National Press Club Address

The Safeguard Mechanism and navigating Australia's path to net zero

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1.Introduction

Speaking at lunch about a policy mechanism is usually not the most engaging way to spend time unless you happen to be a "policy wonk". The reason I am standing here doing so is that the Safeguard Mechanism is a really important policy measure to reduce emissions and as you know its passage through the Senate is proving difficult.

We are now into the fortnight before Parliament rises and returns to focus on the next Budget, to be handed down at a time of great economic and geopolitical uncertainty. The next fortnight determines whether the Safeguard Mechanism can be set up in time, on 1 July 2023, as a stepping-stone for decarbonisation. If this date is delayed by even a year the emissions reduction targets of the facilities with the heaviest pollution become even more difficult to reach.

The question is whether Parliament will draw on the remarkable collaboration of 2011. This year managed the passage of (the too briefly operative) carbon pricing mechanism, the birth of institutions and policies like ARENA, the CEFC and Carbon Farming legislation, and Offset Integrity Standards. The alternative, over a decade later, is another episode of division and delay that has been previously the hallmark of Australian climate policy.

To begin I will explain very briefly how the Safeguard policy works; then why it is so important in allowing us to meet our aggregate emissions reduction target. There has been considerable criticism of the policy and the integrity of carbon markets – and Australian Carbon Credit Units or ACCUs in particular – and I will then move to discuss these issues. Finally, I will address what developments can be expected in our carbon markets in the future.

2. The Basics of the Safeguard Mechanism

The Safeguard Mechanism is directed at heavy emitters. It applies to all facilities that, from their sites, emit more than 100,000 tonnes CO2-e in a year. It covers about 215 large industrial facilities who between them contribute about 28% of all Australia's emissions.

The objective is to decrease those emissions over time, consistent with the 2030 emissions reduction target of 43%. Basically the Safeguard limits the amount of greenhouse gas that a facility can emit over a year, and every year the baseline of allowed annual emissions for that facility decreases by 4.9%. This figure of 4.9% has been set to reduce the emissions of these facilities over time so that by 2030 they will have contributed at least their share of the 43% emissions reduction for Australia that is required under the federal government's climate change policy.

The baseline starts at the emissions intensity of the facility but gradually switches to an industry average approach. Each facility in an industry is typically either above the baseline (emitting more GHGs than its industry peers) or below the baseline (emitting less GHGs than its peers).

To drive decarbonisation in the Safeguard facilities, benefits are rewarded to those bettering their emissions reduction target, and costs are imposed for those lagging behind. Over time the cost to laggards will become substantial as their emissions reduction target increases each year by 4.9%.

Facilities that are doing better than required will be granted credits, called Safeguard Mechanism Credits (SMCs). It is the creation of these SMCs that are the focus of the relatively slender Bill before the house, with most key elements of the reforms contained in draft rules. A facility not meeting its emissions target is required to cover its shortfall by either purchasing SMCs or by buying Australian Carbon Credit Units (ACCUs) where one ACCU is the equivalent of 1 tonne CO2e. Over time, without any action, this laggard facility would face strongly increasing annual costs. At the present time the price of an ACCU is about $35 and this price is expected to increase further; it has already risen from around $15 in recent years.

At a basic level the Safeguard design is quite elegant. The way in which emission targets are set and decline annually, in conjunction with the introduction of new SMCs or credits, means there is a strong commercial incentive for facilities to move faster on emissions and cut deeper than the scheme requires.

Because we are trying to decarbonise, not deindustrialise, it is essential that those facilities who need it, have appropriate time to meet their specific emissions reduction objective. To enable this both ACCUs and credits can be used to meet annual net emissions limits, and credits can be 'banked' for future obligations (until 2030). The idea here is to allow facilities to better manage their adjustment trajectory.

Where emissions reduction uses known technology and is relatively inexpensive to implement, the Safeguard effect on business will be quite manageable and the reduction in on-site emissions is likely to occur quickly. On the other hand, in industries like steel and cement, where changes to production methods and major new capital equipment must be installed, the adjustment will take some time. Those of you who cover industry matters will be aware of new technologies and approaches being introduced in heavy industries like steel and aluminium smelters to lower their emissions significantly. For example major capital expenditure is involved in the recently announced construction of a green steel plant in Duisburg in Germany by Thyssenkrup Steel. Construction involves new technology, is not a business-as-usual build and of course takes time.

