



**Environment Business Australia submission  
on the  
Exposure Draft of the CPRS  
to the  
Senate Select Committee on Climate Policy Inquiry into Climate Policy  
and the  
Department of Climate Change**

We request that this submission be read in conjunction with EBA's submission to Government on the CPRS as outlined in the White Paper

**'New markets, new industries, new jobs – the upside of the CPRS'** (attached)

Environment Business Australia would like to thank the Department of Climate Change and the Senate Select Committee on Climate Policy for the opportunity to provide constructive criticism and recommendations into the CPRS as outlined in the White Paper and the Exposure Draft of the Carbon Pollution Reduction Scheme Bill.

### **Executive summary**

#### **World decision time**

Astute politicians and investors understand that at the core of prosperous and stable nations lies a resilient environment where ecosystem services can continue to support humanity.

#### **Climate change and the global financial crisis share a common heritage - the 'value system' driving wealth generation and wealth preservation is broken.**

A crucial step for political and business leaders around the world is to develop a governance framework that provides 'true value indicators' to markets.

This goes far beyond addressing short-termism, hedge funds, tax havens, sub-prime bubbles, executive salaries and credit crunches. It means restructuring economies that have been built on debt, or on artificially deflated prices that do not reflect the costs of negative externalities.

It is time for a governance framework that takes into account the economic significance of clean air, a functioning atmosphere, productive soils, and clean and abundant water. The commons are already in a state of unprecedented vulnerability. A realistic appraisal of the situation is that there is no amount of money and no existing or foreseeable technologies that can replace eco-system services.

In this new calibration, market mechanisms such as emissions trading offer a number of advantages that are complementary to regulatory and fiscal approaches, for example:

- Where a price has to be paid for an 'anti commodity' as well as a commodity, emissions trading has a vital role to play in speeding up desired outcomes and introducing greater equity to the commercial playing field
- It is a way to help catalyse the next wave of technological innovation by making the market more receptive to innovation
- It is one of the tools to access new commercial opportunity.

The importance of new markets for new waves of technology should not be underestimated. Impending transition understandably makes business, communities and governments nervous. But, with each new technology wave new levels of prosperity have been generated and there has been net job growth. The low carbon and environmental goods and services sector is poised to become the 'next great technological era'. The biggest difference with this technological evolution is that **as well as creating wealth it will help**

**protect wealth** because of the significant decreases in collateral damage (waste, pollution, GHG emissions carry high external costs). CSIRO has suggested that between 2.5 million and 3.3 million new jobs of quality can be created by 2020.

According to a recent report commissioned by the UK Government this **emerging low carbon and environmental goods and services sector is already worth AUS\$6 trillion globally, with an Australian market of \$60 billion**. As the world becomes more serious about tackling climate change and other converging threats (e.g. peak oil, peak soil, peak fish, ocean acidification, etc.) the commercial opportunity for this new industry will grow exponentially.

However, emissions trading on its own will not solve the world's problems or create sustainable wealth quickly or deeply enough. **Complementary measures are required.**

A large part of the portfolio approach lies in the determination of governments to act in time to **"steer capital away from high-carbon investment and channel it towards the low-carbon economy ... We need to finance infrastructure that will allow atmospheric concentrations of CO<sub>2</sub>-e to stabilise at the levels the scientific community deems safe"**<sup>1</sup>.

The speed at which policies and capital are mobilised is now critical to averting what climate scientists are referring to as 'the worst aspects of climate change'.

Our choices this year "will lock us on to a course that will be very hard to change.... Any foundation for future recovery must aim at not only delinking economic growth from pollution but actively contribute to emissions reductions .... Environment, stability, growth and jobs are not separate agendas. They are deeply interconnected. They need shared solutions."<sup>2</sup>

## **Objects of the Act**

"The development of an effective global response to climate change can only occur if all major emitting and energy intensive countries, including Australia, set effective greenhouse gas emissions targets."

