**Carbon Leakage Review - Seco** **A second webinar focused on issues of interest to international stakeholders will be held:**

* **Tuesday 12 November 2024**
* **5.00pm-6.15pm AEDT**
* [**Register**](https://events.teams.microsoft.com/event/a6ad3cff-b05a-4a6b-aab5-1db28d8b836e%408c3c81bc-2b3c-44af-b3f7-6f620b3910ee) **to learn more about the Carbon Leakage Review.**

**Climate, Energy and Disaster Solutions. He has been an author with the International Panel on Climate Change (IPCC), and advised governments on climate, economic and trade matters. He brings experience and expertise to the Review.**

**The Review will consult with a range of stakeholders including industry, environmental groups, research experts, international trade partners and the broader community.**

**nd Consultation-20241106\_015003-Meeting Recording**

0:04
Oh, good morning everyone and thank you so much for joining us. For those of you who I haven't met, my name is Edwina Johnson. I look after this safeguard mechanism and carbon leakage Review branch in the Department of Climate Change and achieve the environment and water. I'm delighted to be joined today by Professor Frank Yotso from the Australian National University, who's been the lead of this carbon leakage review.

0:25
So I'd like to thank you at the start for your engagement and interest in our review and really warmly welcome you to this morning's webinar. And so Frank and I will run through some slides. We anticipate that will take, you know, probably about 45 minutes, 50 minutes and then leave some time for questions. So if I could please ask you to hold your questions over to the end and you're able to type those in the Q&A function and then Frank and I will answer the questions. And so, yeah, really hopeful that this morning gives you a good.

0:55
Overview of the carbon leakage review. Thanks, side. Thanks, Liam. So I'd just like to start by acknowledging the traditional owners of the various lands in which we're calling in from today, which for me is the Gadigal people of the Eora Nation and pay my respects to elders past, present and emerging and extend particular respects to any First Nations people joining us in the call this morning. Thanks, Liam.

1:22
So yes, as you'd be aware, having joined the webinar this morning, we released the second consultation paper for the carbon leakage review last Friday. Our submissions close on the 3rd of December this year. And after that, I will provide advice to government. And so we're really hopeful that this morning's webinar will provide you with the sort of information about the analysis and policy options we worked through as part of the review. So I'll hand now to Frank to make some introductory comments. Thank you.

1:51
Yes. Thank you very much everyone for joining. We're delighted that the second and substantive consultation. For the carbon leakage review is open and we will be speaking to many aspects of the significant detail that is provided in that consultation paper. Briefly, to set the scene here, we do of course observe a global move to net 0 emissions.

2:17
140 countries plus have made commitments to be net 0 economies down the track, and that is of course the very large majority of Australia's trade partners as well. We have seen significantly increased climate change ambition in Australia, including the Federal Government's net zero plans that are currently in development and the vision of Australia as a renewable energy superpower and of course policy efforts.

2:47
Under the labour of future made in Australia, and the point really is that there are very significant economic opportunities for Australia in a net zero world. At the same time, in that transition to global net 0 settings, there is potentially a risk of carbon leakage due to differences in the extent and stringency of climate change policy in different countries and in different.

3:17
And jurisdictions. And at the same time, of course, very importantly, there is a desire to create the preconditions for investments in green industry in Australia, both to help the world decarbonize and of course to reap the economic benefits on the basis of Australia's enormous resource endowment, including in renewable energy potential now.

3:45
The beginning of the consultation paper sets out some of the principles that have guided us in this review and I'll briefly run through three of them. First of all, we put a very great emphasis on economically efficient low and 0 emissions industrial production and the transition there to we start from the proposition that a durable market based system.

4:11
Can incentivize investments in low and 0 emissions industries and that is an important bank in an overall transition to low emissions heavy industry settings.

4:24
That also relates to the definition that we take to carbon leakage, which is relocation of industrial production purely and sorely because of the differences in climate change policy and stringency that may exist between different countries in different jurisdictions more generally.

