



A Policy Platform for a Low Pollution Economy

1. Introduction

The Southern Cross Climate Coalition (SCCC) is an alliance of the Australian Conservation Foundation, the Australian Council of Trade Unions, the Australian Council of Social Service and The Climate Institute. We are committed to reducing our economy's dependence on carbon pollution and promoting solutions to climate change.

Over the coming months Australia's political leaders have an opportunity to lay the policy foundations for a prosperous, fair and competitive low pollution economy. These policies should aim to:

- reduce our economy's dependence on pollution;
- ensure fair and inclusive action on climate change;
- unlock new clean energy jobs and industries; and
- strengthen global action.

The SCCC supports the efforts of the Multi-Party Climate Change Committee (MPCCC) to put a price-tag on pollution. With a strong and rising pollution price Australia can reduce emissions and remain competitive in the emerging global low pollution economy.

However, a price alone will not get the job done. A price on pollution will need to be supported by a set of complementary measures to ensure cost effective outcomes, develop clean industries and support households, workers and communities in the transition to a low pollution economy.

Here we present a policy platform for a low pollution economy. This includes our recommendations for a fair and effective price on pollution, along with priority complementary measures.

This document includes the following sections:

Section 2: A price on pollution

Section 3: Assisting low income households

Section 4: Industry assistance

Section 5: A low pollution, high efficiency economy

Section 6: Clean technology innovation

Section 7: Emissions performance standards for new generators

Section 8: Vehicle pollution standards

Section 9: Carbon farming and landscape resilience

Section 10: Strengthening global action

A summary of our key policy recommendations is also provided below.

1.1. Summary of Recommendations:

A fair and effective price on pollution

- Price on pollution:** An interim fixed price scheme begins the hard work of driving the transition. While targets should not be set now, the design must ensure a clear and legislated pollution cap is implemented by default as soon as possible and the market-based pollution price covers all major and rapidly growing sectors of the economy.

- ii. **Industry transition:** Targeted transitional assistance to trade exposed industries is warranted. Assistance must be balanced against the need to support workers, households and communities. Assistance to industry must be targeted at trade-exposure and maintain investment signals for low pollution investments that meet world's best practice. For affected workers and communities, assistance must be provided to support sustainable local economies and access to employment opportunities, including support for up-skilling and re-training if needed.
- iii. **Household assistance:** No group of low income households need be financially worse off as a result of a carbon price. Appropriate financial assistance to offset the impacts of a carbon price on low income households should be provided through the transfer and taxation systems and take account of the characteristics of various types of households. Implementation of energy efficiency improvements will help minimise the impacts of energy price increases and contribute to the pollution reduction effort.

Complementary measures

While establishing a price on pollution is the core task of the MPCCC, a number of complementary measures will also be needed to make transition more efficient and cheaper. These complementary measures should

- target market failures;
- not undermine the price on carbon pollution;
- manage impacts of the price on households, vulnerable regions and industries;
- deliver abatement in uncovered sectors;
- drive early abatement in covered sectors; and
- support industry and technology development in the transition to a low pollution economy.

The SCCC has identified the following priority complementary measures which should be implemented alongside the pollution price:

- iv. **Energy efficiency:** The Government should commit to introducing a National Energy Savings Initiative, as recommended by the Prime Minister's Task Group on Energy Efficiency, mandating energy retailers and large industrial energy users to achieve a set level of energy savings each year in the residential, commercial and industrial sectors. The Government should provide funding for delivery of practical energy saving measures to low income households.
- v. **Clean energy innovation:** Create a single agency to provide tailored financial support for emerging clean energy technologies through the innovation pipeline, leveraging significant private investment. Additional support will be required for the deployment of clean energy technologies by removing infrastructure and regulatory barriers. Support the transition to a clean energy economy by providing skills and training programs to ensure a highly skilled workforce.
- vi. **Emissions performance standards for new generators:** An emissions performance standard should be implemented to avoid locking in polluting power generation and drive technological innovation.
- vii. **Emissions standards for vehicles:** Set emissions performance standards for new vehicles to keep up with world's best practice and maintain Australia's competitiveness.
- viii. **Carbon Farming and landscape resilience:** Support the Carbon Farming Initiative with a research, development and landholder extension package, securely resourced from carbon pollution permit revenue, to lay the foundations of a vibrant new low-pollution economy in rural and regional Australia. Fund a Climate Change and Ecosystem Protection Fund to invest in adaptation and protect and restore natural ecosystems to lock carbon securely in the landscape.

2. A Price on pollution

The SCCC strongly supports the efforts of the Multi-Party Climate Change Committee (MPCCC) to put a price-tag on pollution. An escalating pollution price, with associated complementary measures, is needed for Australia to reduce its economic dependence on pollution and remain competitive in the emerging global low pollution economy.

The price on pollution must be designed in a way that ensures that Australia reaps the economic benefits of the transition to a low pollution economy and protects our environment.

2.1. Policy recommendations

The price

Australia's pollution price is part of a package of measures needed to ensure emissions peak in the short-term and meet at least Australia's fair contribution to an ambitious international agreement consistent with keeping the global rise in temperature well below 2°C. With a lower starting price, a faster escalator and a stronger package of complementary policies will need to accompany the price to ensure the transition to a low pollution economy.

Households and industries will need to be appropriately supported under a price on pollution to ensure that the transition is just and fair.