We assume "effective" to mean the substantial cuts necessary to bring atmospheric concentrations of CO<sub>2</sub>-e below 450 ppm<sup>3</sup> (as stated in the White Paper and in various sub-sections of the Draft Exposure) as speedily as possible. However, emerging data may lead scientists to recommend different maximum concentrations – Australia and other countries should have carbon management systems in place that are flexible enough to deal with this new data at relatively short notice.

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<sup>1</sup> James Cameron, Vice Chairman and Co-Founder of Climate Change Capital and David Blood, Senior Partner and Co-Founder of Generation Investment Management LLP

<sup>2</sup> Letter from the Copenhagen Climate Council to G20 Leaders. Council members include **FOUNDER Erik Rasmussen**, Denmark, Editor-in-Chief and CEO, Monday Morning; **CHAIR Tim Flannery**, Australia, Writer and scientist; **Georg Kell**, United States, Executive Director, U.N. Global Compact; **Shai Agassi**, Israel, United States, Founder and CEO, Project Better Place; **Samuel A. DiPiazza, Jr.**, United States, CEO, PricewaterhouseCoopers International Ltd; **Yoichi Funabashi**, Japan, Editor-in-Chief, Asahi Shimbun Newspaper; **Björn Stigson**, Sweden, President, World Business Council for Sustainable Development; **Sir David King**, United Kingdom, Scientist and Director of the Smith School of Enterprise and the Environment at the University of Oxford; **Carsten Bjerg**, Denmark, CEO, Grundfos; **Anders Eldrup**, Denmark, CEO and President, Dong Energy; **Rob Morrison**, Asia, chairman, CLSA Asia-Pacific Markets; **Moses Tsang**, Hong Kong Chairman and Managing Partner, Ajia Partners; **Lord Michael Jay**, United Kingdom, Globe International Advisory Board member; **Dr. Thomas Lovejoy**, United States, Scientist and President of the H. John Heinz III Center for Science, Economics, and the Environment; **James Cameron**, United Kingdom, Vice Chairman, Climate Change Capital; **Ditlev Engel**, Denmark, CEO, Vestas Wind Systems A/S; **Robert Purves**, Australia, Chair, Environment Business Australia and Board Member, WWF International; **Li Xiaolin**, China, Chairwoman and CEO, China Power International Development; **Daniel M. Kammen**, United States, Professor and Co-Director, UC Berkeley Institute of the Environment; **Paul S. Otellini**, United States, CEO and President, Intel; **Jørgen Mads Clausen**, Denmark, Chairman, Danfoss; **Lise Kingo**, Denmark, Executive Vice President and Chief of Staffs, Novo Nordisk; **Jens Ulltveit-Moe**, Norway, CEO, Umoe A/S; **Crispin Tickell**, Director of the Policy Foresight Programme, Oxford University

<sup>3</sup> In the Exposure Draft the second object of the Act "to support the development of an effective global response to climate change", we note that the recommendation to bring atmospheric concentrations below 450 ppm is not present in this wording.

**The target range outlined in the White Paper of 5% and 15% cuts in GHG emissions by 2020 falls short of being an effective target or a responsible share of an effective target.**

Parts (i) and (ii) in clause (a) of the third object of the Act are mutually contradictory because the proposed low targets by 2020 would make it extraordinarily difficult to achieve 60% cuts by 2050 (because of the flows and then atmospheric stocks of GHGs) - let alone the 80% plus cuts that climate scientists are currently recommending.

Part (b) of the third object of the Act "to do so in a flexible and cost-effective way" is a commendable approach but it is not supported with a focus either in the White Paper or the Exposure Draft on long-term cost effectiveness or the incorporation of the costs of negative externalities. A short-term evaluation of 'cost-effective' at the capital expenditure stage could lead to much higher operating and collateral damage costs.

An important and logical objective, that is stated in the commentary but not in the Objects of the Act, is that it must be cheaper to reduce emissions than to buy permits. There are several aspects of the Exposure Draft that may act as impediments to this – these include, but are not limited to: free permits; fixed price in the first 5 years; targets of insufficient scale.