4:44
Secondly, of course, Australia's opportunity as a major producer and exporter of clean energy and industrial commodities. And here of course ultimately what you're looking for as a large scale producer of green commodities is premiums in markets for green products, including for traded. And it's all about creating the preconditions for investment in these new low emissions industrial structures.

5:13
3rd Very important for a small and very open economy like Australia, the international rules based trading system and more generally an open and liberal trade framework.

5:27
So Australia has traditionally benefited hugely economically by from free trade, from deep trade integration with the region. And so we place as a review a very strong emphasis on how any potential future climate change measures aimed at calm leakage reduction or addressing calm leakage concerns relate to international trade rules and obligations.

5:56
And looking for solutions that allow trade that is consistent with climate change objectives, for collaborative implementation of any additional policy measures and, of course, to supporting progress in multilateral and trilateral problems. And in fact, we will end on that note when we come to the end of the presentation that we know.

6:19
So to take a step back and just remind ourselves of the background and time frame for the carbon leakage review. So as you will be aware, Australia's legislated emissions reduction targets of 43% below 2005 levels by 20-30 and net 0 by 2050. And as part of delivering to those emissions reduction commitments, the government's reform, the safeguard mechanism, it's industrial emissions reduction policy.

6:45
And I'll say a bit more about safeguard mechanism reforms in a couple of slides time. And so we're arising from those reforms to the safeguard mechanism. The government committed to undertake this carbon leakage review, which has been charged with assessing the risk of carbon leakage and considering policy options including a broader carbon adjustment. And we'll dive in a little bit more in the next slide as to the the definition of carbon leakage risk.

7:09
So the review timeframes, the first phase focused on how, how we should go about identifying carbon leakage risks for Australia. Many of you will remember we consulted publicly in late 2023 and we're really grateful for the submissions we received on that first consultation paper.

7:27
We've been undertaken a number of months of deep both analytical analysis and policy analysis to address the carbon leakage risk of the commodities covered by the safeguard mechanism and have also been grateful for a number of engagements with both domestic and international stakeholders as we've looked to listen and bring together perspectives on the potential policy options that the review's been looking at.

7:52
So the consultation paper which was released last Friday steps out our preliminary findings and we really welcome your feedback on those overcoming weeks. And as I say, submissions close on the 3rd of December. Following this consultation. The review will provide and final advice to government by the end of this year 2024.

8:12
And after that, government will consider the reviews advice. So to be very clear, the government hasn't made any decisions on any of the preliminary findings outlined in the report. Thanks, Liam. So then turning to the definition of carbon leakage. So what we've done with the carbon leakage review is to take an intentionally reasonably narrow definition of carbon leakage where we look at shifts in production.

8:37
Either trade or production from countries with lower or no emissions reduction policy to those sorry, from those with more ambitious emissions reduction policies to those with weaker or no emissions reduction policies. So what what we're looking at there is, is just the relative stringency of emissions reduction policies and the effect that has on on trade or investment.

9:07
Now of course there's a number of reasons why trade and production can flows can change things like costs of capital and labour market conditions, company strategies and business sentiment. And while we recognise there's certainly important policy areas and and issues for for those businesses that work in this space, they're outside the remit of the reviews. So we do like to be very clear upfront what carbon leakage is and what it is not.

9:37
And what it is, is thinking about the relative stringency and the move of trade or investment solely due to that relatively stringency of emissions reduction policies across different countries. Next slide. Thanks, Liam.

9:53
So as I said, and I know many of you will know, the government has undertaken reforms to the safeguard mechanism. So the safeguard mechanism applies to Australia's largest industrial facilities. It's currently covers about 220 facilities, which are those industrial facilities across things like coal, oil and gas, steel, cement, other types of manufacturing, the large transport facilities.

10:18
And covers facilities that produce over 100,000 tonnes scope one or direct emissions each year. The following their forms our baselines are set on production adjusted emissions intensity basis and those baselines will decline as a standard rate of 4.9% each year to 2030. Those trade exposed facilities that experience particular cost impacts are able to apply for a concessional baseline decline rates.