Transition to cap and trade

An emissions trading scheme provides greater environmental certainty and lower cost solutions than a fixed price. Delaying the commencement of a cap-and-trade scheme increases the pressure on the domestic scheme to achieve Australia's international commitments.

To ensure that a limit on pollution is introduced, and the most efficient means of achieving emission reductions is adopted, the length of the fixed price scheme should be limited through the inclusion of a time-bound default setting to shift to a cap-and-trade system. The SCCC proposes a one to three year fixed price period.

A smooth transition from a fixed price to cap and trade is important to minimise the potential impact on Australian jobs. There are various design options that should be considered to support a smooth transition to a cap-and-trade system.¹

Coverage

The pollution price should have broad coverage of the Australian economy, ensuring all major and rapidly growing pollution sources are captured, with appropriate levels of industry assistance. The SCCC supports coverage as was agreed under the CPRS.

Consideration should also be given to achieving emissions reduction in uncovered sectors. If a sector is not covered, appropriate regulatory and other complementary measures are required to address emissions from that sector.

Caps

The length and level of the cap for the pollution pricing mechanism should be set a year in advance of moving to a floating price. The SCCC calls for establishment of an independent and non-partisan expert body – similar to the UK Climate Change Committee – to recommend national targets, scheme caps and complementary measures (especially in uncovered sectors) to the Minister or Executive. The skill set of the members of the independent body should be mandated in the legislation to ensure appropriate expertise, as has been established for the UK Committee within the Climate Change Act 2008.²

Australia's 2020 target should not be locked in before our international obligations are clear.

¹ For example, interim approaches such as price floors or genuinely high ceilings.

² Climate Change Act 2008 (UK). Schedule 1.

Support for households and industries

A price on pollution will disproportionately affect some workers, households, communities and industries. The SCCC supports targeted assistance to ensure that low-income households need not be worse off under a price on pollution. In addition we support appropriate assistance to industries, in particular emissions intensive trade exposed industries, in the transition to a low pollution economy to protect workers and communities and unlock investment in clean technologies.³

2.2. Rationale

If prompt and decisive action is taken the transition to a low pollution economy will create a multi-billion dollar clean technology market that Australia can benefit from.

A clear and legislated national pollution limit and a pollution price covering all major polluting sectors of the economy is essential to drive long-term structural changes in the economy and make businesses responsible for the pollution they cause. It will incentivise transition, unlock investment in clean technologies and generate hundreds of thousands of jobs across all sectors of the economy.

It is important that policy reforms make an immediate impact on Australia's still rising domestic pollution. It is also critical that there is flexibility to achieve Australia's fair contribution to an ambitious international agreement consistent with keeping the global rise in temperature well below 2°C.

³ See SCCC policy papers on Industry Transitions, Assisting Low Income Households and Clean Technology Innovation. April 2011

3. Assisting low income households

The SCCC recognises that the MPCCC and the Government have committed to managing the impacts of the pollution price on Australian households. This is particularly important for low-income households, where the potential impacts will be felt most acutely and the potential to make changes is limited.

The SCCC is supportive of reforms of the taxation and income support systems that reduce complexity, improve fairness and encourage workforce participation. Our recommendations presented here are based on the current system. If changes are made in advance of the commencement of a carbon price mechanism, we reserve the right to review our recommendations in light of these changes.

We have identified several policy solutions to assist low-income households to adjust to a price on pollution and contribute to Australia's transition to a low pollution economy. In summary:

- The Government should fully compensate low income households for cost increases attributable to a carbon price. This assistance should be paid through the social security and taxation systems and take account of characteristics of various types of households. This assistance should be paid from the time that a mechanism commences operation, be indexed appropriately and be reviewed and adjusted in light of changes at the transition from fixed to market price.
- The Government should introduce measures to significantly increase the efficiency of energy end use in households, with a view to maximising amenity from energy consumed, minimising consumption and energy costs, and reducing carbon pollution.

3.1 Policy recommendations

- i. At a minimum assistance to households should be delivered as proposed by the Carbon Pollution Reduction Scheme (CPRS) through the income support and personal taxation systems as increases to all Pensions and Allowances, Family Tax Benefits and the Low Income Tax Offset. Assistance should allow for projected increases, be paid from scheme commencement, be indexed annually and be reviewed and adjusted in light of changes at the transition from fixed to market price. Assistance proposed by the CPRS allowed for the modelled increase for 'average' households plus a buffer.
- ii. Consideration should be given to providing assistance to low income households based on cost increases rather than income levels. For instance, an 'average' cost of living increase of \$10 per week would be compensated by a standard increase of say \$15 per week through all pensions, allowances, supplements and low income tax arrangements.
- iii. The Government should introduce measures to increase the efficiency of energy end-use in households, especially low income households. Improved energy use-efficiency can improve well-being, contribute to the carbon pollution mitigation effort, can in effect be adaptive to climate change, and can save occupants money by minimising energy consumption and expenditure on bills. In addition to beneficial outcome for householders such an investment has the potential to grow enterprises and jobs. Of the approximately 8 million existing dwellings, in the order of 3 million are occupied by low income households. Improving energy use efficiency in the household sector is a significant long term project to be realised over time. Initially and over time investments for low income households could be funded from one or more of several sources including consolidated revenue, carbon price mechanism revenue, and a national energy savings initiative. Some of the revenue generated through a carbon pricing mechanism should be invested in improving residential energy efficiency, particularly for low income households. There are currently no federally funded, federally mandated, federally consistent household energy efficiency schemes in operation. SCCC proposes that the Government initiate a significant research, development and deployment project detailed separately.

