

Transitioning the Safeguard Mechanism to a Baseline and Credit ETS

Design Options for Consideration - Discussion Paper

January 2019



In the context of strengthening the response to the threat of climate change in a 'post-Paris era', the Carbon Market Institute (CMI) believes that market-based solutions are the most efficient policy mechanism to address this challenge. Our vision is for a net zero-carbon world where a national and internationally linked market-based approach to emissions reduction helps Australian companies capitalise on economic opportunities, minimise risk, and create competitive advantages.

We recognise that effective climate change mitigation and adaptation require a comprehensive suite of complementary policies – specifically policies that can endure beyond multiple political cycles, enabling business and industry to make an orderly and just transition towards the future net zero-carbon economy that is already starting to emerge. Carbon markets are a vehicle to facilitate augmented climate change action across, and carbon pricing needs to be a key part of Australia's emissions reduction toolkit.

As the peak industry body for climate change and business in Australia, CMI is dedicated to this vision, and to driving the evolution of carbon markets and market-based solutions to have a significant and positive impact on addressing climate change. We are independent and non-partisan, and continue to help business seize opportunities as carbon markets rapidly evolve at home and abroad.

Engaging leaders, shaping policy and driving action, we're connecting insights and catalysing opportunities in the transition to a zero-carbon economy.





Disclaimer: This discussion paper has been developed to provide options for consideration to transition the Safeguard Mechanism to a Baseline and Credit Scheme.

The views and options expressed in this document are those of CMI and do not necessarily reflect the position of any individual CMI member.

The Safeguard Mechanism is a key, active element of the Government's current climate change policy suite. It is a policy mechanism that if strengthened, could be used to more effectively drive emissions reductions to meet the objectives of Australia's 2030 emissions reduction target, which we have committed to as a nation signatory to the Paris Agreement.

Findings from CMI's [Australian Climate Policy Survey 2018](#) found that 92% of Australian business and industry respondents believe that current climate and energy policies are insufficient and won't drive the emissions reductions needed to meet our Paris Agreement targets¹.

In the lead up to the next Federal Election both major parties could use the existing legislated architecture of the Safeguard Mechanism (the Safeguard) to adjust current emissions baselines and define the conditions, criteria and process for a declining emissions trajectory across the economy. By evolving the current policy, it would avoid the need to legislate a new market mechanism and industry already covered under the Safeguard would have continuity of the future policy direction.

This evolution could occur by transitioning the Safeguard to a Baseline and Credit Emissions Trading Scheme (BCS), thereby enabling a scalable, multi-sector market mechanism that strengthens its contribution towards achieving Australia's emissions reduction objectives. Transitioning the

Safeguard to a BCS will involve placing a clear limit on absolute emissions covered under the scheme through the adjustment of baselines. The emissions reduction trajectory required under Australia's Paris Agreement targets should guide how emissions baselines set under the Safeguard will decline and reduce (cap) absolute emissions in alignment with other policies across the economy.

It would involve redefining the objective of the Safeguard and establishing a number of key design features to ensure the scheme can transition efficiently into a mechanism that aligns with Australia's emission reduction targets, and one that can provide long-term certainty to business and investors across the economy.

Industry covered under the Safeguard want to see the mechanism evolve as CMI's survey also found that 82% of respondents agreed that Safeguard baselines must be set to reduce over time in line with Australia's emission reduction target trajectory and 79% of respondents thought the Safeguard could transition to a Baseline and Credit Scheme.

¹ Carbon Market Institute, [Australian Climate Policy Survey 2018](#).



Some of these key design features and options for consideration on how the Safeguard could evolve and the possible implementation pathways are presented in this discussion paper, and have been developed to inform the position that each major political party takes to the Federal election. These include:

1. Setting an emissions trajectory

Redefining the role of the Safeguard to drive below business as usual emission reductions in alignment with the broad trajectory of Australia's long-term emissions reduction target.

2. Declining emissions baselines

Providing certainty to industry as to how baselines will be adjusted over time in alignment with a trajectory, and sending a clear market signal for facilities covered under the Safeguard to reduce and/or offset emissions at lowest cost.

3. Setting the emissions coverage

Defining appropriate coverage of the scheme and determining its capacity to contribute to Australia's emissions reduction target at least-cost.

4. Ensuring adequate supply of offsets

Utilising the existing architecture of the ERF to ensure there is an adequate supply of ACCUs to support covered facilities manage their emissions.

5. Crediting emissions reductions

Supporting continued growth and integrity of Australia's domestic carbon market and increased ambition by providing an incentive for facilities covered by the Safeguard to reduce emissions below their emissions baseline.

6. Establishing international market linkage

Providing increased compliance flexibility to covered facilities by allowing access to international carbon markets and eligible units to support compliance at least-cost.

7. Assisting Emissions Intensive Trade Exposed (EITE) entities

Providing assistance to covered facilities operating in EITE industries and protecting Australia's international competitiveness.

8. Defining the role of the electricity sector

Defining whether the electricity sector should continue to be covered under the Safeguard and its role in contributing to Australia's emissions target.

Enhancing the overall operation, design and effectiveness of the Safeguard by transitioning the mechanism to a Baseline and Credit Scheme (BCS) can bring about a meaningful and lasting contribution to the emissions reduction challenge that Australia has committed to as a signatory to the Paris Agreement.



The Safeguard Mechanism ('Safeguard'):

The Safeguard is a key element of the Government's Emissions Reduction Fund (ERF) and was established to ensure emissions reductions purchased through the ERF are not offset by significant increases in emissions above business-as-usual levels elsewhere in the economy².

The policy involves allocating emissions baselines to facilities covered by the Safeguard. The Safeguard currently covers over 200 of Australia's largest emitting facilities that together emit over 50% of Australia's emissions.

Introduction

The Safeguard has the potential to become a primary climate change policy mechanism in Australia to make a substantial contribution to Australia's emissions reduction targets. Evolving the Safeguard in a way that utilises existing legislative architecture and processes, places an upper limit on emissions and defines a trajectory for baselines to decline over time allows for a smooth policy transition. The Government in 2018 consulted with industry on ways to make the Safeguard "fairer and simpler", and this included bringing baselines up-to-date. Continuing on this transition pathway by amending the Safeguard rules in a way that supports Australia's emissions reduction targets can avoid potential delays and legislative uncertainty associated with establishing completely new policy.

