the private sector with a long-term price signal needed to manage this transition.

2.8. Issue IX: The impact of repealing the Clean Energy Package on Australia's pollution cap.

One of the biggest challenges countries face in tackling climate change, is finding the right policy framework that can provide certainty that they can not only achieve emissions reductions, but feel confident they are on track to meet their emission reduction targets and their international obligations, while pursuing economic and social development goals.

Putting an annual limit, or cap, on pollution provides certainty that emission targets will be met.

A cap-and-trade ETS puts an annual cap on pollution and restricts the number of pollution permits in the system and that can be traded. This way Government can be confident that they can meet their desired and/or internationally agreed targets.

A scheme without limits or caps, such as the current Direct Action Plan, does not provide the Australian Government or the international community with confidence that Australia can meet its national and international pollution targets.

If Australia failed for example to meet international targets, the Government would be required to purchase international emissions units at a cost to the domestic budget or do more the following year(s) which is likely to increase the cost of mitigation.

Australia cannot afford to delay cutting emissions as this will make keeping within our carbon budget even more difficult and costly, as demonstrated in figure 2 below.

There are numerous international and national studies arguing that delayed action on climate change will cost the world and Australia more than taking swift action.⁴¹ For example, earlier Treasury modelling found that delayed action increases Australia's future mitigation costs, with a three year delay resulting in higher mitigation costs of 2 to 10 per cent in 2050.⁴² International academic analysis suggests that more ambitious early action can help to reduce total costs over time, and could drastically reduce the magnitude of future carbon prices.⁴³ The International Energy Agency finds that if strong global mitigation is to be achieved, for every dollar of investment avoided by taking less

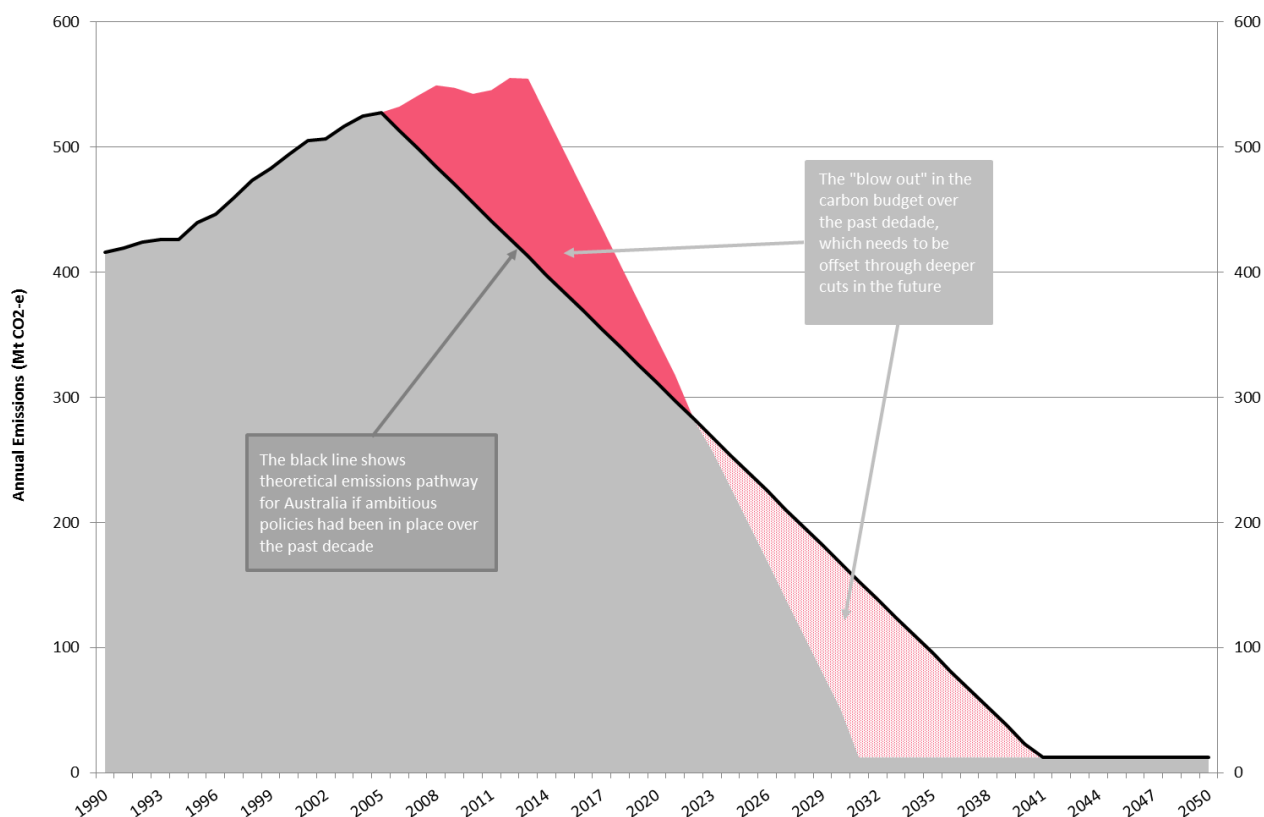
⁴¹ See for example Stern, N. (2006) "[Stern Review on The Economics of Climate Change \(pre-publication edition\). Executive Summary](#)". HM Treasury, London; IEA (2009) World Energy Outlook 2009, OECD/IEA, Paris; CSIRO (2006) Climate Change Impacts, Risks and the Benefits of Mitigation <http://www.csiro.au/files/files/pb9u.pdf>.