The elegance of the basic Safeguard Mechanism disappears when it has to accommodate some other real-world matters. (Of course these sorts of clunky add-ons would be largely avoided if we had an economy wide carbon price but I dream on...) The additions to the Mechanism include:

- the treatment of new industry entrants
- the treatment of export trade facilities
- a government administered cost containment reserve with ACCUs available at $75 - increasing by CPI plus 2% annually - for companies that cannot source sufficient ACCUs from market
- an initial exclusion of high integrity international offsets; and
- the possible future introduction of a carbon border adjustment mechanism to address 'leakage'.

Not surprisingly these awkward additions to the Mechanism have raised many questions and some concerns.

3. General Emissions Reduction Policy and the Safeguard

So how does Safeguard fit in and coordinate with broader emissions policy?

One of the common characteristics of all climate change and emissions reduction policies globally is a focus on the high emitting sectors and the high emitting facilities. In Australia (for Scope 1 emissions) this means concentrating on emissions reduction in the sectors of electricity, stationary energy, transport, agriculture, fugitive emissions, industrial processes and waste. For high emitting facilities it requires a focus on exactly those targeted in the Safeguard.

Having a plan and sector and facility-based targets is essential, and happily Australia is making progress in these directions. In the recent Climate Change Act the net zero by 2050 target has been set in legislation. And recognizing that substantial steps must be taken earlier if we are to meet this target, the legislation, as you know, also requires a 43% reduction in emissions by 2030.

Progress is measured by all countries against 2005 data. In 2005 Australia emitted about 620Mt CO2e. In aggregate we are currently emitting just below 500Mt CO2e, so some progress has been made, but nevertheless by 2050 we still need to eliminate or offset at least 500 MtC02e.

Furthermore by 2030, to meet the 43% target, we must eliminate or offset about 267 Mt CO2e. Only if we can get somewhere near that 2030 target will we have a chance of making the 2050 net zero target.

The latest data shows that the sector contributing most to recent emissions reductions is electricity. This reduction has been driven by various sector-based policies and is helpful for other sectors who can use less emissions intensive electricity to help with their own efforts. Electricity has a clear sector target to reach 82% renewables in the National Electricity Market by 2030. Policies that are backing that target include *inter alia* the recent federal policies of Rewiring the Nation, and the existing Renewable Energy Target and related certificates. Whether or not this sector target is achieved remains to be seen and recent commentators are raising some concern. Sector based policies have been in place in some states (like Victoria and NSW) for some time and are being introduced in WA. At a federal level, as well as the electricity sector policies, policies are developing in transport and slowly getting there. What this experience is demonstrating is that emissions reduction can occur in heavy emitters, like the electricity sector, but needs ongoing focus to stay on target and its planned reduction trajectory. 'Set and forget' simply will not work.

Another common and important feature of climate change policies is to recognize that emissions are an externality and (as economics suggests) are best tackled by everyone together…hence under the UN auspices and the Paris Agreement every country sets a target and reports on progress regularly. This transparency and ongoing monitoring and discussion is one of the main purposes of the regular COP meetings.

Indeed at the end of this year, at the 28th UN climate summit, the results of the first global stocktake will be on view. These global stocktakes occur every five years and revised national commitments are due two years after.

The progress Australia has made, and intends to make, with emissions reduction including the Safeguard Mechanism will be noted internationally, particularly given our poor climate change policy record in the recent past. Our stance is also very important at the upcoming summit for the prospective chance to co-host

the UN climate talks in 2026 with Pacific Nations, for whom climate action is an existential concern and with whom we must engage.

It is inevitable, given recent serious climate related events, that there will be a call for much faster and stronger action beyond our current 2030 ambitions. Similar advice from climate scientists certainly supports a move to more ambitious requirements for national commitments, including ours. In this context setting a future federal target of around a 70% reduction by 2035 should be encouraged. It may appear ambitious but progress in Victoria and NSW suggest it is possible; and science suggests that a change of this magnitude is needed. Personally I do think that Australia must set a 2035 target of at least a 70% reduction below 2005 levels. It is in line with where other countries are focussed and is the minimum needed to make climate change even remotely manageable.