### **Maintain starting date of 1 July 2010**

The CPRS can be made more effective with some relatively straightforward amendments incorporated immediately, and therefore, the **start date of 1 July 2010 should be maintained.**

### **Recommended amendments to the Exposure Draft and general comments of context**

#### **2020 targets**

- **The 15% upper level should be removed. It should be replaced with 25% to 40% dependent on action by the rest of the world**
- The 5% minimum should refer to pollution abatement action by the top 1000 polluters only
- A way forward may be to put in place additional aspirational 5% target(s) for GHG emissions reductions action by each of: households; the broad commercial and industrial sector; cities; States and Territories; Federal Government assets, procurement and investment.

#### **Transfer of credits**

The current Exposure Draft allows for transfer of credits to the major polluters effectively reducing the level of emissions they need to achieve. While one could theoretically argue that any reduction in GHG emissions is a good reduction there is little incentive for the community to change behavioural patterns if they perceive that this amounts to a 'free pass' to polluters - but still does not achieve meaningful climate action.

#### **Review date for 2050 target**

The reference to 2020 as the date to review 2050 targets should be removed. It is too late to have meaning and does not provide certainty about long-term direction.

#### **Gateways**

Flexibility will be required to respond to emerging scientific data. The gateways of 5 years may not be adequately 'nimble' and consideration should be given to shortening the gateway either now pre-legislation, or allowing for their shortening in legislation at a later date as and when more serious action is required.

#### **Price cap**

The price cap for the first five years of operation of the CPRS is a disincentive to investors. This stifles market functionality and sends a message to investors that their funding of risk is appreciated but they shouldn't anticipate commercial upside from involvement in the carbon market in Australia. At Carbon Market Expo 2009 over \$0.5 trillion of assets and funds under management were represented, and their unequivocal message to Government was that a capped price that essentially fixes the upper price would drive investment to other countries.

## **Omission of energy efficiency/productivity and renewable energy in definitions**

Omission of definitions – the definitions do not include renewable energy (or any of the technologies currently available), energy efficiency or energy productivity; carbon sequestration (240) does not include soil carbon or biosequestration of carbon other than by forests. These potential abatement and mitigation solutions should be defined so that there is no future argument about non-inclusion in the carbon market, especially as other approaches have been defined in great detail.

## **Emissions trading - the cornerstone of action to move to a low carbon economy**

The Australian emissions trading scheme was initially seen as a flexible mechanism to help the economy make the transition to a future which would be increasingly carbon-constrained because of the need to substantially reduce GHG emissions.

The transition would involve curbing emissions by increasing energy efficiency and improving energy productivity at all points in the supply-to-demand chain; it would involve substituting cleaner forms of energy culminating in renewable energy at commercial infrastructure scale; the construction of a rapid and efficient DC grid; as well as distributed generation. Transition also involves capturing and sequestering<sup>4</sup> carbon dioxide from major source points.

However, this emphasis seems to have shifted. The CPRS, in its various iterations from discussion paper to Green Paper to White Paper to Exposure Draft has increasingly focused on protecting and compensating traditional sources of energy and the companies that rely on superficially "cheap" but in reality very expensive fossil fuel energy.

This is the debate that is being staged in the media and it is what the community is beginning to believe is the sum total of emissions trading. This is unfortunate as a great deal of work from the private sector as well as Government departments has gone into crafting a vehicle capable of the long and arduous task ahead.

We recommend, therefore, a simple revision of the Objects of the Act to clearly articulate the first principles – decarbonising the economy in the most effective way possible and valuing the environment as the basis for a robust economy.

## **Complementary measures are needed to help re-assign value indicators**

EBA has consistently given strong support to the concept of a market based mechanism as a cornerstone of activity to deliver the transition to a low carbon economy. However, we believe that a framework of complementary measures, alongside the CPRS, is even more important now than at any stage in the past. The market needs a portfolio of 'value indicators' as discussed above.

## **Renewable Energy Target (RET)**

The Renewable Energy Target (RET) of 20% by 2020 is important in assisting with this re-valuation but it needs to be introduced immediately and should be extended beyond 2020 with incremental increases flexible to meet market need. Australia, perhaps more than any other country, has great opportunity to harness renewable energy as outlined below in EBA's recommendation for 'mega clean energy parks'.