10:45
If a facility emits below their baseline, they're issued safeguard mechanism credits. If a facility emits above its baseline, it must surrender domestic emissions credits. So other Australian carbon credit units or safeguard mechanism credits. And so it's really in the.

11:02
The context of those reforms that the review's been undertaken and as you'll hear during this during the presentation, the particular settings of the safeguard mechanism are very important when we think about potential policy options to address carbon leakage risk. Next slide. Thanks, Liam. So we weren't really conscious of the potential for carbon leakage risk when we undertook the reforms to the safeguard mechanism and there's really three main ways we've looked to address that risk as part of the existing.

11:32
Parameters and arrangements for the safeguard mechanism. So the first is that they're under the production adjusted emissions intensity baseline facilities have the capacity to admit up to their baseline without any cost as I said for those facilities who are trade exposed.

11:49
That and face particular impacts. They're able to apply for a reduced baseline decline rate. So instead of the standard of 4.9% each year for non manufacturing facilities, they're able to apply for a reduced rate down to 2% a year and for manufacturing manufacturing facilities down to 1% a year. There's also about a billion dollars through the Powering the Regions fund, which has been set aside to help our facilities decarbonize and therefore meet their obligations under the safeguard mechanism.

12:20
So in terms of our preliminary findings, we found that there's current safeguard mechanism settings are effective at mitigating carbon leakage risk in the short to medium term, but the settings for some sectors maybe may need to be augmented over time. And we also noted that the reduced baseline decline rates under the trade exposed based on adjusted status Tortiva facilities constrain the contribution of the safeguard mechanism to Australia's overall emissions reduction efforts.

12:48
And now I hand back to Frank to talk through some of the assessment of carbon leakage risk. Yeah. And the analytical foundation for our work really is the assessment of potential carbon leakage risk commodity by commodity for 73 trade exposed commodities covered by safeguard mechanism go in 37 commodity categories and.

13:11
The review team has really done an outstanding job here in providing a very in depth quantitative as well as qualitative analysis of these factors, where of course.

13:23
Very interested in informed stakeholder feedback on that analysis and I'm happy to report that in many ways this analysis that's reproduced in the consultation paper sets a kind of benchmark actually for the depth of analysis on these issues.

13:42
The way we've gone about this is we've leveraged several in depth statistical indicators as well as qualitative stakeholder feedback and and other factors to come to a holistic assessment of likely future carbon leakage risk. Now in terms of the quantitative indicators.

14:03
Starting on the left, we've made an indicative, indicative assessment of what the 2030 carbon liability might be as a percentage of product prices. So this makes there's assumptions of course about the prices at which credits might be traded at 20-30, the assumptions of course about baseline decline rates.

14:29
And assumptions about product prices guided by most recent product prices. We then assess trade as a share of safeguard mechanism production in Australia using most recent available data. Once again commodity by commodity. And that is a policy for the trade exposure of a particular commodity produced in Australia and exposed to trade.

14:56
And then comes a very involved piece of analysis, and that is an econometric estimation of the sensitivity of trade flows to changes in relative crisis. I come to that in a little bit more detail, but essentially it is looking at historical data of the last decade or so to empirically assess how the balance between imports to Australia and domestic production in Australia has varied as a function of changes.

15:26
In the relative prices between Australian production and world prices or imports, we combine that quantitative analysis with other factors including stakeholder feedback already received. And of course, very important to emphasise that this kicks off our second consultation. And we're open to receive further information and analysis from stakeholders domestically as well as internationally.

15:54
Now all of that assessment allows us then to firstly assess the so called trade leakage risk and so that includes a quantitative illustration of the potential reduction in production under safeguards without any additional measures to address carbon leakage.

16:17
And it allows an assessment of more broadly framed assessment of investment leakage risk. So this is broadly speaking the the question of where the next facility might be built. And the indicator that we're using there to illustrate is emissions relative to firm profits.