In the context of Australia's Nationally Determined Contribution (NDC) submitted under the Paris Agreement, the Government has committed to an emissions reduction target of 26 to 28 per cent

below 2005 levels by 2030. The Opposition have also committed to increasing this emissions reduction target to 45 per cent below 2005 levels by 2030³. Under current policy settings, the Government's existing climate change policy mechanisms will not effectively constrain emissions in a way that will enable Australia to meet its current 2030 target. The latest emissions projections from the Department of the Environment and Energy in December 2018, show that emissions in 2030 are projected to grow by 4 per cent above 2020 levels, and are currently projected to be just 7 per cent below 2005 levels by 2030⁴. This misalignment was also supported by the findings from CMI's Australian Climate Policy Survey 2018 (see **Appendix 2** for key findings) which found that 92% of Australian business and industry respondents believe that current climate and energy policies are insufficient and won't drive the emissions reductions needed to meet our Paris Agreement targets⁵.

This discussion paper suggests a number of options for how the design of the Safeguard could evolve and possible implementation pathways. The primary proposition outlined is to transition the Safeguard to a Baseline and Credit Scheme ('BCS'); a type of Emissions Trading Scheme (ETS) (see **Appendix 3** for key characteristics of an ETS), that could see the Safeguard become a scalable, multi-sector market mechanism. If this transition of the Safeguard is enacted, the mechanism could play a more significant and effective role in meeting the objectives of Australia's 2030 emissions reduction target and contributing to a net zero emissions trajectory.

² Australian Government Department of the Environment and Energy, [Emissions Reduction Fund Safeguard Mechanism](#).

³ Australian Labor Party [Media Release](#), November 20, 2018.

⁴ Australian Government Department of the Environment and Energy, [Australia's emissions projections 2018](#).

⁵ Carbon Market Institute, [Australian Climate Policy Survey 2018](#).



Design Features & Options for Consideration

This discussion paper presents some of the key design features and options for transitioning the Safeguard into a BCS and strengthening its role as one of the key policy mechanisms to deliver Australia’s emissions reduction commitments under the Paris Agreement. The key design features for transitioning the Safeguard to a BCS and the associated options discussed in this paper, include the options in the box to the right:

1. **Setting an emissions trajectory.**
2. **Declining emissions baselines.**
3. **Setting the emissions coverage.**
4. **Ensuring adequate supply of offsets.**
5. **Crediting emissions reductions.**
6. **Establishing international market linkage.**
7. **Assisting Emissions Intensive Trade**

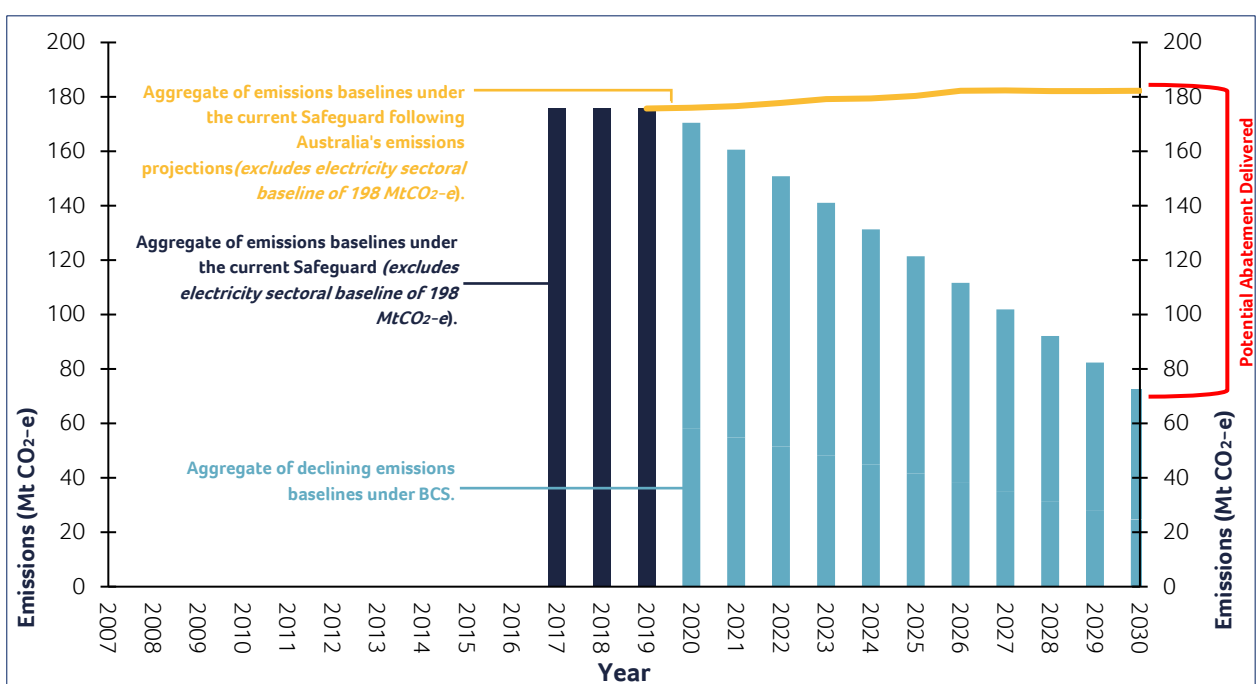
Contributing to a 45% Emissions Reduction Target Scenario by 2030

The visualisations presented in Figures 1 & 2 are an approximation only and have been developed solely for the purpose of providing a visual illustration of an example transition scenario. The

figures are based on high-level assumptions. If the option to transition the Safeguard to a BCS is taken up, detailed modelling should be undertaken to accurately forecast the impact of the scheme.

Figure 1: Transition from Safeguard to BCS to help achieve an economy-wide 45% reduction target by 2030.

Figure 1 below is a visual representation of a potential scenario where the Safeguard transitions to a BCS in 2020 and covered emissions decline on a trajectory that achieves a level of abatement which contributes to meeting an economy-wide 45 per cent emissions reduction target on 2005 levels by 2030 (it is expected that other policies will also contribute to this task). This 45 per cent illustrative target has been chosen to demonstrate a scenario where the Safeguard contributes to achieving an increased emissions reduction target, and one that was previously recommended by the Climate Change Authority in 2015; namely a 40-60 per cent reduction on 2000 levels by 2030⁶.