3.2 Rationale

A price on carbon pollution will not be levied directly on households. It will be levied on the largest of businesses responsible for most of the carbon pollution. However, the pollution price will be passed through to some retail prices, including for energy. Some households are less able to cope with any increase in the prices of essential services and goods: households with low, fixed or unreliable incomes, those dependent on transfer payments, those who work in low paying (and often casual) jobs, and the many that move between employment, under-employment and unemployment.

Previous modelling by Treasury estimated that a pollution price of \$25/t would increase the overall cost of living for an average household by 1.1%. In the worst case modelled, the impact would be about 1.4%. Single pensioner and sole parent pensioner households are more exposed to price impacts because of the way they spend.

These changes are material and significant enough to bring further stress on household budgets. The challenge is to ensure that low income households are not punished by the introduction of a carbon price, but are exposed to price signals and assisted to meet higher costs through support for investments that improve energy end-use efficiency.

Deficiencies and inequity in the current system

The current income support system does not provide an adequate, equitable or consistent foundation for assistance to low income households that rely wholly or in part on transfer payments. Pensions are paid at significantly higher rates than Allowances (currently \$365 per week and \$237 per week - including unemployment and sole parent payments - respectively). Allowance recipients also do not receive the \$10 per week 'utilities' payment (now integrated with the Pension Supplement) nor the more recent \$32 per week increase in single pension rates. Regular indexation for Allowances is based on the Consumer Price Index which does not adequately address cost of living changes, and is less comprehensive than the indexation arrangements for pensions, based on the Pension and Beneficiary Living Cost Index.

The 'starting points' for assistance to Pension and Allowance recipients similarly affected by a carbon price are therefore inconsistent. If a uniform, percentage-based approach is taken, the result is an extension and exaggeration of current inequity; allowance recipients risk being significantly under-compensated for actual increases in their cost of living. There is a strong argument to be made for assessing assistance levels with regard to household expenditure rather than on the basis of income (i.e. transfer payments).

4. Industry assistance

As acknowledged by the MPCCC, a key challenge is to maximise the opportunities for Australian industries in the transition to a low pollution economy.

Sustainable industry transitions require a commitment that place workers at the centre by promoting inclusive economic growth that provides secure and safe employment in the transition to a low carbon economy; safeguarding workers in emission-intensive industries by supporting industry to adopt best practice energy efficiency and low emission technologies; and empowering workers through access to training that provides workers with the skills needed to benefit from employment opportunities in a low carbon economy.

Transitional assistance to some trade exposed industries that is targeted, reduced over time and maintains investment signals for low pollution investments that meet world's best practice is warranted. The adoption of low emission and energy efficient practices, in particular, is essential for maintaining and growing employment in traditional industries that will continue to play an importance role in a low carbon economy.

Below we outline several policy solutions to assist Australian industries to make a fair contribution to Australia's pollution reduction effort, while remaining competitive and prosperous.

4.1. Policy recommendations

Assistance to emissions-intensive trade exposed industries

Short term assistance will be required for retaining and growing sustainable production and associated jobs. Short-term assistance measures for emissions-intensive trade exposed (EITE) industries must:

- i. Provide assistance to EITE industries that is balanced against the ongoing need to allocate revenue to support workers, low income households and communities during the transition to a low pollution economy, as well as supporting clean technology innovation and other complementary measures;
- ii. Adopt a principled policy approach including regular reviews of new international policy developments with assistance removed as the real and implicit pollution prices increase in competing countries.
- iii. Ensure assistance to EITE industries is designed to maximise ongoing incentives for low pollution investment and ensure that all parts of the economy contribute equitably to reducing pollution;
- iv. Maintain investment signals for low pollution technologies, activities and behaviours and drive structural and technological changes in high emitting industries consistent with world's best practice;
- v. Tie assistance to demonstrated trade-exposure and target the trade-exposed and emission intensive elements of a company's operation and to demonstrated low pollution technological changes consistent with world's best practice;
- vi. Not restrict the ability of governments to achieve national emissions mitigation targets; and
- vii. Be publically and transparently reported in terms of the allocation and quantity of permits, and the value of assistance.

Industry meeting world's best practice

The adoption of best practice low emission and energy efficient technologies and practices is essential for maintaining and growing employment in traditional industries that will continue to play an importance role in a low carbon economy.

The introduction of a price on pollution will incentivise investment in clean technologies. However, in the short-term and in response to non-market barriers, complementary measures are needed to assist with

the adoption of low emission technologies. Complementary measures include a national energy savings initiative, financial tools to support innovation, reform of the National Electricity Market, and standards.⁴

For industry to adopt world's best practice emission and energy efficiency technologies, we need investment in the skills required. Within existing training programs, clean technology skills should be a priority.

With respect to skills and training, we recommend at least a third of the remaining 345,000 positions on Productivity Places Program are dedicated to re-skilling the workforce for the low carbon economy. A similar commitment, if not greater, is needed in the Critical Skills Investment Fund. Clean economy budget commitments should also be underpinned by industry training programs that assist workers to gain the skills needed in a low carbon economy.

Assistance to carbon intensive communities

For affected workers and communities, assistance must be provided to support sustainable local economies and access to employment opportunities. A focus on collaborative planning for structural change in regional communities is needed, with a particular focus on the development of clean technology industrial clusters that draw on the existing industrial fabric and support for affected workers to gain training in the skills and knowledge needed to access emerging employment opportunities in a low carbon economy.