A gross feed-in tariff is another complementary measure that would assist in scaling up new technologies, reducing emissions and creating jobs.

## **Energy efficiency target**

A national energy efficiency and energy productivity target should be introduced alongside the CPRS and RET.

## **Replace 'compensation' with structural adjustment**

The word 'compensation' is ambiguous. Indeed it has led some commentators to suggest that carbon pollution is a property right; others have suggested that the result will be windfall gains with no follow-on investment in performance improvement.

Harm done to the commons should not be considered a property right.

While heavy polluters can point to decades of activity without falling foul of regulation, there has been sufficient knowledge in the business community for at least 15 years that high levels of greenhouse gas

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<sup>4</sup> Inclusion of soil carbon and biosequestration approaches in the CPRS are included later in this paper

emissions were linked to changes in climate and therefore the day would arrive when this pollution could no longer be ignored and action would need to be taken. The previous decade of delay has made the task more onerous, any further delay will increase the difficulty, cost and complexity of meaningful action.

Our disagreement with the word 'compensation' should not suggest that we are opposed to assisting companies and sectors of industry with financial support to make the structural adjustment required to reach a clean energy future. EBA's previous submissions (and submissions from a number of other organisations, companies and individuals) have proposed steps such as border tax adjustments; green depreciation; and extending the Future Fund and other major funds to include financing for technology retrofit and major clean technology deployment programs.

## **Use CPRS revenue to help fund desired outcomes**

### **Structural adjustment**

Revenue generated by the CPRS would be best employed helping with structural adjustment to reduce GHG emissions. In the process this could help develop Australia's next competitive edge by weaving in new technologies and systems and winnowing out those that have unacceptable GHG pollution emissions.

### **Household assistance**

Assistance to households would be better focused on securing long-term energy savings through efficiency retrofits. We note the initial work of the Government in this area with the energy efficiency stimulus package, however we believe that energy efficiency retrofits should be extended in order to achieve projects of scale for contractors and also for investors. For example as well as insulation/solar hot water, a neighbourhood-by-neighbourhood complete household retrofit including double-glazing, draught-proofing, ventilation, solar PV roofing/reflective roofs, carbon planting, etc., would do far more to buffer against rising energy prices than a one-off cash payment to householders. It would also assist with new industry development and new job creation.

Clearly, work at this enhanced scale would cost more than is covered by the stimulus package, but smart financing that links additional retrofits to a mortgage extension or lease-financing package would help households match repayments against savings on their energy bills. And, if a further incentive is required, maintenance of energy savings in following years could be matched with a tax rebate.

### **Steadily improving appliance standards and trade-in scheme**

Updating standards to benchmark against world's best performance followed by a national trade-in scheme for appliances, electrical fittings, and even automobiles could be introduced.

### **Commercial sectors**

The same approach can be developed for commercial sectors; SEDA, the now-disbanded Sustainable Energy Development Authority in NSW put together some excellent programs – the fast food restaurant energy retrofit is an example.

### **Communities**

There is potential to use part of the revenue destined for assistance to communities reliant on industries exposed to a carbon price/spurred by a low carbon market, to set up demonstration plants for new industries or existing industries that substitute cleaner energy and more efficient systems.

## **Equal weighting for industries of value**

The Exposure Draft, the White Paper, and the \$2.15 billion Climate Change Action Fund pay significant consideration to the demands of the energy intensive and trade exposed sectors, however, commensurate facilitation for the low carbon and environmental goods and services sector is not as apparent.

This is of considerable concern to the low carbon and environmental goods and services sector because the current signals to the market may not be adequate to encourage the necessary level of deployment of innovation. The likely result is that impact costs of negative externalities (pollution, waste, GHG emissions) will remain high, while new technology's access to markets of scale is slowed down, this in turn could lead to new 'nation-building' infrastructure being deferred – especially in the current economic situation.