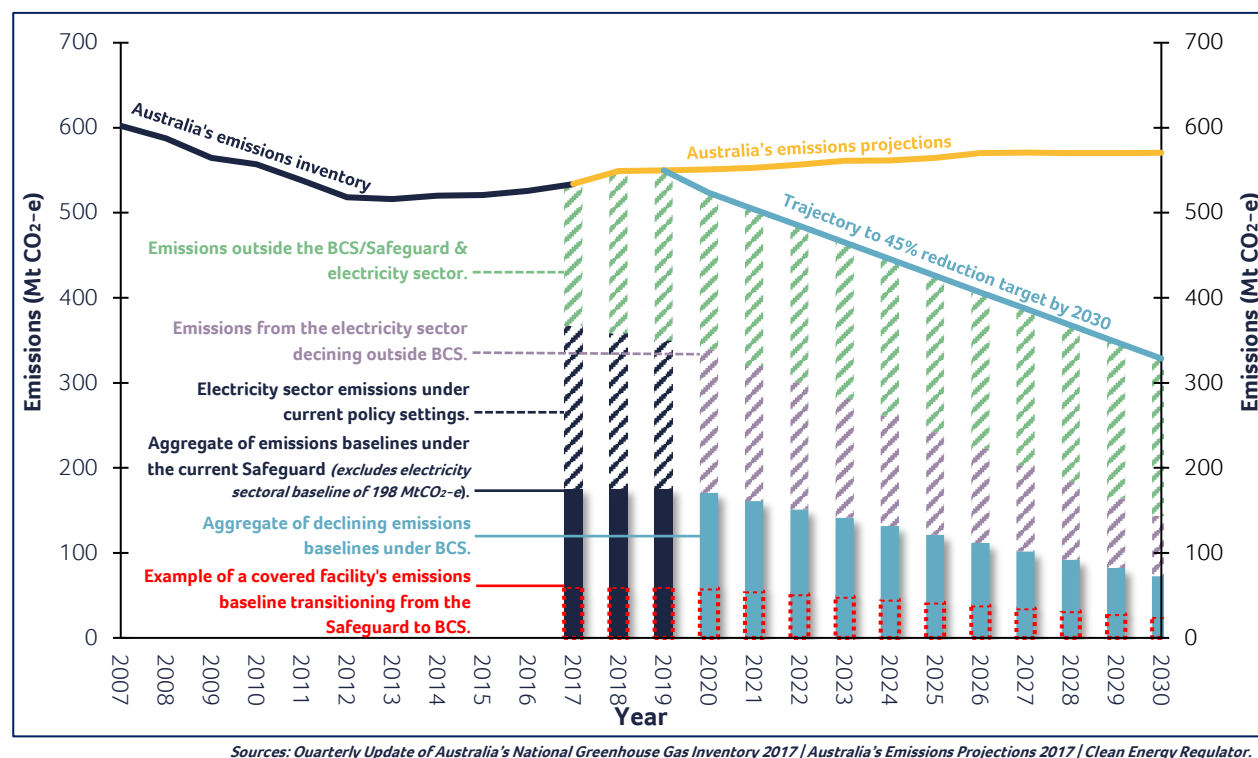
Sources: Quarterly Update of Australia’s National Greenhouse Gas Inventory 2017 | Australia’s Emissions Projections 2017 | Clean Energy Regulator.

⁶ Climate Change Authority, [Final report on Australia’s future emissions reduction targets.](#)



Figure 2: Economy-wide emissions trajectory to achieve a 45% reduction target by 2030.

Figure 2 provides an overview of Australia's economy-wide emissions, and how the BCS, in conjunction with a policy covering the electricity sector, would help meet the emissions reduction target in 2030. The rate that covered emissions decline in **Figure 1** is directly proportional to the emissions trajectory in **Figure 2**.



Key Assumptions for Figures 1 & 2.

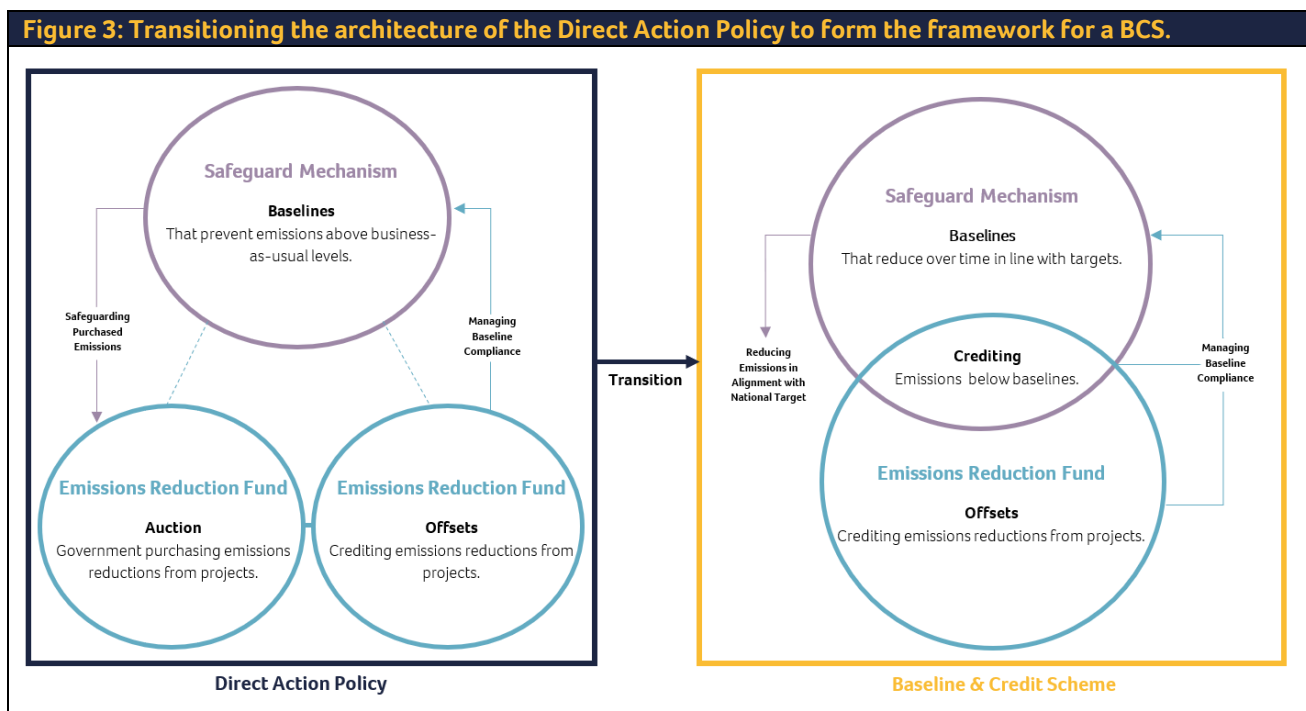
- The BCS and any policy mechanism that covers the electricity sector are the main emissions reduction policies in the economy. Both policy mechanisms drive a proportional share of the emissions reduction task to deliver an economy-wide 45% reduction in emissions below 2005 levels by 2030, and decline at the same rate. It is noted that the electricity sector may achieve a greater level of emissions reductions than illustrated above.
- The aggregate of emissions baselines under the current Safeguard remain constant until 2020. In reality, the aggregate covered in each compliance year will likely fluctuate, for example, depending on the number of facilities that meet the current 100,000 t CO₂-e covered emissions threshold.
- There are no new entrants or expansions to covered facilities under the Safeguard Mechanism or the BCS. In reality, there will most likely be new entrant facilities and significant expansions to existing facilities, which will require the abatement delivered in Figure 1 to be greater than depicted. This will also need to be accounted for when setting and adjusting any emissions trajectory under a BCS.
- If the Safeguard Mechanism does not transition, the aggregate of covered emissions in Figure 1 increase or decline at the same rate as Australia's emissions projections in Figure 2. In reality, these emissions will likely fluctuate, and so the illustrative abatement delivered must be considered an estimate.
- The emissions not covered by the Safeguard Mechanism, BCS, or electricity sector remain constant from 2020 – 2030 in Figure 2. In reality, these emissions will likely fluctuate and will need to be accounted for when setting and adjusting any emissions trajectory under a BCS.