Under the CPRS, a portion of the carbon price revenue was provisionally allocated to structural adjustment assistance for workers and communities disproportionately impacted on by the introduction of the price on pollution. In the scheme currently being developed, we recommend at least \$500 million is allocated to support structural adjustment in carbon intensive communities.

4.2. Rationale

Like previous structural changes to the economy, the transition to a low carbon economy through the introduction of a price on pollution presents both opportunities and challenges. The opportunities are well known: the transition to a low pollution economy will create a multi-billion dollar clean technology market that Australia can benefit from if prompt and decisive action is taken. The challenge is to balance environmental outcomes with support for workers in, and communities dependent on, industries that are responding to changes brought about by a price on pollution.

The SCCC believes that the policy package we are supporting including a price on pollution, an effective industry transition scheme, household assistance and priority complementary measures, provides the foundation for a fair and effective transition to an economy much less dependent on pollution.

However, it is essential that the lessons of past economic reforms are reflected in policy development and planning. All levels of government must work in partnership with unions and broader civil society groups to maintain living standards and support workers, their families and communities.

⁴ SCCC policy documents on complementary measures identify measures that will support industry to decouple competitiveness from emissions.

5. A low pollution, high efficiency economy

A critical element in the transition to a low pollution economy must be significant improvements in energy efficiency; in the way that we produce, transport and consume energy for end-use purposes. Significant improvements in energy efficiency for industry, business and households will have economic, social and environmental benefits.

A price on pollution is unlikely to provide sufficient inducement for investment in energy efficiency improvement. Other measures including direct funding and leveraged investments, regulatory interventions and constructive taxation arrangements may be required.

5.1. Policy recommendations

Whether appropriately integrated with the design of a carbon price or otherwise, the Government should, in parallel with a carbon price mechanism, take action to address market and non-market barriers to the take up of energy efficiency measures, including the following.

National Energy Savings Initiative

The Government should proceed with the recommendation of the Prime Minister's Task Group on Energy Efficiency to establish a transitional National Energy Savings Initiative (NESI) that would replace existing and planned state energy efficiency schemes and be phased down as a carbon price matures. The NESI should: cover all states and territories; apply to commercial, industrial and residential electricity and gas use; and place the point of obligation on energy retailers, with voluntary opt-in for large energy users. To ensure the scheme is delivering actual savings, compliance should be determined based on metered energy savings. Limited use of deemed credits may be allowed for situations where metered savings are impractical, or would add significant costs to the scheme.

The NESI will be important for driving the adoption of energy efficiency measures. In the commercial sector, for example, it would be a key driver of investment in retrofitting of existing building stock; where there are significant opportunities to improve energy efficiency.

Low income households

The Government should commence work on a research, development and deployment program that aims to improve energy efficiency in low income households, to assess and retrofit 250,000 homes by 2020 and provide a foundation of methodology, information and technology for further extension. In summary the proposed project commences with a research and development phase over three years at a cost of \$35 million, followed by a deployment phase over six years at a cost of \$780 million. The project begins with work to develop benchmark and baseline data, build an evidence base of technologies (including costs, benefits and efficacy) and test delivery methods for assessments, retrofits and use-awareness. The project builds on the long term experience and effectiveness of programs delivered through the Kildonan model which regards householders (i.e. the energy consumer) as the focus of the project.

National target

Building on the Government's previous commitment to put Australia on track to be at the forefront of OECD energy efficiency improvement, the Government should set an aspirational national energy efficiency target of improving primary energy intensity by at least 30% by 2020.

5.2. Rationale

As reported by the Prime Minister's Task Group on Energy Efficiency in 2010, Australia lags behind other developed nations in both current levels of energy efficiency and rates of energy efficiency improvement.

For industry, businesses and households, regardless of size or location, improvements in energy efficiency should result in:

- minimising energy consumption and energy bills;
- maximising the value from consumption;

- growing employment and enterprise, including for accredited building and home assessors and other service providers (eg for ceiling insulation);
- electricity grid benefits including improved reliability and security and delayed investments in augmentation;
- reductions in carbon pollution; and
- adaptation towards predicted climate change.

For householders, improved end-use efficiency can lead to

- improved amenity, financial stability and general wellbeing for householders (including for example through lower rates of disconnection from energy supply; increased workforce participation, fewer hospitalisations, increased attendance at school); and
- socialised benefits of individual and family wellbeing and social inclusion.

6. Clean technology innovation

Alongside the pollution price, we recommend the Government implement an ambitious package of measures to support clean technology innovation.

Australia has abundant opportunities to end our dependence on pollution and move to cleaner production processes. Not doing so risks investment and jobs in a growing global clean economy. Last year, a record \$243 billion was invested in clean energy across the globe led by China, the US and Europe, up from \$186 billion in 2009. There is a strong rationale for Australia to act now, unleashing billions of dollars of private investment and creating hundreds of thousands of new jobs in a strong and productive clean economy.

Below, we identify several policy solutions to unlock innovation in clean technologies in Australia. In summary this includes:

- Targeted funds to overcome market barriers to clean energy innovation and leverage private investment through a Clean Energy Finance Corporation;
- Removal of infrastructure and regulatory barriers to investment in enabling technologies; and
- Investment in skills to support workers to benefit from emerging employment opportunities and to support the clean technology sector to develop and mature

6.1. Policy recommendations

Clean energy innovation

To accelerate development and deployment of clean energy technologies governments need to implement targeted policies that support clean technology development in each phase of the innovation and commercialisation process.