This means that the environment industry will have to continue to compete on an uneven playing field. This is because while all the early costs of R&D, trialling, market penetration, commercial scaling up and deployment have to be carried in the price of 'cleantech', more traditional industry does not have to incorporate costs of negative externalities that are left to the community to absorb. In reality this equates to perverse and long-standing subsidies that are not transparent. A further issue is the large-scale preferentially priced energy contracts for fossil fuels that make it more difficult for clean energy and

environmental goods and services to make a substitution breakthrough and reach markets of scale where technologies can be brought down the typical cost curve.

### **Obligation transfer number (OTN)**

It is not clear whether sequestration of carbon is eligible other than by compliant forestry projects in Australia or overseas, or by carbon capture and geological storage (CCS). For example, can the carbon liability from a large emitter such as a coal-fired power station be passed on to an algae synthesis processor seeking to sequester large volumes of carbon? In this respect the draft legislation tends towards prescription (e.g. CCS) rather than 'desired outcome' (timely and safe sequestration at sufficient scale, at comparative cost, with clear delineation of risk responsibility in future decades).

### **Carbon abatement and mitigation opportunities**

#### **The market for clean and green**

As mentioned above, the UK Government released a report in March 2009 showing that in 2007-2008 the global market for low carbon and environmental goods and services was worth in excess of AUS\$6 trillion. The Australian share of that market was \$60 billion. However, Australia was ranked relatively low at 17<sup>th</sup> worldwide – this suggests there is scope for more assertive cleantech growth from Australia especially as the world increasingly addresses the 'flows and stocks' risks associated with GHG emissions and climate change.

Much of the emphasis in the CPRS is on reduction of emissions at industrial level and pollution reduction at source is an important approach. However, the scale of the climate change challenge suggests that other steps should be introduced as quickly as possible.

#### **Mega renewable energy parks**

EBA has suggested that Australia aim for 'mega clean energy parks' by 2030 – making Australia a regional hub for minerals processing and manufacturing as well as providing renewable energy to the grid. Solar thermal, marine, and geothermal energy in particular have the potential to scale up to this level of activity.

This provides potential for renewable energy to replace revenue from coal exports over time.

Australian renewable energy resources would be value-adding at the production end of the supply chain. Labour costs may remain higher but OH&S and environmental standards around the world will rise and whatever country is being asked to produce cars, appliances, computers, toys or other consumer goods, will have to be paid a sufficient margin by the demand side supply chain.

### **Drawing down legacy carbon from the atmosphere - soil carbon and biosequestration need to be included alongside forestry**

There needs to be recognition of the importance of removing 'legacy' carbon from the atmosphere as well as carbon abatement from production, consumption, supply chains and transportation. The value of soil carbon and biosequestration therefore needs to be recognised and included in the CPRS.

A broader approach to carbon capture and storage needs to be incorporated in the CPRS. For example, alongside trialling CCS (geological sequestration) at scale the following approaches should also benefit from policy and capital investment to bring to commercial scale:

- Algae technology where captured point source carbon dioxide is 'fed' to rapidly growing algae. Research, already in commercialisation, points to significant potential as a carbon sink (either direct or via biochar to replenish soil carbon; a source of animal fodder that does not require soil to grow; and also a source of biodiesel (that does not compete with the food chain or further deplete soil mineral and nutrient levels)
- Soil carbon replenishment, for example – biochar; food waste recycling; plant stone technology (phyto silica storage of carbon); changes to rangeland management; improved crop selection.

The Department of Climate Change and the Senate Select Committee have received a number of detailed technical submissions on these aspects of carbon mitigation.