16:36
Now on the basis of that analysis and we won't go into too much detail in the slides here you have all the detail required in the paper in front of you. We see very stark differences between commodities in terms of their potential exposure to trade based carbon leakage risk as assessed on the basis of our statistical analysis.

17:01
We'll come to individual commodities in a minute. Just to emphasise here, that is really very substantial differences in the quantitative assessment of likely trade carbon leakage exposure. And just to illustrate or just to give you a guide, the dark coloured bars here are for commodities that compete with imports.

17:25
The light coloured bars are commodities that largely compete as exports in international markets. Now assessing investment leakage risk is done in rather broad categories of commodities and industries owing to confidentiality provisions of the underlying data that we use in the review. And I'll leave you to to take in the overall picture here.

17:55
We also of course, use qualitative feedback received from stakeholder engagement in our overall assessment of potential investment carbon leakage. Next slide. Now in terms of the assessment, commodity by commodity and not out, this will be one of the most anticipated preliminary results.

18:21
From the review, you can read some words on the particular commodity groups here on the right, I will go through the preliminary findings for consultation that are included in the consultation paper. So the following commodities are assessed to be subject to potentially material carbon leakage risk over time.

18:50
Firstly, the cement group of commodities that cement itself as well as clink and lime, ammonia and derivative products, steel as well as glass.

19:01
We assess that carbon leakage risks are particularly pronounced for clinker alignment cement, more pronounced than for other commodity corps, and that fact may warrant additional policies to be introduced at an earlier stage potentially than for other commodity corps.

19:20
Further, to assess that there are potential carbon leakage risks for aluminium, aluminium and alumina, as well as refined petroleum pulp and paper, and the preliminary finding is that these commodities are to be recommended for consideration as part of the 2026.

19:40
2027 scheduled review of the safeguard mechanisms. So in other words, a watching brief and in depth treatment in the 202627 Safeguard Mechanism review. Now the review has of course been tasked with the assessment of various different potential policy options to deal with carbon leakage risk.

20:08
That may emerge in the future.

20:12
Very important to again emphasise, as Edwina did before, that, the plenary findings that we're sharing with you here today and that are contained in the consultation paper have not yet been considered by government.

20:25
They don't reflect government policy.

20:27
They're not a foreshadowing of potential government decisions.

20:31
They're just simply what we are putting out for consultation and and which will then of course inform our final report findings and recommendations to government by the end of the year.

20:46
Now the existing carbon leakage policies under the safeguard mechanism, baseline decline rates including T bar arrangements and so forth serve as the benchmark of assessment of alternative of potential additional policy instruments that are being assessed.

21:09
Now the first of these options assess is public investment.

21:13
So government support for decarbonisation essentially and of course many full programmes already exist in that regard and and further programmes are are known to be in under consideration including under the future Made in Australia programme.

21:33
Now some existing public investment is already targeted at sectors under safeguard mechanism that may be at risk of carbon leakage.

21:44
Now the review spells out that there is of course a role for government investment in a net zero transition, including to accelerate innovation and bringing forward low emissions productions.

21:56
Now specifically though, our findings for consultation are that public investments can help reduce emissions intensity and thereby help address the risk of carbon leakage in specific cases.

22:11
We also find that public investment is likely to be particularly relevant for export oriented industries and of course not in that range of such programmes already exist.

22:23
Now.

22:23
However, while fulfilling a range of functions, public investment is found to not be sufficient as a systematic and fiscally sustainable solution for commodities with high carbon leakage risk.

22:38
In other words, we cannot as a result of the extensive analysis, find that public investments would be a comprehensive solution for carbon leakage risk and we're very happy to go into detail about that finding in Q&A if desired.

22:57
Next slide.

22:59
Now much interest of course has focused on the option, a potential option of a border carbon adjustment mechanism.

23:07
Now to recap, a border carbon adjustment is a policy instrument that seeks to mirror domestic climate change policy settings onto international produced goods.