The scale of investments required to transition to a low pollution economy are well beyond the financing capacity of the public sector. There is therefore an urgent need to leverage private sector capital for innovation.

The SCCC supports the development of a Clean Energy Finance Corporation (CEFC) as an economically prudent and responsible way to manage public investment in clean energy. This single entity would provide tailored financial support mechanisms appropriate to different investors, technologies and stages of innovation, covering clean energy, energy efficiency and other low carbon infrastructure assets. This would be similar to the structure of the successful Export Finance and Insurance Commission.

The financial tools available to the CEFC should include:

- partial loan guarantees by Government of a borrower's debt repayment obligations;
- climate bonds as an effective mechanism to raise further capital as required;
- seed funding and/or co-investments in direct equity or debt positions in companies (similar model to that of Commercialisation Australia) as well as bridging finance;
- tax credits that support firms in all sectors and of all sizes to research and develop energy efficiency and low emissions technology, consistent with achieving international competitiveness in a low carbon economy;
- policy/political risk guarantee/insurance; and
- currency risk funds to assist with imports of capital equipment where relevant;

Where appropriate, the CEFC could administer a range of existing funding programs, including the Solar Flagships, Renewable Energy Equity Fund and elements of the Research and Development Tax Credit, in order to create sufficient scale with the limited public funds.

The allocation of \$2-3 billion per annum for the development of low emissions technology, as proposed by Garnaut,⁵ could leverage at least \$10 - \$15 billion in financing for projects over the next 10 years (based on conservative assumptions from the UK Green Investment Bank model). This model would then be self sustaining, recycling revenues from its investments.

Examples of support for investment in clean energy technologies include a commitment of £3 billion by the UK Government to seed its Green Investment Bank which will leverage an additional £15 of private investment, the provision of low cost capital and economic stimulus packages by the Chinese Government, and a program of loan guarantees by the US Government which has provided \$26 billion in loans, creating 59,000 jobs.

Infrastructure and regulatory barriers

A number of regulatory and investment barriers currently exist which prevent the accelerated deployment of low pollution technologies, including cogeneration. To overcome this, reform of the National Electricity Market (NEM), which currently favours supply-side options over demand-side measures, will be crucial to achieving low cost pollution abatement. The NEM rules must remove barriers to, and provide greater fiscal incentives for, network business investments in energy efficiency, distributed generation and demand management. In addition to unlocking low cost abatement, this will help to minimise the need for grid augmentation and ultimately help to keep electricity prices down. While NEM reform is not a simple or quick process, the Federal Government is well placed to initiate the process of reform.

Specifically, the SCCC calls on the Federal Government to initiate and lead a process of NEM reform to remove barriers to energy efficiency and incentivise greater investment in demand-side measures, including distributed generation. This reform should be initiated in 2011 beginning with an independent enquiry to recommend on priority reforms for implementation beginning in 2012.

Skills

To minimise the risk of skills shortages emerging as a barrier to investment in new low pollution industries, and to support the sector to develop and mature, an appropriately skilled workforce is needed. This will require collaboration between governments, business and unions to anticipate the workforce and skills needed, assess the gaps in the existing workforce skills, and invest accordingly in re-skilling and re-training workers in low carbon processes and technologies. We recommend at least a third of the remaining 345,000 positions on Productivity Places Program are dedicated to re-skilling the workforce for the low carbon economy. A similar commitment, if not greater, is needed in the Critical Skills Investment Fund. Clean economy budget commitments should also be underpinned by industry training programs that assist workers to gain the skills needed in a low carbon economy.

6.2. Rationale

The transition to a low carbon economy will require significant investment in clean technologies and infrastructure, including: utility scale renewable energy projects; distributed small scale renewable energy capacity; energy efficiency measures; energy network enhancement and modernisation; transport infrastructure; and water efficiency technologies.

These technologies face a complex range of barriers to innovation and investment and are subject to a range of market failures that the carbon price alone cannot address. For example, the immediate benefits from innovation are difficult for a private company to profit from and introduce significant first mover disadvantage. This inability to capture all the returns of private investment will result in innovation investment levels well below what is required during a period of major economic adjustment. There is therefore a strong case for a suite of policies designed to overcome the complex barriers and market failures currently preventing all stages of innovation including research, development, deployment and commercialisation.

⁵ See Garnaut Update Paper 7: Low Emissions Technology and the Innovation Challenge April 2011

7. Emissions performance standards for new generators

To reduce emissions in the electricity generation sector – which emits approximately 36 per cent of Australia’s total greenhouse gas emissions – there will need to be a shift from fossil fuels to clean energy sources. The carbon price mechanism will be the main driver of change. However, complementary measures are needed in the short- to medium-term to support this transition.

The SCCC strongly supports the Government’s existing commitment to introduce an emissions performance standard for new electricity generators. A well designed emissions performance standard, operating alongside a carbon price and the Renewable Energy Target, will encourage the early deployment of clean energy technologies and minimise the risk of further entrenching emissions intensive energy sources.

7.1. Policy recommendations

An emissions performance standard is an important regulatory requirement to ensure all new electricity generators built in Australia are consistent with world’s best practice emissions performance. An emissions performance standard that applies to all new fossil fuel energy sources and tightened overtime will provide a long-term clean energy investment signal that will encourage the early deployment of the full suite of clean energy and low pollution technologies.