Utilising the existing architecture of the Safeguard Mechanism and Emissions Reduction Fund

Although part of the same policy, the ERF and Safeguard largely operate independently of each other, however they are linked. This was evidenced by the trading in Australian Carbon Credit Units (ACCUs) that took place in the first compliance year (2016/17) of the Safeguard, for those facilities that needed to manage emissions above their legislated baseline. In the first compliance period for the Safeguard Mechanism (1 July 2016 to 30 June 2017) 16 facilities had to manage emissions above their baseline by collectively surrendering 448,097 ACCUs to maintain compliance. These ACCUs were primarily sourced from ERF projects.

Transitioning the Safeguard to a BCS will involve placing a clear limit on absolute emissions across the economy through the adjustment of baselines; strengthening the connection to and ensuring the market for ACCUs has adequate supply available; allowing baselines to decline along a trajectory in line with national targets; and crediting facilities for reducing emissions below their baseline. Importantly, the transition could utilise the existing legislation of the current Direct Action Policy, as outlined in **Figure 3**.



Key design assumptions

In outlining the Safeguard design options presented below, the following key assumptions have been made:

- existing policy is one that can evolve without new legislation being introduced;
- the design features primarily relate to facilities that are not electricity generators, however there is an option that considers the prospect of the electricity sector continuing to be covered under the Safeguard;
- the Clean Energy Regulator (CER) continues to administer the Safeguard and ERF under a BCS;
- reference to emissions through this discussion paper refer only to scope 1 (direct) emissions;
- these design features are not exhaustive and have been developed to inform future climate and energy policy developments.



Key Definitions

Covered Facility: A facility that is captured under the Safeguard or a BCS and must comply with the rules of the scheme. Under the Safeguard, a facility is a covered facility if its annual emissions are equal or greater than 100,000 tCO₂-e. Under a BCS this threshold may change.

Emissions Coverage: Emissions coverage refers to the quantum of emissions that are covered by the Safeguard or a BCS. The current emissions coverage under the Safeguard includes scope 1 emissions from all covered facilities.

Emissions Baseline: A defined level of annual emissions – measured in tonnes of carbon dioxide equivalent (tCO₂-e) – at or below which a facility covered by the Safeguard must keep its net emissions for the year.

Aggregate of Emissions Baselines: The combined level of emissions baselines from all facilities covered by the Safeguard or a BCS in one specific year, measured in tonnes of carbon dioxide equivalent (tCO₂-e). The combined level of emissions baselines can be understood as an emissions “cap”.

Sectoral Aggregate of Emissions Baselines: The combined level of emissions baselines from all facilities operating in a particular sector (e.g. the mining sector) that are covered by the Safeguard or a BCS.

Offsets: An emissions offset, such as an ACCU, represents a unit of emissions (e.g. 1tCO₂-e) that has been reduced or sequestered (for example by undertaking an ERF project), which can then be used to compensate for (‘offset’) emissions elsewhere, subject to eligibility rules for offset units under a BCS.

Crediting: Crediting is the issuance of ACCUs to covered facilities for emissions reductions in accordance with the rules. Under a BCS, entities could be credited with ACCUs for reducing emissions below their facility’s baseline.

Market Linkage: The ability to link one or more carbon markets to each other and facilitate the trade of eligible offset units (‘carbon credits’) between markets.

New Entrants: A new entrant into a scheme includes new participants (facilities) whose emissions have exceeded the covered facility threshold, either through growth in emissions at an existing facility or development of a new facility.



1. Setting an emissions trajectory

To redefine the role of the Safeguard to be a key market-based measure which makes an effective contribution to drive below business as usual emission reductions that follow the broad trajectory of Australia's emissions target.

The emissions reduction trajectory required under Australia's Paris Agreement targets should guide how emissions baselines set under the Safeguard will decline and reduce (cap) absolute emissions. The method of calculating and adjusting the baseline trajectory should be flexible so that adjustments can be made periodically to account for:

- a. **reductions in emissions from sectors that are not covered by a BCS;**
- b. **emissions that are exempt under the scheme;**
- c. **expansions to existing facilities; and**
- d. **the incorporation of new entrants.**

The annual aggregate of emissions could be periodically reviewed and adjusted accordingly. It is also critical that the chosen BCS trajectory provides the market with long-term visibility on the emissions reduction task to support efficient investment and carbon trading decisions, manage compliance and contribute to Australia's emissions reduction task at least-cost.

The following result from CMI's Australian Climate Policy Survey 2018 supports the design options in Box1, specifically that **'82% of respondents agree that safeguard baselines must be set to reduce over time, in line with Australia's 2030 emissions reduction target trajectory'**.

BOX 1: Options for setting an emissions trajectory

A. **Adjust baselines under a BCS to decline at a staggered rate (or aligned to interim targets) to help achieve Australia's long-term emissions reduction targets.**

The annual aggregate of all emissions baselines under a BCS, could translate to an annual cap on emissions from facilities covered by the scheme. From the commencement of a BCS until 2030 (current national target timeframe), the annual aggregate of emissions baselines could decrease on a staggered trajectory (or aligned to interim targets) to help achieve an economy wide emissions reduction target. For example, the staggered rate could be slower in the earlier years of the scheme, becoming steeper in later years, or in line with any interim targets that are set. This trajectory could be proportional to the emissions reductions associated with the electricity sector. The longer-term trajectory to net-zero emissions could also be set as the end goal.