Finally of course broader emissions reduction policy generally starts by using the technology that is available and the most cost effective - and for hard to abate sectors and industries R&D should be encouraged to address the issues. The way that the Safeguard Mechanism works encourages such actions. As the targets for facility-level emissions reduction become more and more substantial over time, the costs of not meeting targets increase significantly.

4. The Role of Australian Carbon Credit Units

I am now changing tack to examine some of the concerns around the Safeguard reforms. One of the most contentious issues raised is the role of ACCUs in the scheme. The main concern appears to be that, to meet Safeguard obligations, facilities will purchase ACCUs rather than the alternative of actually cutting emissions.

To address this undesirable outcome it is suggested that all net reductions in Safeguard emissions should occur locally - behind the specific Safeguard facility, and not beyond that site. This constraint prevents or tightly limits the use of ACCUs to help meet compliance obligations under the Safeguard. Abatement action in other parts of the economy could not be counted.

While facilities certainly should not use ACCU offsets at the expense of pursuing their own emissions reduction, it is important to recognize the role that ACCUs can play in assisting change and the adjustments needed to make that change. Starting with some sort of hard cap on the amount of ACCUs that companies can use has great disadvantages, not least of which is that it will not assist facilities to manage the operational changes they must make.

The 10 years of climate policy uncertainty has not helped diminish the lead time required to develop and deploy transformative technologies. And in the period of making their changes many facilities need some offsets.

It is also challenging to get any quantitative cap on offsets 'right', so that their use in all possible legitimate scenarios is permitted. We simply do not have enough practical evidence about how the market is working and is likely to evolve. That information is needed before we can responsibly consider how to set caps on offsets and whether doing so would be desirable.

For now, to address any potential over-use of ACCUs a number of steps could be followed. First, from start-up, a soft constraint in the form of what WA MP Kate Chaney has termed a "please explain" approach, could be adopted. Companies covered by the Safeguard have to explain how and why they are using ACCUs. Transparency could also be increased by making it mandatory for all Safeguard covered companies to prepare and make public transition plans as part of the government's reforms to introduce mandatory climate reporting. This is similar to the UK approach.

It has been suggested that rolling ACCU vintage limits could be introduced to help guard against the risk of unlimited offsetting and to encourage new abatement projects elsewhere in the economy. This works by requiring that ACCUs surrendered in a particular compliance period be no more than (say) five years old. Vintage limits would raise the bar in terms of access to ACCUs, and would provide a stronger incentive for new carbon offset projects.

Many other concerns around the Mechanism relate to the awkward additions that have been made to it to deal with other various issues. Most of the solutions proposed rely on modelling and analysis that has not been made public. While there is undoubtedly personal and commercial-in-confidence matters in this data it needs to be judiciously published protecting those confidences so a broader audience can make assessments and form judgements.

For example the treatment of new entrants is managed by setting aside sufficient ACCUs in reserve to cover their anticipated demand. This reserve also provides liquidity in the ACCU market and apparently ensures that the ACCU price does not rocket above $75 before 2030. Whether or not this reserve will work as intended is difficult to assess – on first glance it looks as if it will but more information would help.

The new entrants are required to operate facilities in accordance with international-best-practice, whatever that is. An understanding of exactly how this definition will be approached at a site facility level is important for both industry and emissions reduction outcomes. It is important that the government clarify and publish the processes and procedures about how international best practice for Australian circumstances will be determined. This must be done to give confidence that so-called 'best practice' is soundly based and not over-ridden by facility interests and advocacy.

CMI has also advocated that the carbon budget could be regulated within the scheme so that a maximum limit on emissions is permitted in the setting of baselines across the 2021-30 period. New entrant baselines could then be set having regard to the residual aggregate emissions that remain within that budget.

The treatment of export traded facilities also needs to be bedded down tightly along with later consideration of an Australian carbon border adjustment scheme presumably similar to the European scheme to be introduced shortly.

Special pleadings from some facilities who may want extra time for adjustment can also be expected and how these particular matters are to be managed requires some forethought.

All in all when the reformed Safeguard is reviewed in 2026-27, the review should consider these matters carefully and openly, along with whether more concrete restrictions on the use of ACCUs would be beneficial, based on real-world data of how credits of all types are being used.

I am strongly of the view that this milestone review should be brought forward by a year to 2025-26 using whatever preliminary data is available. This is a new policy for all participants and an earlier expeditious review to complement a later more fulsome review would allow any necessary minor adjustments to the design to be made so that it best guides decarbonisation.