The regulatory framework can be implemented immediately and at no major cost to the government.

- i. The SCCC recommends that an emissions performance standard come into effect on 1 January 2012. It should apply to all new fossil fuel power stations, including both coal and gas, and major expansions or refurbishments of existing generators; with the exception of peaking plants that run less than 10 per cent of the time.
- ii. With the principles identified above in mind, the Australian Conservation Foundation and The Climate Institute propose the following specific recommendations:
 - Beginning on 1 January 2012 the emissions performance standard, applying to all planned and proposed generation projects, should be set at no more than 500 kg CO₂e/MWh; and
 - From 2020 the emissions standard must require all planned and proposed power stations to operate at or below 200 kg CO₂e/MWh.
- iii. A principle objective of the emissions performance standard is to encourage the full range of low pollution electricity generation technologies. With respect to carbon capture and storage (CCS), the Australian Council of Trade Unions and The Climate Institute supports investment in CCS technology to encourage commercial availability by 2020 and the adoption of CCS technology across all fossil fuel generators as soon as possible.

7.2. Rationale

A price on pollution, operating alongside the Renewable Energy Target, will see a significant transformation of Australia’s electricity sector over the coming decades. However, there is a risk in the early years of the pollution price of locking in large amounts of conventional fossil fuel generating capacity, entrenching high emission plants for many decades and leading to stranded assets as the price on pollution matures. This would undermine national pollution goals and increase the cost of meeting Australia’s emission targets in the future. Another key challenge for the electricity sector is to drive early deployment of new emerging clean energy options above the RET. This will require a strong regulatory framework and targeted policies to support clean technology development. (See SCCC Clean Technology Innovation Paper).

8. Vehicle pollution standards

The SCCC supports the Government's intention to introduce mandatory vehicle pollution standards for all new cars sold in Australia to operate alongside an economy-wide price-tag on pollution. Ensuring vehicle pollution standards are consistent with international trends will support Australia's vehicle manufacturing to remain competitive by securing export markets for Australian vehicles.

8.1. Policy recommendations

The Government should proceed with its commitment to introduce mandatory vehicle pollution standards. These standards should aim to ensure Australia keeps up with world's best practice and remains competitive in a low pollution future.

The SCCC acknowledges the need for Government and the industry to address the starting point of the negotiations⁶ on mandatory vehicle pollution standards and are seeking an outcome informed by a comprehensive assessment of international standards while taking into account how standards interface with carbon pricing and other climate change measures and a comparison of treatment of other Australian industries in the transition to a low pollution economy.

As part of this process to determine the mandatory standards, The Climate Institute and the Australian Conservation Foundation recommend a standard that is at least as good as the US by 2015 and EU by 2020. In practice this means setting the standard at the following levels: 166 CO₂-e/km by 2015 and 95 g CO₂-e/km by 2020.

As recommended by the Prime Minister's Task Group on energy efficiency, there is an important role for the Commonwealth Government in adopting vehicle pollution standards for the government vehicle fleet. The standards should be consistent with the rigorous assessment proposed above. This will support both pollution reduction objectives and domestic producers (through a parallel commitment to support Australian-made). We recommend that the Commonwealth Government also work with state, territory and local governments to adopt similar targets. Given the size and turn-over of the public sector vehicle fleet, such a requirement will have a significant impact on the overall performance of the wider vehicle market. In moving in this direction, the Commonwealth needs to recognise the requirements for different vehicle sizes in the overall fleet and should take any decisions in consultation with the industry.

Bearing in mind the recent cuts to the Green Car Innovation Fund, it is vital that the industry is assisted to meet the requirements of the introduced vehicle pollution standard.

8.2. Rationale

Road transport accounts for approximately 13% of Australia's total emissions and is one of the fastest growing pollution sources. Passenger vehicles are by far the single largest source of transport emissions.

The challenge is threefold: to unlock the full pollution reduction potential of the transport sector; to assist Australian households manage rising fuel costs; and to ensure Australia's vehicle manufacturing industry remains competitive in global low pollution economy.

It is critical to ensure transport emissions are fully covered by the pollution price so as to provide a sustained long-term price signal to consumers. While in the short-term rising petrol prices have a limited impact on everyday consumption, in the medium- to long-term, higher prices do have a significant impact on fuel consumption patterns and vehicle purchasing decisions.