B. **Adjust baselines under a BCS to decline at a linear rate to achieve Australia's long-term emissions targets.**

Using the same logic as the above option, the annual aggregate of emissions could instead decrease on a linear trajectory to help achieve an economy wide emissions reduction target, as outlined in **Figure 2**.

A suitable notice period could also be provided to covered facilities under either option, prior to the commencement of a BCS, which would allow facilities adequate time to prepare for any new obligations under the scheme. This will also allow time to factor in updated emission reductions from other sectors into the trajectory, such as the electricity sector, which will reduce the overall economy-wide task of meeting Australia's targets under the Paris Agreement. For example, if the renewable energy industry is able to continue to deploy wind and PV at current rates, it will be able to achieve a 26% emissions reduction in the electricity sector by 2020/21⁷ under current policy settings.

⁷ The Australian National University, [Australia's Renewable Energy Industry Is Delivering Rapid and Deep Emissions Cuts](#)



2. Declining emissions baselines

To provide increased certainty for industry as to how baselines will be adjusted over time, and send a clear market signal for facilities covered under the Safeguard to either reduce and/or offset their emissions at lowest cost.

It is important that the conditions and criteria by which baselines are determined to decline to meet the chosen emissions trajectory and target are defined, to allow covered facilities to predict liability in current and future years of the scheme and manage their compliance at lowest cost. The options outlined below are based on the assumption that prior to the commencement of a BCS, emissions baselines will be “up to date”. This aligns with the work currently being carried out by the Australian Government, consulting with businesses on ways to bring Safeguard Mechanism baselines up-to-date with current circumstances and make the scheme fairer and simpler. This consultation process was an outcome of the 2017 review of climate change policies⁸. Following this work, emissions baselines can then decline at a predictable rate within each sector or across sectors as per the suggested options in Box 2.

BOX 2: Options for declining emissions baselines

C. Emissions baselines of covered facilities are set to decline at a rate that does not differ between each industry sector.

This option distributes the annual reduction in aggregate emissions evenly across sectors, sub-sectors and covered facilities. The decline in the annual aggregate of emission baselines from year-to-year, under the chosen BCS trajectory, will provide a required annual aggregate reduction in emissions (e.g. 10 MtCO₂-e). The decline from the previous year will also provide an annual percentage reduction (e.g. 7% reduction) that could then be applied to the emissions baselines of individual covered facilities equally.

D. Sectors are treated differently with the emissions baselines of covered facilities set to decline at a rate that takes into consideration a particular industry sector's capability and capacity to reduce emissions.

Under this option, the annual aggregate could be attributed proportionally to each sector or sub-sector (e.g. 3 MtCO₂-e to Mining, 2 MtCO₂-e to Manufacturing). Proportioning could be done, for example, by creating an emissions reduction sectoral ratio and sub-sectoral ratio, that could be used to proportion emissions between and within each sector, year-to-year. The decline in the sectoral and sub-sectoral aggregate of emissions from year-to-year will provide a sectoral and sub-sectoral percentage reduction, that could then be applied to the emissions baselines of covered facilities. This option could allow some sectors with the greater capacity to reduce emissions using current technology to do more of the heavy lifting in the early years of the scheme and other sectors to increase their emissions reduction in later years.

This option would require the Australian Government to comprehensively investigate, each sector's and sub-sector's capability and capacity to reduce emissions prior to commencement of a BCS.

The introduction of new facilities and the expansion of existing facilities will need to be taken into consideration by providing flexibility in setting and adjusting the chosen emissions trajectory. Visibility as to how the declining trajectory for baselines will take into account emissions outside the mechanism, emissions from new entrants or significant expansions of covered facilities, will be critical. One potential option is to apply an algorithm or formula which defines variables that the emissions trajectory is reliant on. Covered facilities can then have a degree of certainty around how changing variables (such as new entrants) will be treated under a BCS.

⁸ Australian Government Department of the Environment and Energy, [Consultation on amendments to the National Greenhouse and Energy Reporting \(Safeguard Mechanism\) Rule 2015](#)



3. Setting the emissions coverage

To define appropriate coverage of a BCS and determine its capacity to contribute to Australia's economy-wide emissions reduction targets at least-cost.

Increasing the coverage of the Safeguard (by lowering the threshold of annual emissions covered at a facility to below 100,000 tCO₂-e) would enable the scheme to capture a greater proportion of emissions in the economy and distribute the emissions reduction task across a greater number of emitters, instead of relying primarily on the largest emitters to do the heavy lifting to reach the predetermined emissions reduction target.

The following finding from CMI's Australian Climate Policy Survey 2018 supports the options in Box 3, specifically that **76%** of respondents believe the safeguard threshold should expand to cover other entities.

BOX 3: Options for setting the emissions coverage

E. Reduce the Safeguard threshold from 100,000 tCO₂-e to a new threshold, to capture a broader group of facilities and sectors.

Broader coverage of a BCS could be achieved through a reduction in the current threshold. This could be 25,000 tCO₂-e or another level below 100,000 tCO₂-e which best balances the capacity of facilities to contribute to emissions reductions across the economy with the administrative effort and cost of compliance. This option would necessitate an assessment of facilities that sit below the 100,000 tCO₂-e threshold to determine the cost-benefit of reducing the threshold to another level, taking into consideration the capacity of facilities to contribute additional emissions reductions and the administrative burden associated with the size and volume of facilities covered under the scheme. Lowering the Safeguard threshold to 25,000 tCO₂-e, for example, will align the threshold for reporting obligations under the National Greenhouse & Energy Reporting (NGER) scheme and include most facilities that were covered under the former Carbon Pricing Mechanism.

This option holds to the principle that lowering the threshold increases both the coverage of the mechanism and its capacity to contribute to Australia's economy-wide emissions reduction targets.

F. Keep the Safeguard threshold at 100,000 tCO₂-e.

Keeping the Safeguard threshold at 100,000 tCO₂-e will maintain the current coverage of the mechanism, limiting participation in the economy to larger emitters. Compared to option E above, this will place the primary responsibility on large emitters to make the required reductions that contribute to Australia's economy-wide emissions reduction targets.



4. Ensuring adequate supply of offsets

To utilise and enhance the existing offset architecture of the ERF to ensure there is an adequate supply of ACCUs to assist covered facilities manage their emissions.

The current safeguard legislation allows Safeguard facilities to purchase and surrender offsets as the primary means to manage emissions above their baseline. A BCS with declining baselines will increase market demand for ACCUs.