5. The Role of Carbon Markets

As noted earlier the price of ACCUs has been rising in the small but growing ACCU market. This simply reflects a carbon market where demand for credits is increasing more than their supply.

On the supply side it must be recognized that carbon credits market are not (in the words of Norman Lindsay) a magic pudding. It is a difficult and time-consuming process to develop and deploy new projects that can earn credits. Having regard to the physical, social, economic, legal and time constraints for new project development, the supply of credits takes time. Future estimates of potential carbon sequestration and carbon credit supply in Australia must be viewed with caution. It is true that the domestic Australian carbon market has grown rapidly in the last few years. With ACCUs the growth has been largely in the areas of vegetation and soil carbon sequestration in agriculture, but we cannot assume this growth will necessarily continue, and the latest Clean Energy Regulator data shows the rate of growth to be slowing.

Demand for ACCUs is increasing at a rapid pace from multiple sources – state government agencies, companies not covered by the Safeguard, and non-government organisations all show increasing interest in acquiring credits for their own purposes. There will be fierce competition for any ACCUs that are available, and Safeguard-covered companies know this, which means heavily relying on ACCUs to meet their Safeguard obligations is a risky proposition.[1]

Hence rising demand and supply factors put upward price pressure on offsets. In contrast, the price of many of the technologies needed to cut emissions is continuing to fall. The decision by a facility about whether to cut emissions in-house or alternatively to buy credits is in part an economic one. Various pressures (including the Safeguard design) are likely to favour emissions reduction rather than long term carbon credit purchases except in the case of hard and very expensive to abate emissions.

It should also be noted that companies are driven to pursue an emissions reduction strategy that is focused strongly on specific on-site decarbonisation for a number of other reasons. Reputation and shareholder pressure matters, along with the fact that finance and insurance is more and more difficult without an emissions reduction strategy. More recently listed company directors have been subject to litigation concerning failure to pursue appropriate reduction strategies and for 'green washing'.

[1] The demand for ACCUs from any new permitted coal and gas development reinforces this position. For example, the total carbon footprint from 121 planned coal and gas projects in Australia has been estimated at almost 1.7 billion tonnes of CO2e and of this an estimated 51.7 Mt of domestic emissions will need to be offset, which is equivalent to 10 per cent of Australia's total current domestic emissions in all sectors.

Finally, when a facility pursues a well-formed strategy to cut on-site emissions it has increased control of its operations and costs and is able to better manage the uncertainty that it might otherwise face in the market. While some companies may be resilient in the face of this market risk, through the sheer size and diversity of their operations (including the development of vertically integrated carbon origination businesses), this is not the case for many Australian companies.

Of course ACCUs and SMCs are not the only carbon related credits available. There are other markets, and certificates for large and small scale renewable energy, and a number of voluntary markets and trading platforms exist. The common role of all these markets is to enable the transition to net zero emissions and to assist with the often difficult structural and organisational changes required within our economy and society.

The tricky thing about most carbon credits is the challenge in measuring them and validating the integrity of their products. Every market that functions reasonably has rules around product integrity and typically some protection against the inevitable shonky market participant. Such things as the safety and performance of products is monitored - think of all the regulation around motor vehicle markets and even around the safety and hygiene of children's toys.

In the carbon market case verifying renewable energy certificates is not that difficult, but measuring the integrity of carbon sequestration products is more challenging, albeit becoming more accurate and simple due to advances in technology including satellite and drone technology, on site measurement and advances in analysing big data.

CMI is acutely aware of the risks that integrity poses for carbon markets and created a Code of Conduct which has been in place for some time. This aims to protect the rights of consumers and carbon industry participants, including Native Title Holders, representative bodies, landholders and land managers.

6. Integrity in carbon credits

Carbon credit integrity is a fundamental issue for carbon markets (as in any other market). They must operate with high integrity to have acceptance and be able to scale up in the manner required to make a meaningful contribution to the climate goals set through the Paris Agreement.

As we have seen in recent weeks with the 4 Corners investigation into an offsetting company active in PNG, policymakers must be ever-vigilant in developing improvements in carbon offsets governance, transparency and regulation, just as they need to be vigilant in pursuing reforms to drive at-source decarbonisation. The Government has indicated in-principle support for all of the recommendations of the Chubb Review. It is crucial that these recommendations be implemented as soon as possible to ensure transparency, accountability and ultimately scalability. It is widely acknowledged that the recommendations will result in important improvements to the ACCU regime. They are also critical for the success of the Safeguard Mechanism and to ensure public confidence that the reformed scheme is driving real abatement.