### **Financing this transition - where does catalyst investment come from?**

Neither the Exposure Draft, nor the White Paper, closely examines ways of harnessing some of the major funding mechanisms to capitalise on the 'opportunity side' of climate change action. The UN's Global Green New Deal addresses some of the options for diverting capital investment into sustainable projects and EBA has recommended some approaches in recent submissions to Government<sup>5</sup>, an indicative list includes:

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<sup>5</sup> Targets for our future; Wedges, levers and a zig zag – see [www.environmentbusiness.com.au](http://www.environmentbusiness.com.au)

- Hypothecating all revenue from the CPRS
- Ensuring that all Future Fund, Infrastructure Australia and other 'sovereign' or Government controlled investment funds promote low carbon outcomes and innovation deployment including through iconic nation-building projects
- Using all three tiers of Government spending (Commonwealth, State/Territory, Local Government and their procurement, investment, asset management funds) to create markets for clean technology and low carbon infrastructure. For example government vehicle fleets; all government tenders should require a low carbon outcome (but should not prescribe the process or technology)
- Fiscal measures to reward performance that does not pollute or create waste; or to penalise poor performance; re-investment tax concessions for business; tax-free mortgage extensions or lease-financing for additional household retrofit programs
- Create a government-backed 'climate bond' attracting investment from individual investors wanting to see their money put to work but also wanting a guaranteed rate of return. This approach has also been recommended by James Cameron, Deputy Chairman of Climate Change Capital and Chairman and co-founder of the Carbon Disclosure Project

### Urban myths to tackle

There are two issues that have become important urban myths in that they are stated by many commentators as fact rather than conjecture:

- *"Coal is cheap"*. It is not. Coal's carbon emissions are one of the most significant contributors to the atmospheric stocks of GHGs and oceans taking up increasing levels of carbon emissions are beginning to acidify. In addition mercury pollution is affecting people directly and indirectly via cumulation in fish stocks.
- *"CPRS will cause carbon leakage with major companies leaving Australia."* To put this into context – how many companies with a reputation to protect, sunk assets and a good resource base, are going to seek a licence to pollute from their shareholders, investors, bankers and insurers, and leave a stable economic and political regime, good infrastructure and skilled workers, in order to be shielded from a price on carbon? How long will they be shielded? Will they be able to amortise new plant quickly enough if developing countries take on carbon targets/prices/trading because of the capital and technology flows that will be increasingly available to them? Have they considered that investors and consumers are increasingly demanding goods and services with low/zero carbon footprints? For example, aluminium smelting in Iceland to take advantage of geothermal energy. Are they prepared to walk away from Australia's rapidly emerging potential for minerals processing and manufacturing using renewable energy? And, if having decided to absorb all these risks and abandon Australia, have they made a material declaration on the matter to the ASX?

### Conclusion

Building new markets will take more than money and technology - inspiration, motivation, empowerment, and excitement cannot be bought, but they can be stimulated and their value should not be under-estimated as we go forward.

That is why our criticism that the CPRS, as outlined in the White Paper and in the Exposure Draft, has become "unambitious", is important.

Our new era of responsibility dictates that we succeed at the task of tackling climate change but the steps outlined in the Exposure Draft and the White Paper, on their own, are not sufficient to create the necessary transition to a low carbon economy and they are also not sufficient to develop the next technological era, its markets, industries and millions of potential jobs.

If the necessary behavioural changes are to happen, then the legislation, complementary measures and market changes that galvanise action need to evolve much more quickly.

'Conventional' risk assessment and risk management approaches have undermined the planet's fundamental environmental capital. An important part of tackling climate change is to recognise and reposition value so that capital and ingenuity flow to where they are most needed. As Pascal Lamy, Director General of the WTO said on a recent visit to Sydney "animal disease is better regulated than financial markets." Clearly this is not acceptable.

There are some relatively straightforward amendments that can be made to the Exposure Draft and the CPRS to make sure it is the flexible and far-reaching emissions trading scheme that is needed. This can be done quickly enough to ensure a July 2010 start date for the CPRS.

Australia has the good fortune of being able to learn from some of the EU's early mistakes in emissions trading and a major incentive should be that Australia is also a welcomed and respected trading partner of countries in our region. Asia will be the biggest market for clean energy and efficient systems – and Asia is where the battle against climate change will be won or lost, therefore our strongest recommendation is that we design approaches to work with this market to achieve the changes that are needed in time to make a difference.

As Lord Nicholas Stern states "the scale of damage of climate change is very different from previous externalities".

We have to be up to the task of our future.

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