In the first compliance period for the Safeguard Mechanism (1 July 2016 to 30 June 2017) 16 facilities managed emissions above their baseline by collectively surrendering 448,097 ACCUs to manage their emissions liability. These ACCUs were primarily sourced from ERF projects. Allowing covered facilities to offset their emissions to manage compliance (using ACCUs issued under the ERF) should continue under a BCS.

However, to provide greater flexibility and assist covered facilities manage their emissions at least-cost, the current suite of ERF methodologies could be expanded, and new methodologies introduced to increase the supply of offsets available in the market for purchase. In expanding ERF methodologies, it will also be important to consider the vital role that R&D can play in method development, and that innovative technologies can help accelerate emissions reduction options available to covered facilities, including those undertaking EITE activities. Increasing the supply of ACCUs will be particularly important during a transition from the current public funding model of the ERF and Safeguard, to a private funding model under a BCS. The government should take these crucial supply and demand issues into consideration when investigating possible design options for transitioning the Safeguard.

The following results from CMI's Australian Climate Policy Survey 2018 support the options in Box 5, specifically that (a) **59%** of respondents state that more funds should be invested in ERF methodology R&D; and (b) **78%** of respondents want to see more market information regarding supply and demand of ACCUs and international units.

BOX 4: Options for ensuring adequate supply of offsets

G. If a covered facility exceeds their emissions baseline, they can surrender ACCUs equivalent to the level of emissions exceedance to manage compliance.

This involves maintaining the current compliance obligation under the Safeguard, which allows covered facilities to source and surrender ACCUs to manage compliance against their emissions baseline in any one year. This option follows the reasoning that in some circumstances it may be more economical for a covered facility to offset their emissions, instead of implementing activities to reduce emissions below their emissions baseline. Additionally, some facilities may reach the current technological limit of emissions reductions they can practically achieve at their facility, or production and efficiency levels are so variable as to require offsets to maintain compliance.

The combination of declining emissions baselines, policy certainty, and offsets as an option to manage compliance can send a long-term market signal to stimulate the development of ERF projects and help ensure adequate market supply.

H. Introduce new and/or expanded methodologies under the ERF to increase participation and stimulate the supply of ACCUs to create liquidity in the ACCU market.

Supporting the expansion and development of methodologies under the ERF can provide an opportunity to increase the supply of ACCUs to help meet compliance obligations as Safeguard baselines decline. This in turn can optimise investment in abatement, increase supply of domestic offsets and lower the cost of compliance under the scheme. This may also involve identifying efficiencies in the established process that develops and introduces new methods, whilst maintaining accuracy and scheme integrity.



5. Crediting emissions reductions

To support continued growth and integrity of Australia's domestic carbon market and provide an incentive for facilities covered by the Safeguard to reduce emissions below their emissions baseline.

Unlike the options in Box 4, in some circumstances it may be more efficient and cost-effective for a covered facility to reduce their own emissions to manage compliance against their baseline instead of purchasing offsets. This will largely depend on a covered facility's operations and marginal cost of abatement.

As emissions baselines from covered facilities decline under a BCS, an additional incentive could potentially be provided to encourage reductions below emissions baselines. This incentive could be in the form of carbon credits that are reflective of a quantum between the facility's reduced absolute emissions and the emissions baseline. However, as the main domestic offset credit in Australia is the ACCU, simply allowing covered facilities to be issued with 'credits' for reducing emissions below their baseline may not align with the integrity, transparency and credibility of ACCUs in the current market. This could create the perverse incentive of establishing a credit, or permit, that is not considered an ACCU under the ERF legislation and potentially reduce the overall integrity of the scheme.

BOX 5: Options for crediting emissions reductions

I. Covered facilities can generate ACCUs proportional to the level that their emissions are reduced below their baseline.

Under the current Safeguard Mechanism, covered facilities are eligible to participate in the ERF and create ACCUs from eligible emissions reduction projects at their facility, use these ACCUs for a liability at other facilities they are responsible for and/or sell their ACCUs to other parties. To avoid the double counting of emissions, ACCUs issued for emission reductions at a facility are added back on to that facility's net emissions. This ensures facilities cannot receive ACCUs for reducing emissions and then sell or surrender these ACCUs to further reduce their net emissions or net emissions of another facility.

Under this option the Australian Government could consider providing an incentive for covered facilities to reduce emissions below their emissions baseline. Noting the above double counting rules, this provision could look at a fair and equitable way of allowing covered facilities that reduce emissions below their baseline to be issued ACCUs under an approved ERF methodology. The number of ACCUs could be proportional to the level of emissions below their baseline. This could act as an incentive to reduce emissions below baselines and provide one way for covered facilities to manage their compliance obligations. This would help drive increased ambition under the scheme.

This option would need careful consideration to prevent any additionality issues or perverse outcomes.



6. Establishing international market linkage

To provide increased compliance flexibility to facilities under a BCS by allowing access to international carbon markets and offsets to meet compliance requirements at least-cost.

Existing Safeguard Mechanism legislation only allows for the use of ACCUs to meet compliance. The use of international units is not yet an approved policy position, however the Government has signalled in-principle support for the use of international units, with decisions on eligibility (quality & quantity) to be taken in a review by 2020⁹.

The transition towards future international trading in global carbon markets is likely to be built on a growing network of local and regional carbon markets. Finalisation of the rules for the carbon market mechanisms under Article 6 of the Paris Agreement has now been included in the United Nation's 2019 workplan for implementation. Should Australia determine, through government policy, to open opportunities to link and trade with international markets, a list of approved international carbon markets and eligible units could be established under a BCS. Covered facilities may then choose to offset their emissions by using international units from these approved markets and project types. The Government may also consider establishing a strategic reserve of international offsets in the absence of international linkage to increase compliance flexibility and options under a future BCS.

It is important to note that the future supply and demand of credits in domestic and international markets is unclear. As the demand for carbon offset credits grows and countries increasingly consider the use of markets to meet their Paris Agreement commitments, any approved importation of international offsets may need to be established in conjunction with the export of ACCUs.

It is also critical that any policy for the use on international units does not impact the growth and viability of Australia's domestic offset market.

BOX 6: Options for establishing international market linkage

J. Allow a percentage of international offsets that can be utilised by covered facilities to manage their compliance liability.

A nominal percentage could be set across the BCS, representing the amount of emissions that a covered facility is allowed to offset annually using approved international units. For example, a percentage of covered emissions could be set as the limit which can be offset through the surrender of international units. This percentage could be adjusted periodically. Recognising that a BCS may impact different industry sectors in different ways, the percentage of international units allowed to manage emissions could also be set at different levels for each sector. For example, sectors with limited technological options to reduce emissions may be allowed to utilise a higher proportion of international units to manage their compliance under a BCS.