A key recommendation from the Chubb review was for much greater transparency about the operation of the ACCU scheme, and much greater access to data. I strongly support these important measures.

Currently, in the context of land-based carbon projects, the integrity of products such as the Human Induced Regeneration method, are being questioned. To validate the credentials of these vegetation projects, high-resolution satellite imagery is needed, supplemented by imagery collected by drones and low-flying aircraft where required. Collecting this detailed data on the performance of landscape-based carbon credit projects over time is what must be relied on to assess credit entitlements.

All that data – which can show vegetation height and cover with great accuracy, and across time scales – must be made publicly available in a useful form, such as a national data platform recommended by Professor Chubb. Privacy should be protected to the extent necessary. All those scrutinising that data must be able to assess the integrity of the credits provided. This is an important and time-consuming analytical role and it is essential that the new monitoring institutions recommended by Chubb are not only properly set up but adequately resourced.

The Chubb Review recommends that the Emissions Reduction Assurance Committee, (ERAC) that has historically provided advice to the Minister on creating and revoking project methods be replaced by a new body. The Carbon Abatement Integrity Committee (CAIC) will have a full-time, independent chair and be supported by its own independent secretariat, as opposed to a part-time chair with secretariat support provided by the Regulator under ERAC.

Importantly, CAIC will have at least one First Nations member to ensure representation and consideration of their knowledge and increasing role in the Australian carbon markets.

I would also note that, at the international level the release of final guidance from the Voluntary Carbon Markets Integrity Initiative, or VCMI, is expected very soon. This advice will provide important additional guidance on carbon credit integrity.

7. Future trends

The Australian carbon market is continuing to evolve and I would like to mention two important trends. First, projects with co-benefits are becoming available and how co-benefits can be best measured is being considered. Designed the right way, carbon farming projects can offer economic and social benefits to Indigenous Australians, and deliver significant biodiversity benefits. Australia is just now at a critical juncture in its positioning around co-benefits - there are many different schemes, initiatives, labels and trading platforms emerging, or in early stages of implementation.

The Chubb review recommendation for the Clean Energy Regulator to develop procedures to support transparency of different project characteristics and types of co-benefits associated with ACCUs is a significant opportunity to integrate and value these aspects. Further work is also needed to establish taxonomy, assurance, agreed standards and frameworks so that the Australian market can capitalise on opportunities that 'high-quality' credits with integrated co-benefits can provide. These include increasing market breadth, supply and financial returns, but also catalysing the positive returns for nature, Indigenous Australians, and regional Australia generally.

Of course in line with my earlier comments, markets for high-quality carbon credits with integrated co-benefits will only persist to the extent that there is credibility and market integrity behind them so that buyers can have assurance about purchases and claims.

The second trend is the growing demand for carbon credits to assist in the transition. Carbon offsets in the future must scale up their availability to meet this demand. Robust plans for each high emitting sector in the economy will emerge as they have already done in some states and carbon markets need to be available to assist in the transition. And the time when industry most needs carbon offsets is now. By 2035, and certainly by 2040, industry's demand is expected to reduce as a result of material in-house action already taken to reduce emissions. At this point in time, the carbon market will play an important role in supporting negative emissions through drawdown.

In conclusion, obviously no one piece of legislation can carry the full burden of climate change policy. The task of reducing emissions needs multiple pieces of legislation, and action by all institutions.

As for the Safeguard it is sensible to leave some things to the review, rather than trying to second-guess everything now. The review of the Safeguard – which I have argued should start in a preliminary way in 2025-26 and not 2026-27 as currently proposed – will allow us to see with experience, which of our hopes and fears about the scheme turn out to be valid, and which turn out to be false. The review will provide those insights in time to undertake any reset that is required and still meet the 2030 goal.

And I must finish by saying….we must not ignore the positive contribution that carbon markets can make, and we must pay close attention to what is needed for them to work efficiently. Carbon markets are part of the means to an end. They must have integrity and must also be allowed to help the important transition for industry as it adjusts. Market-based frameworks, and carbon market in particular, have a core role to play because they can enable efficient business decision-making and reward those businesses that move faster.


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