23:18
In other words, putting onto a level playing field domestic production, which is of course in Australia.

23:23
So they're subject to a safeguard mechanism and, and So what a safe, what a broader carbon adjustment in principle does it, it creates a market premium for low and 0 emissions products and DIY levels.

23:39
So playing field and DIY can help accelerate investment in those low emissions and 0 emissions facilities that is of course desired as part of the net zero transition.

23:52
Internationally, there has been sharply increased consideration of border carbon adjustments and in fact preparations for the implementation.

24:00
Notably, the EU is going ahead with the C band, the carbon border adjustment mechanism, which is in implementation stage, and the UK have announced that it will be the introduction of a border carbon adjustment in the UK by 2027.

24:16
Now we make several preliminary findings with regard to border carbon adjustment and a fair bit of the rest of the policies section of of this webinar will be devoted to that.

24:27
Once again to emphasise that these preliminary findings have not been considered by government.

24:34
So our overall finding is that all the carbon adjustment applied to imports could be an appropriate policy measures for some selected safeguard covered commodities that have a high carbon electric risk from imports.

24:53
Should it be pursued by government, then it would need to mirror domestic emissions policy settings for imports to provide a level playing field and and it would need to be designed to minimise administrative burden.

25:09
So there's a very, very clearly defined corridor for the for the design and implementation of a possible carbon border adjustment mechanism for the specific commodities and we'll come to some of the details of the analysis on that.

25:29
Any such mechanism, very importantly, would need to be consistent with Australia's deep and long standing commitment to an open rules based trading system and to Australia's international trade law obligations.

25:44
The review also sees significant opportunity for Australia to advance relevant work within trilateral initiatives and to support trade partner countries with implementation of such a mechanism.

26:00
Next slide.

26:03
Now what about border carbon adjustments for exports?

26:06
So in principle you could think of a border carbon adjustment that also applies to exported commodities.

26:14
For example.

26:15
Dominant form that that would take would be to rebate domestic climate change policy costs for exports from Australia to elsewhere.

26:25
Now this would obviously effectively exempt exports from local Australian emissions reduction obligations and it is known that it would raise a very considerable international trade law concerns.

26:40
It is also the assessment of the review that export sectors will tend to benefit from faster global energy transition and from growth in demand in markets that provide a premium for low emissions schools.

26:53
So for example, in markets that have their own carbon pricing or equivalent schemes and that reflect those policy settings at their own borders.

27:03
So the preliminary findings on border carbon adjustments for exports are that they would be inconsistent with Australia's emissions reduction targets and could raise those considerable international trade law concerns.

27:15
And For these reasons, a border carbon adjustment for exports from Australia is unlikely to be an appropriate solution for Australia or indeed to achieve relevant policy objectives.

27:30
Instead, the DD ambition could be for those exported commodities to seek premiums, price premiums in markets that are available to Australian exporters.

27:44
Next slide.

27:46
Now where might we see recommendations for the nearer term implementation of a broader carbon adjustment mechanism should government decide to go in that direction?

28:00
So possible first mover.

28:02
So that depends of course on several factors.

28:06
Firstly, the extent of carbon leakage risk, the immediacy of the problem, if you will, as detailed before.

28:13
Secondly, the impractical feasibility of a border, carbon adjustments or internationally experiences are still being made.

28:22
Or well, we're at the beginning really of the process where international experience are being made, in particular in the EU with the implementation of such mechanisms.

28:31
And this much to be learned.

28:33
And an early lesson certainly that we have heard from many stakeholders importantly internationally as well, is that there are very significant differences between different commodities according to the complexity of supply chains and according to the complexity or variety of specific products within one board product category.

28:56
And there's also then the question of the extent of the domestic production that's actually subject to safeguard mechanism obligations.

29:05
Now our preliminary findings for consultation once again in regard to possible first movers are that cement and clinker are judged to be suitable for initial consideration for an Australian border carbon adjustment, that lime.