⁴² Australian Government (2011), Strong growth, low pollution: modelling a carbon price, The Treasury.

⁴³ Jakob, M, Luderer, G., Steckel, J. Tavoni, M, Monjon, S. (2012) Time to act now? Assessing the costs of delaying climate measure and benefits of early action, Climatic Change, 114: 1, pp 79-99.

action before 2020, an additional four dollars would need to be spent between 2021 and 2035 to compensate for the higher emissions.⁴⁴

Figure 2: Emissions pathways to stay within the long-term carbon budget and the impact of delay (source: Ecofys analysis)⁴⁵.



2.9. Issue X: The impact of repealing the Clean Energy Package on international efforts to reduce carbon pollution.

Under the current *Clean Energy Future Act*, the Government is due to make decisions on the 2020 target in May 2014, however along with the repeal of the *Act*, the government has said that it will review Australia's 2020 and post-2020 emission reduction targets in 2015, as part of a review of the entire ERF policy. We welcome the commitment to review these targets, but we are concerned that this timeline is out of sync with negotiations that will occur at the international level.

As a signatory to the Doha amendments to the Kyoto Protocol, Australia has made an international commitment to begin reviewing its target for the second commitment period in April 2014, with a view to increasing the level of ambition. Five months later in September 2014 the UN Secretary General will hold a summit of world leaders to secure stronger pledges from countries.

If Australia is to play a constructive role in these international processes, the government should be prepared to show signs that it is willing to strengthen 2020 and post-2020 targets. If, as is anticipated, other countries are forthcoming with stronger targets, it would reflect poorly on Australia if we failed to also act in this regard.

⁴⁴ IEA (2011) World Economic Outlook.

⁴⁵ WWF (2013) Avoiding Dangerous Climate Change: Defining Australia's carbon budget

http://awsassets.wwf.org.au/downloads/fs067_policy_brief_avoiding_dangerous_climate_change_defining_australia_carbon_budget_25.pdf.

The Climate Change Authority's draft report on Targets made it clear that a 5 per cent reduction is no longer a credible target for Australia. WWF-Australia is therefore concerned that if the ERF, as currently proposed, is locked in as Australia's policy response between now and 2020, Australia will not be in a position to meet even the minimum target of 5 per cent, let alone a higher target. This would seriously undermine Australia's ability to secure an ambitious and effective global response to climate change.

2.10. Issue XI: The impact of abandoning linkage with the European Union on international cooperation to reduce emissions.

The decision to abandon the planned linkage of the Australian and European carbon markets is contrary to Australia's national interests. Linking to Europe would have helped to lower the cost of achieving Australia's emission reduction targets, and allowed for the flexibility to strengthen these targets without incurring additional economic costs (see discussion above on the value of an internationally linked ETS).

Abandoning the link with Europe also works against international efforts to establish a truly global carbon market, which (if well designed) has the potential to facilitate much stronger global efforts to tackle climate change. However, the reality is that this market is beginning to take shape, irrespective of what Australia does. As discussed in more detail above, this includes the emergence of domestic schemes in three of our most important trading partners – China, South Korea and the US – in addition to Europe's regional scheme.

Through the link with Europe, Australia had an opportunity to be at the forefront of this emerging global market. Now the risk is that we will be left to play catch up.

2.11. Issue XII: The ability of the Government and the Australian people to receive expert independent advice on an appropriate carbon pollution cap for Australia following the abolition of the Climate Change Authority.

WWF-Australia believes it is critical that the Climate Change Authority or similar body is retained to ensure Australia's efforts to reduce greenhouse gas emissions are informed by independent experts in science, economics, energy and climate mitigation policy, with a level of distance from stakeholder influence. This is not unlike monetary policy in Australia with the Reserve Bank of Australia, and the Climate Change Committee in the UK.

While Governments of the day can undertake to do regular reviews of policies, as is proposed to still occur under the Climate Change Authority (Abolition) Bill 2013 Part 2, Division 2, the benefit of an independent body undertaking the review, in addition to providing advice free from stakeholder influence, is that the Government is required to consider the advice and publicly responded, which is in keeping with principles of democracy.