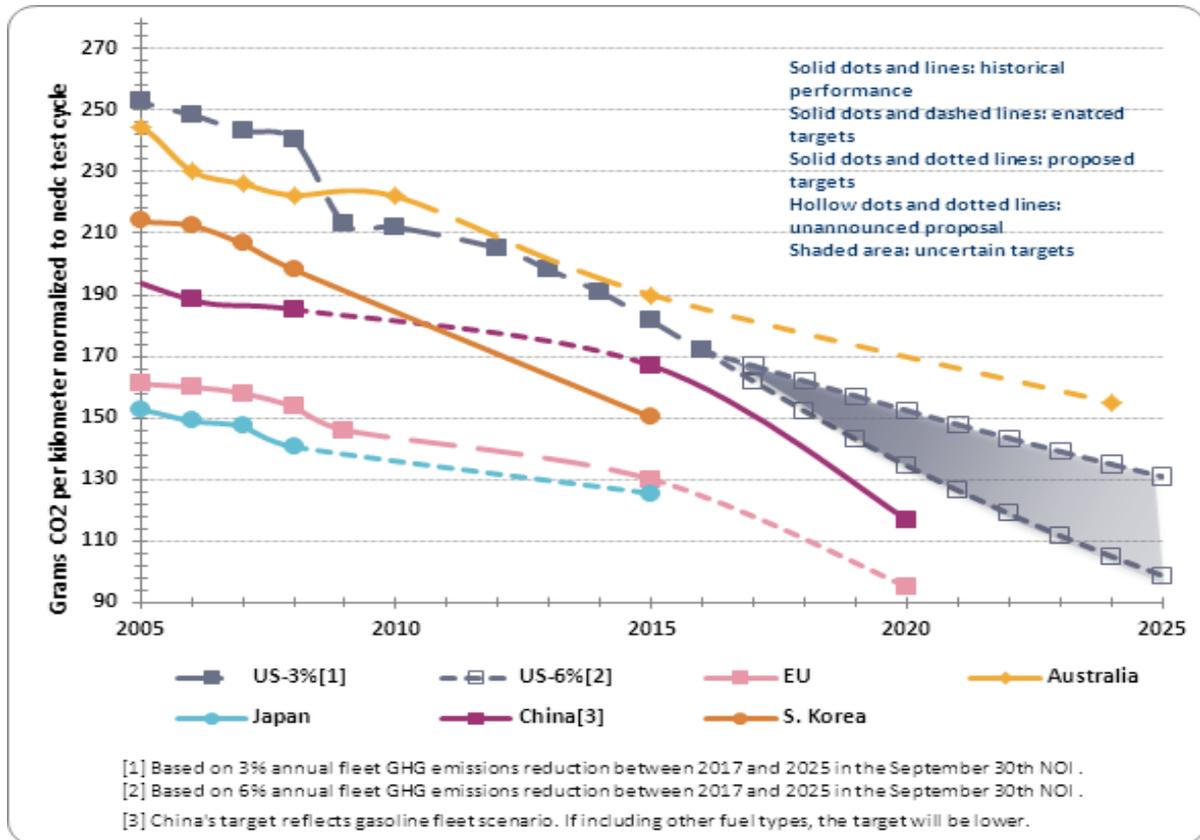
Mandatory pollution standards operating alongside a pollution price can, if properly designed, assist in overcoming non-price barriers that limit the uptake of fuel efficient and low pollution vehicles. This has the potential to reduce pollution in the transport sector and relieve financial pressures on consumers.

As tariffs have decreased, Australian vehicle manufacturers have become increasingly export focused. The trend globally is for tighter vehicle standards. The challenge for Australian producers will be to keep up in order to not limit export opportunities. Based on current manufacturing standards, Australia's export

⁶ 190 g CO₂-e/km by 2015 and 155 g CO₂-e/km by 2024
April 2011

market will be limited to those countries without mandatory standards, such as in the Middle East (Figure 1, illustrates the global trend in mandatory vehicle standards in key economies).

Figure 1: Illustration of global trends in vehicle pollution standards (based on NEDC test cycle)⁷



⁷ It is important to note that the standards compared in Figure 1 are based on the New European Test Driving Cycle methodology, which accounts for differences between countries, including vehicle size, weight, technology penetration and engine performance. See: International Council on Clean Transportation (2007), *Passenger Vehicle Greenhouse Gas and Fuel Economy Standards: A Global Update*, <http://www.theicct.org>. Graph from International Council on Clean Transportation (2010), 'Global passenger vehicle standards: 2010 Update', <http://www.theicct.org/passenger-vehicles/global-pv-standards-update/> April 2011

9. Carbon farming and landscape resilience

The SCCC believes that the Carbon Farming Initiative (CFI) lays the foundations for rural and regional Australians' participation in the low-pollution economy. It should support strong innovation and growth in abatement activities in agriculture and other land-uses, and promote other important environmental outcomes and economic development opportunities – especially in Indigenous communities.

Alone, however, the CFI is unlikely to catalyse the substantial investment needed to generate the suite and scale of abatement activities needed across the land sector, nor to restore resilience to Australia's natural systems.

We identify several policy strategies to enhance and complement the CFI, maximise industry development potential, increase opportunities to sequester carbon in the landscape, and unlock Indigenous employment opportunities. These will also create opportunities for abatement in global agriculture and land-use, allowing Australia to help developing countries especially. In summary, this includes:

- Linking the CFI to the domestic price on pollution to provide a strong and healthy market;
- Using some of the carbon price revenue – at least \$200 million over four years – commit additional funding for research, development, extension and commercialisation of abatement opportunities – leveraging climate solutions in Australia's land sector and around the world; and
- Establishing a Climate Change and Ecosystem Protection Fund to protect the capacity of natural systems to act as a carbon store.

9.1. Policy recommendations

Carbon Farming Initiative

An effective CFI will yield net benefits to the climate and the environment, and minimise the risk of perverse outcomes through the provision of clear and binding standards. It will ensure carbon forestry and other biosequestration projects do not exacerbate stress on natural systems, and, where possible, enhance ecosystem health.

The CFI will develop a strong domestic industry for land sector abatement and provide incentives for abatement in sectors not covered by the price on pollution. Without a link to the domestic pollution price, however, there will not be sufficient demand to underpin a strong local market.