29:20
Lime production would also be suitable for early consideration.

29:25
However, there's a particular issue to be dealt with here in that safeguard mechanism coverage of Australian line production is partial.

29:34
In other words, not all Australian line producing facilities are subject to the safeguard mechanism because of the 100 kilotons emissions threshold.

29:46
And so that raises complex considerations as to how domestic production would be put or how import would be put on an equal footing with domestic production.

29:59
And that is an issue that would need to be pursued in further detail should a decision be made to to to go further in consideration.

30:11
Next slide.

30:13
Now what about possible later additions that we could foresee at this point?

30:18
And of course, red paints do not hear that this assessment might change over time.

30:23
Assessment might be refined and of course circumstances could change as well over time.

30:29
So the preliminary findings for consultation are that based on our current analysis as done this year, ammonia and derivatives as well as steel as well as glass could be worth further policy consideration and could be candidates for border carbon adjustment later on, further down the track.

30:49
Now as is evident I think in our exposition here, the review views that border carbon adjustment measures could be suitable or would be suitable for phased, a phased approach starting with the commodities at relatively high risk of calm leakage and the commodities for which implementation is likely to be most straightforward.

31:14
All of this of course would be subject to further stakeholder consultation and further detailed work should government decide to go in that direction.

31:25
And if we are handing back to you at this point, thanks so much, Frank.

31:28
So, yeah, as Frank said and and as I said, as as we know, no decisions have been made by government on any of these preliminary findings, but the review has taken the opportunity to think through some potential design consideration should government wish to pursue a border carbon adjustment.

31:46
And so this slide sets out that one of the important aspects, as we've said for the reviews consideration is compliance with international law.

31:55
And a key element of that is, is that any border carbon adjustment mechanism would need to mirror key provisions of the safeguard mechanism.

32:05
And so should a border carbon adjustment be pursued, a liability could be applied in to emissions and exceedance of the safeguard mechanism baselines and to the extent that the assessed effective carbon price paid in the originating country is lower than in Australia.

32:20
So on the left hand side, we've sort of stepped through what what that means in practise.

32:24
And so as you'll see in the top left hand box, the liability would apply under any border carbon measure should costs of carbon obligations are be lower in the originating country than in Australia.

32:41
And also that the emissions intensity of production is higher than the Safeguard mechanism benchmark in whatever year we're talking about into the future.

32:52
But you'll also see 3 examples of times when we wouldn't anticipate a liability would apply.

32:58
And so that's where if the carbon cost is equal to or higher than the cost of in Australia, no liability would apply.

33:07
Similarly, if the emissions intensity is lower than the Safeguard benchmark, no liability would apply.

33:13
And if both of those factors correct then equally no liability would apply.

33:18
So we wanted to just sort of sketch out that where we think about what would any how could it work when we think about mirroring the safeguard mechanism should government wish to pursue a border carbon adjustment.

33:32
Similarly, the the basis of the scope of emissions would be the same, so only scope one and also the same set of relevant greenhouse gases, which is relatively standard around the world.

33:43
But we're also conscious that should government wish to pursue a broader carbon adjustment that may generate revenue.

33:50
And so we've heard from stakeholders that in addition to offsetting the costs of implementation of the policy, that would create the opportunity for funds to be provided to to programmes to support implementation and industrial decarbonisation objectives in trade partner developing countries.

34:07
Next slide.

34:08
Thanks, Liam.

34:09
So continuing the the detailed consideration of how we could think about mirroring our safeguard mechanism parameters, there's two elements that this slide calls out.

34:20
The 1st is that in terms of a border carbon adjustment would ensure that imports and domestic production are put on a level playing field and that they receive equivalent policy treatment.

34:33
So this would mean that removes the policy basis for the trade exposed baseline adjustment or TIBA arrangements that I spoke through earlier.

34:41
So that therefore creates the potential to remove or phase out TIBA for sectors where a border carbon adjustment is introduced.