⁹ Australian Government Department of Environment and Energy, [2017 Review of Climate Change Policies](#)



7. Assisting EITEs in the transition

To provide assistance to Emissions-Intensive Trade-Exposed (EITE) industries to support facilities in the transition and protect Australia's international competitiveness.

Assistance could be provided to EITE industries under a BCS to minimise the impact on an EITE facility's competitiveness and business performance when reducing emissions whilst being exposed to international competition, and address the risk of carbon leakage. However, it will also be important to define a long-term timeline for the rate of assistance, which could be adjusted over time. This would enable EITE facilities to plan for changes to their liability over time in the context of their operations and production outlook. Providing clarity on how any assistance would evolve (and potentially reduce) over time is a key consideration when modelling and assessing the impact of a BCS on EITE facilities.

It is important to note that any emissions which are exempt through assistance to EITEs under a BCS will need to be delivered elsewhere in the economy to maintain the chosen emissions trajectory and cap on emissions.

EITEs would need to apply for any exemptions under a BCS.

BOX 7: Options for assisting EITEs in the transition

K. Allow covered EITE facilities to utilise a greater proportion of international offsets to manage their compliance liability, as compared to non-EITE facilities.

Allowing EITEs to access a greater proportion of international offsets provides increased flexibility and could be one option to support EITEs during the transition and implementation of a BCS. For example, if all covered entities are allowed to surrender up to a percentage of international offsets to manage their compliance in any one year then EITEs could be allowed to surrender a greater proportion of international offsets for compliance purposes. This option does not factor in the current or future price and availability of eligible offsets in the international market.

L. Provide EITEs access to 'support' ACCUs from the CER, to cover a certain proportion of emissions above their baseline.

An allocation of 'support' ACCUs could be provided to facilities undertaking a defined EITE activity so as to help manage a proportion of their liability under a BCS. These ACCUs could be granted to the facility by the CER from ACCUs purchased through the exiting ERF auction process and then held in a strategic reserve by the CER or through a specific auction. A new ERF auction guideline would need to be developed and/or a policy for the establishment of a strategic reserve determined (including the prevention of double counting in Australia's emissions inventory). This strategic reserve could also be used to support the compliance of smaller emitters, if they were covered under the BCS, who would have higher transaction costs when participating and complying with a BCS.

The other option is that 'support' ACCUs could be purchased through an 'EITEs Auction', under the current ERF auction architecture (once the BCS is implemented). The proportion of EITE emissions exempt under any one compliance year would represent the amount of abatement the CER would offer to then purchase through a subsequent auction. This option provides a similar approach taken under the former Carbon Pricing Mechanism's Jobs and Competitiveness Program (JCP), where EITE facilities were issued free carbon units to assist in complying with the carbon price.

M. Provide covered EITE facilities with an emission baseline trajectory that declines at a reduced rate.

Where a facility undertakes a defined EITE activity, providing that facility with an emissions baseline that declines at a reduced rate is one option for reducing the impact of the low carbon transition on EITE activities. A rate of decline could be set based on an impact assessment and application of the facility's trade exposure as a result of declining baselines. Under this option, the reduced rate of decline would need to be accounted for in the emissions trajectory of a BCS.



8. Defining the role of the electricity sector

To define how the electricity sector will support achievement of Australia's economy wide targets.

Emissions from the electricity sector are currently capped at 198 Mt CO₂-e under the existing legislation of the Safeguard, which covers the sector with a 'sectoral baseline'. However, emission reductions in the electricity sector may be considered under a separate policy mechanism, that does not involve adjusting the sectoral baseline under the Safeguard.

Results from CMI's Australian Climate Policy Survey 2018 demonstrated support for including the electricity sector under a BCS, with the added advantage of streamlining emissions reductions under one policy mechanism and reducing overall transaction and compliance costs for Australian businesses.

The survey found specifically, that (a) **73%** believe an electricity wide baseline legislated under the Safeguard could be used as a policy lever to drive emissions reduction in the sector; and (b) **68%** of respondents feel that the electricity sector should reduce emissions by more than the sector's profile in the economy.

BOX 8: Options for the role that the electricity sector could play

N. Reduce and maintain a sectoral baseline.

The electricity sector is currently covered by the Safeguard under a sectoral emissions baseline; designated electricity generation facilities are not currently covered by an individual facility emission baseline. Prior to the commencement of a BCS the electricity sectoral baseline could be reduced to bring it "up to date" with current emissions in the sector. Under this option the sectoral baseline could then remain in place for the electricity sector as an emissions backstop, preventing any increases in emissions.

O. Transition the sectoral baseline for the electricity sector such that designated electricity generation facilities are subject to individual facility baselines.

Removing the sectoral baseline and applying individual facility emissions baselines will allow the electricity sector to participate in a BCS from its commencement. Individual facility emissions baselines have already been issued to designated grid connected generators covered by the Safeguard, and would need to be updated prior to the commencement of a BCS to ensure they are reflective of current emissions. Including the electricity sector under a proposed BCS will allow the sector to potentially reduce emissions greater than its share of emissions in the economy by adjusting baselines accordingly.

Under this option, energy security and reliability characteristics of Australian electricity grid networks, could be incorporated into the scheme to allow for circumstances where, for example, the Australian Energy Market Operator (AEMO) requires covered facilities in the National Electricity Market (NEM) to generate electricity for specific security or reliability purposes. For example, partial or full exemptions may be granted for emissions that exceed baselines proportional to the generation (and therefore associated emissions produced) during the time AEMO, or any other market operator, required a covered facility to operate for such purposes.



P. Use the RET and ERF policy architecture to convert LGCs to ACCUs.

Renewable electricity generation under the Renewable Energy Target (RET) could be used to create ACCUs and link the RET to the architecture of the ERF to support compliance under the Safeguard. One pathway to consider is the establishment of a new ERF methodology that utilises a formula to convert Large-scale Generation Certificates (LGCs) – or a proportion of LGCs under the RET – into ACCUs. Alternatively, a methodology could utilise a formula that converts the generation of renewable electricity into an eligible “activity”. This option could also involve the expansion of current methodologies associated with renewable energy and energy efficiency. This could provide some conversion and fungibility across the RET, the ERF and the Safeguard.

This option could help ensure there is an adequate supply of ACCUs in the market, (as discussed in Box 4) and continue to provide an incentive for the uptake of new renewable electricity if the RET is not expanded or increased. This would further support emissions reductions in the electricity sector and the potential it has to contribute to Australia’s emissions reduction targets.