Regular reviews and analysis of carbon budgets and emissions reduction targets will be crucial to ensure Australia is contributing its fair share to the global problem and we are on track to meet our obligations and protect our national interest.

2.12. Issue XIII: The impact of cuts to funding for the Australian Renewable Energy Agency.

WWF-Australia supports the Australian Renewable Energy Agency as it plays an important role in research and development of renewable energy, which can improve efficiency and costs of renewable technologies.

2.13. Issue XIV: Any other related matters

Avoiding an emissions reduction gap

WWF-Australia is deeply concerned at the prospect that Australia may not have a significant emission reduction mechanism in place if the repeal of the *Clean Energy Act* is successful, and there is no alternate mechanism in place.

The 2007 Shergold Report, commissioned by then Prime Minister John Howard, argues that if Australia wants to reap economic benefits, government should act quickly and irrespective of a global agreement:

*“The Task Group has concluded that Australia should not wait until a genuinely global agreement has been negotiated. It believes that there are benefits, which outweigh the costs, in early adoption by Australia of an appropriate emissions constraint. Such action would enhance investment certainty and provide a long-term platform for responding to carbon constraints.”*⁴⁶

WWF-Australia is therefore strongly urging the government to delay wholesale repeal of the *Clean Energy Act* until there is an effective alternative mechanism in place – that includes a price and limit on pollution - to reduce greenhouse gas emissions.

This is important for good governance, sound economic management, business certainty and most importantly to ensure Australia is not left without a climate mechanism to meet our international obligations of cutting carbon pollution between 5 and 25 per cent by 2020.

Supporting renewable energy growth

The study *Policy brief: Renewable Energy and the Carbon Price*⁴⁷ by energy and carbon specialists RepuTex, commissioned by WWF-Australia, found that given the ERF does not impose a price on competing fossil fuel generation, that if Australia's ETS is repealed, renewable energy production would shrink **and Australia would fail to meet our renewable energy target.**

The report also found it likely that **retail electricity prices would rise as a flow-on effect of repealing the ETS.**

The study shows there would be a double whammy impact from repealing the ETS: a big drop in renewable energy projects, meaning more pollution, and higher electricity prices for consumers.

Putting a price on pollution supports renewables in two ways. First, it provides a long-term price signal to investors to favour the build-up of low polluting energy like wind and solar, and second it works with the Renewable Energy Target (RET) to help reduce the cost of building new renewables, particularly the cost to customers.

Key points from the report include:

⁴⁶ Prime Ministerial Task Force on Emissions Trading (2007) Report of the Task Group on Emissions Trading http://pandora.nla.gov.au/pan/79623/20080117-2207/dpmc.gov.au/emissions/docs/emissions_trading_report.pdf, pg. 6.

⁴⁷ RepuTex (2013) Policy brief: Renewable Energy and the Carbon Price.

- The Carbon Pricing Mechanism (CPM), also known as an ETS, and the Large-scale Renewable Energy

Target (LRET) are complementary market mechanisms that together support Australia's transition to a low carbon economy.

- With carbon pricing in place, even at low prices, the modelling suggests that the large-scale renewable energy credits (LGC) market will continue to support the development of 7 GW of onshore wind energy at LGC prices between \$40-75/MWh, achieving close to the 41,000 GWh RET target by 2020.
- The modelling finds that should the carbon price be repealed, the price of LGC would likely spike to near the effective penalty price of A\$85/MWh (the price of not purchasing a credit), at which point LGC prices would be capped, making the build of renewable assets uneconomic.
- If the carbon price is repealed, investment in renewable energy in Australia would slow, as retailers choose to pay the penalty price instead of buying LGC at prices above A\$80.
- Repealing the carbon price would severely limit investment in additional onshore wind energy, potentially resulting in a capacity shortfall of nearly 6 GW, meaning that by 2020 only 14 per cent of our energy would come from renewables - well short of our 20 per cent RET target.
- While wholesale electricity prices would be lower if the carbon price is repealed, retail customers would be unlikely to receive the benefit of any fall in wholesale prices, as electricity companies would actually be paying more under the LRET scheme. In other words, the outcome would likely be higher retail electricity prices, without the additional competition from wind energy or the benefits of shifting to a clean energy economy.

ANNEXES

The following reports are provided as annexes to this submission:

- RepuTex (2013) Emissions trading versus direct action: Achieving Australia's emissions reduction objectives.
- RepuTex (2013) Policy brief: Renewable Energy and the Carbon Price.
- RepuTex (2014) Unlocking land sector abatement: outlook for the emissions reduction fund.
- Vivid Economics (2013) The costs and benefits of greater Australian emissions reduction ambition.
- WWF (2013) Avoiding Dangerous Climate Change: Defining Australia's carbon budget [Annex: Ecofys (2013) Australia's carbon budget based on global effort sharing: Technical report].