34:50
The other key consideration which Frank touched on earlier was that as we know, safeguard mechanism applies to facilities that emit more than 100,000 tonnes scope 1 emissions in a year.

35:01
So that means for some commodities and lime is one that we've called out earlier in this presentation, not all of Australia's domestic producers are necessarily covered.

35:10
And so that creates an additional complexity thinking about how to apply a border carbon adjustment if government wish to do so to imports.

35:19
And so that's scenario in which further consideration will be needed before a border carbon adjustment could be applied to a commodity that has less than 100,000.

35:29
I'm sorry, 100% safeguard mechanism coverage of domestic production.

35:34
Next slide.

35:34
Thanks, Liam.

35:36
We've also been really grateful to hear feedback from a range of stakeholders over the last recent months about the sort of administrative considerations that the government would need to think through should any border carbon measure be pursued.

35:51
And so, so whilst we've done some initial thinking about administrative issues, this is something that should government decide to pursue a border carbon adjustment, really further detailed design and consideration and importantly consultation would need to be undertaken.

36:09
So we've heard from from stakeholders like yourselves that should Australia pursue a broader carbon adjustment, we should consider a design that was non discriminatory, had low transaction and compliance costs and importantly supported an open and Fair Trading system.

36:24
And so things that we're thinking about there include how would you design our frameworks related to reporting and verification that minimised administrative burden, including through streamlined reporting processes that we've we've heard.

36:41
And our preliminary finding is that they would should maintain confidentiality for producers that they provide effective yet efficient emissions verification and and that we would need to provide suitable emissions intensity default values to help with that simplicity and administrative lower the costs should any such measure be pursued.

37:05
And importantly, we've also the preliminary finding is that the framework should align with existing and future international standards where possible so that they can be interoperable as far as possible.

37:19
And now I hand back to Frank to talk through some of the modelling the review did.

37:23
Yeah, and we're really looking forward to the Q&A as well as of course your input in the consultation.

37:30
But before we get to the Q&A, three more things.

37:34
Number one, we want to share just very briefly some of the the further analysis that has been done and that's detailed of course in the paper that's modelling a border carbon adjustment in a computable general equilibrium framework.

37:52
And so that's different from the analysis that we presented before in that it, it represents in a broad and stylized fashion interactions between different parts of the economy as well as interactions between different commodities.

38:08
And so, you know, the review is LED of course and, and located in the department time, change and energy.

38:15
Some of this analysis was supported strongly by other federal Australian government departments.

38:23
Now in the scenarios that we'll show in the next slide, we're comparing the current the the stylized representation of a border carbon adjustment on the current safeguard mechanism arrangements.

38:36
And then secondly with the trade exposed baseline adjustment removed for the sectors in question where we assume for illustrative purpose the implementation of a border carbon adjustment.

38:48
Now the headline from this result and here next slide please, is that the overall economic impacts of the implementation of such a mechanism are tiny.

39:01
In fact, it would be so small on a macroeconomic level as to get lost in the noise.

39:08
So this is actually not unexpected because you're talking about a relatively marginal change in policy arrangements affecting just a few selected commodities.

39:23
And of course the effect in terms of achieving efficient long term emissions reductions outcomes and efficient investment decisions in the specific sectors, it can be very significant.

39:36
However, the macroeconomic fallout from any such such measures is really tiny and that was confirmed through this analysis.

39:47
Likewise for trading partners.

39:49
So we've had done the modelling of of potential trade outcomes as a result of the introduction of such a mechanism.

39:59
And once again, to say this is really purely illustrative because the the databases for these issues is really not well developed yet, in particular with regard to the emissions intensity of created commodities from countries that not that do not yet have a sophisticated industrial emissions accounting system in place.

40:21
Nevertheless, once again, the story here is that the impacts.

40:26
Are confirmed to be very minor in terms not just in terms of overall economic effects, but also in terms of overall trade flows that may be expected in future.

40:38
Next slide please.