Under this option, consideration would need to be given to preventing circumstances whereby the market may be oversupplied with ACCUs. Prior to the commencement of a BCS, as with **Option N** above, the electricity sectoral baseline could be reduced to bring it “up to date” with current sectoral emissions, and remain in place as an emissions backstop, limiting increases in emissions from the electricity sector.



The following timeline represents a possible pathway for transitioning the Safeguard to a BCS. Depending on the design options selected this timeline may need to be adjusted.

Example Transitional Timeline – Safeguard to BCS		
(1) Confirm transition to a BCS.	Pre-election	Confirm the intention (pre-election) that the Safeguard will be the primary market mechanism that drives covered emissions to follow the trajectory of Australia's emissions reduction target. Outline the intention to transition to a BCS at the earliest possible time to give relevant entities the maximum amount of time to start preparing for and updating their long-term emissions reduction strategy under a declining baseline scenario.
(2) Determine abatement task and consult on options.	Post-election Early/Mid 2019	Commence consultation with industry on the design options. Confirm governance, administration and design features such as: <ul style="list-style-type: none"> • the proportion of the abatement task that the BCS will deliver relative to other emissions reduction policies; • how new entrant facilities and facility expansions will be incorporated into the scheme; • the trajectory to set emissions; • how emissions baselines will decline; • the emissions covered under the scheme; • how emissions reductions from covered facilities will be credited; • how to incorporate emissions offsets; • how to establish international market linkage; • the assistance provided to EITEs; • the role of the electricity sector.
(3) Initiate legislative amendments	2019/20	Following consultation, confirm and finalise the amendments required to existing legislation.
(4) Provide facilities with their projected baseline trajectory.	Early 2020	All covered facilities receive their projected baseline trajectory, which will be updated annually based on Australia's emissions inventory, new entrants and facility expansions.
(5) Transition Safeguard to BCS.	1 July 2020	Implement BCS, with covered entities now subject to updated legislation and emissions baselines.



Results from CMI's [Australian Climate Policy Survey 2018](#) indicated Australian business strongly supports the need for a comprehensive market mechanism as a key policy measure to address emissions reductions throughout the economy. Key findings from the survey include the following:

KEY FINDINGS

The key findings outline business views on policy and market expectations with regards to the Paris Agreement commitments, the Emissions Reduction Fund, the Safeguard Mechanism, the energy sector, carbon pricing and corporate climate risk and disclosure.

82%

AGREE THAT SAFEGUARD BASELINES MUST BE SET TO REDUCE OVER TIME, IN LINE WITH AUSTRALIA'S 2030 EMISSIONS REDUCTION TARGET TRAJECTORY.

64%

AGREE MORE FUNDS SHOULD BE ALLOCATED TO THE ERF; 45% SAY FUNDING SHOULD BE CONTINUED UNTIL THE ERF TRANSITIONS TO A PRIVATE MARKET.

92%

AGREE THAT CURRENT CLIMATE & ENERGY POLICIES ARE INSUFFICIENT TO MEET OUR PARIS TARGETS

79%

AGREE THAT THE SAFEGUARD MECHANISM COULD TRANSITION TO A BASELINE AND CREDIT SCHEME.

68%

AGREE THAT THE ELECTRICITY SECTOR SHOULD REDUCE EMISSIONS BY MORE THAN THE SECTOR'S PROFILE IN THE ECONOMY.

82%

AGREE THAT AUSTRALIA SHOULD SET AN ECONOMY WIDE ZERO-NET EMISSIONS TARGET FOR 2050

84%

AGREE THAT AUSTRALIA SHOULD ACTIVELY PARTICIPATE IN ESTABLISHING INTERNATIONAL LINKAGE OF CARBON MARKETS.

64%

OF LARGE GREENHOUSE GAS EMITTING COMPANIES ARE FACTORING IN A CARBON PRICE.



Cap and Trade

Under a Cap and Trade ETS, a maximum (cap) of greenhouse gases that can be emitted by facilities covered by the system is set. The cap and trade approach creates a system of tradeable permits which is fixed, in effect limiting the amount of emissions that can be made in any one period. Tradeable permits are quotas, allowances or ceilings on pollution emission levels that, once allocated to the covered facilities, can be traded subject to a set of prescribed rules. The ownership of a tradeable permit allows a facility to emit greenhouse gas emissions up to a certain limit.

If the facility increases emissions, then they must either invest in emissions reduction technologies or purchase more permits. Some cap and trade programs allow facilities that emit less than their allowance to sell their surplus permits to other firms or use them to offset excess emissions in facilities. The market is left to determine the most efficient way to control emissions within a regulatory framework.

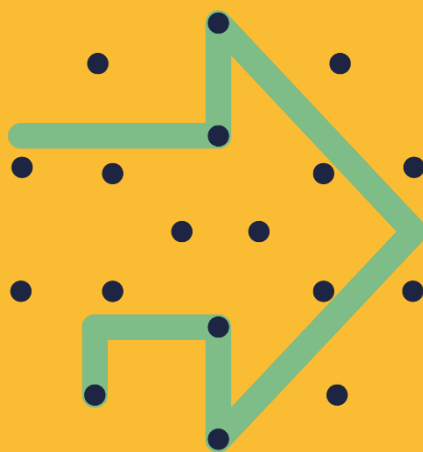
The European Union's Emission Trading System and Californian Cap and Trade Program are the major examples of a cap-and-trade ETS currently operating.

Baseline and Credit

Under a baseline-and-credit ETS, covered facilities are allocated a certain amount of allowable emissions, called their emissions baseline. The aggregate of all emissions baselines from covered facilities represents a maximum (absolute cap) of greenhouse gases that can be emitted under the scheme. These facilities must surrender enough emissions credits to account for any emissions above their emissions baseline. Third parties create the credits through various projects and then sell these credits to the facilities, or other market participants.

The baseline-and-credit scheme can be designed so that covered entities can also be credited for emissions below a facility's emissions baseline. Ideally, as emissions baselines are lowered, the overall amount of emissions from covered facilities also reduces.

The previous New South Wales Greenhouse Gas Abatement Scheme (GGAS) is an example of this type of approach.



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The Carbon Market Institute is at the centre of climate change policy and business in Australia. Independent and non-partisan, we bring business, policy makers and thought leaders together to drive the evolution of carbon markets towards a significant and positive impact on climate change.

Engaging leaders, shaping policy and driving action, we're helping business to seize opportunities in the transition to a low carbon economy.