Despite the opportunities afforded by the CFI, full industry development will be hindered by low carbon literacy. Extra funding and specialist assistance to various rural industries and communities (including Indigenous communities) is needed to strengthen understanding of and engagement with the carbon market, facilitate innovation, and align projects with natural resource management goals. To achieve this, the SCCC supports provision of funding well above the \$4 million already allocated to Landcare.

The proposed positive and negative list, alongside a Domestic Offsets Integrity Committee, is important for guiding project development and ensuring the integrity of carbon farming credits. The SCCC supports a register of projects that discloses – consistently and clearly – the environmental and/or Indigenous community co-benefits of projects.

Landscape resilience

Enhanced protection and improved management of natural ecosystems can contribute to both reductions in pollution, as well as biosequestration. While the CFI is focussed on the agricultural and managed forests sectors, there will be substantial co-benefits from investment in complementary conservation mechanisms across land tenures. For example, Australia's National Reserve System (NRS) stores 1.5 billion tonnes of Kyoto-compliant carbon.

A carbon price does not directly correct the failure of the market to value ecosystems nor provide the additional incentives needed to encourage biodiversity protection. While this goal is distinct from pure climate change mitigation, the interaction of incentives to price pollution and encourage ecosystem and biodiversity protection enhances both the carbon sequestration and the biodiversity benefits.

The SCCC calls for a Climate Change and Ecosystem Protection Fund, of \$1 billion per annum, to build the resilience of Australian ecosystems by reducing existing threats such as land-use change, over-allocation of water, and pollution. The Fund would scale up, align and accelerate work underway through the Caring for Country, Wildlife Corridors, and Marine Bioregional Planning programs.

The Fund would build on the CFI through the development of a national plan to expand existing reserve systems, boost management programs to counter the impact of pests and weeds, and build the capacity of national and regional organisations to monitor and report on carbon sequestration and biodiversity restoration.

With the right policy framework in place, the Fund could leverage private funding for biodiversity conservation and create significant employment opportunities for Indigenous Australians on-country.

9.2. Rationale

The land sector represents nearly one-quarter of Australia's emissions, including ten per cent of methane emissions. In addition, Australian agriculture is highly disparate, with well over 100,000 diverse small and medium-sized enterprises. Carbon accounting in farming systems is still in its infancy, off-the-shelf abatement solutions are not always readily available, and carbon literacy is low. Given these market failures, public investment to seed industry development, together with a market for land sector abatement, are crucial first steps towards more sustainable land-use.

Rural industries and landscapes have the potential to provide a wide range of solutions to climate change that deliver environmental, social and cultural co-benefits. Protection, enhancement and management of natural ecosystems can generate positive outcomes; abatement of carbon pollution, biodiversity protection, and employment opportunities for Indigenous Australians on-country.

10. Strengthening global action

Australia has an important role to play in delivering an ambitious global response to the challenge of climate change. Australia has the highest carbon pollution levels per person in the developed world, is in the top twenty group of global polluters and its power sector is in the top ten list of pollution emitted per kilowatt hour.

At United Nations (UN) climate meetings Australia chairs the “Umbrella Group” of countries including the USA, Russia, Canada and Japan. Australia is a leading participant in the “Cartagena Dialogue” of key developed and developing countries.

What Australia does matters.

Building on the foundations provided by the Kyoto Protocol and the Cancun Agreements, it is critical that the Australian Government continue to use all diplomatic channels, combined with a credible policy framework at home, to help strengthen global action.

10.1. Policy recommendations

Credible action at home

Currently the most important contribution Australia can make to a strong global response is to implement an effective domestic regulatory framework to reduce our carbon pollution. This needs to be capable of meeting at least Australia’s fair contribution to an ambitious international agreement and do our fair share implementing the Cancun Agreement to keep the global rise in temperature well below 2°C. This will demonstrate Australia’s firm commitment to meeting its obligations.

As outlined in the earlier sections of this document, this should include a price-tag on pollution and a series of other complementary measures.

Climate diplomacy

Australia is an important middle-power in international climate change negotiations and it is vital that we continue to play this role in the coming years. This should include remaining actively engaged in the UN climate negotiations, as well as showing leadership in other international fora, including the G20, the Cartagena Dialogue, the Major Economies Forum on Energy and Climate, and the Commonwealth Heads of Government Meeting.

Support for poorer developing countries

Beyond meeting its internationally agreed pollution reduction commitments, the most important contribution Australia can make to a global efforts to avoid dangerous climate change is to scale up its investment in and support to developing country efforts to reduce their economic dependence on pollution. While some rapidly emerging economies, such as China, do not need and are not asking for developed country support, many others countries will need financial and technical assistance.

The Australian Government, as a signatory to the Copenhagen Accord and the Cancun Agreements, has committed to contributing its share of the long-term climate finance of raising \$100 billion from public and private sources by 2020. This commitment was made, in part, in return for much stronger international pollution reduction commitments from major emerging economies, including China, India, South Africa and Brazil.

Support for mitigation and adaptation measures in developing countries is crucial to effective climate diplomacy and to supporting our neighbouring nations and trading partners to develop their economies sustainably.

The SCCC calls on the Government to show leadership on the issue of international climate finance by outlining a package of measures that is in addition to existing aid commitments to meet Australia’s fair share of the global effort. This should be informed by the sources identified in the High Level Advisory Group on Climate Change Financing. We call on the Government to release its package of measures in advance of the next UN climate summit in Durban.