40:40
Now covering off on two more policy aspects that the review was tasked to investigate.

40:49
Firstly, the theoretical option of mandatory emissions product standards as a means to address carbon leakage concerns.

40:57
So in brief, what is meant by that would be to rule out the sale of products that do not meet some kind of emissions intensity standards.

41:09
So in other words, products that exceed some level of emissions intensity might not be allowed into the Australian product market.

41:18
Now this of course would have similarly administrative and design considerations as a broader carbon adjustment, because you would need to establish what the actual embodied emissions levels are for particular batch of products.

41:30
Also, this would need to be logically applied similarly for domestic production, which might lead to unintended consequences in consultation and feedback to the first consultation paper of the review.

41:43
Late last year, there was very little support for the inclusion of a mandatory emissions products standard as as a means to address time leakage concern.

41:53
It's a logically the finding, the preliminary finding for consultation that we're putting out is that while mandatory emissions products standards can be suitable for a range of policy objectives, they are not seen as an effective policy intervention to address carbon leakage concerns.

42:11
Next slide.

42:13
Now finally to a question of multilateral cooperation.

42:18
Now the preliminary findings that we make here are that you know Australia of course has a very strong stake in the international rules based system trading system and any policy responses to address carbon leakage concerns in Australia should advance and support international system not run against it.

42:39
Now we started to seminar by pointing out that we are seeing enhanced global climate action.

42:46
You know it's sometimes a a question of one of two steps forward and one back, but the direction of travel is of course very clear.

42:54
Nevertheless, we will see divergences in ambition and policy approaches persisting in the medium term, perhaps in the longer term, and perhaps those divergences would be very significant now.

43:08
An internationally agreed solution to address carbon leakage risk that will be developed through multilateral or trilateral initiatives would be the ideal solution.

43:19
However, it is uncertain as to whether and for which commodities such an internationally agreed solution will be able to be obtained and when it might arrive.

43:31
And so you know, the possibility of long term international solutions will not replace the need for near and medium term action on on carbon leakage concerns for specific commodities in Australia.

43:47
Further, on plutilateral and multilateral approaches, the Review sees very significant opportunity to support implementation of interoperable standards and approaches, for example, through the development of mutually agreed default emissions intensities for particular product categories and or for standards to measure embedded emissions.

44:16
And so the review finds that Australia's active engagement in these initiatives at international levels, so for example, under the Eagles of the Climate Plan, under the OECD shepherded Inclusive Forum on Carbon Mitigation Approaches could support the development of best policy practise to address carbon leakage.

44:39
And such enhanced engagement is in fact a significant opportunity for Australia to contribute in a positive way to international policy development.

44:51
And back to you, Edwina, for closing.

44:53
Thanks, Frank.

44:53
So just to close in terms of the presentation.

44:56
So as we said, the consultation.

44:58
Is open until the 3rd of December.

45:00
As we've said that preliminary findings have not been considered by government and don't reflect government policies.

45:07
But we would be very grateful for feedback on all aspects of the reviews paper, including the preliminary findings and analysis.

45:14
And we would do really genuinely welcome submissions to the review from all stakeholders.

45:19
So following following the closing of the consultation.

45:25
The review will be providing advice to government by the end of the year and government will then take that advice and make any decisions subsequent to receiving that advice.

45:35
And so we're really grateful for your time today.

45:38
I see there's a number of questions in the chat, so I'll start working through those with Frank.

45:43
But yes, thank you again.

45:44
I really appreciate your engagement.

45:46
So see the first one.

45:48
Many thanks tenant for replying.

45:50
So that's right.

45:50
So we do publish submissions that are marked that are not marked confidential.

45:55
We publish those on the department's website.

45:57
Tenants kindly provided the link to the first, the submissions to the first consultation paper and we'll certainly intend to follow the same approach for non confidential submissions to this second consultation.

46:11
As the next question is about do we have specific HS codes that are being considered for those, these commodity groups?

46:17
If not that, will that be included in the final report and recommendation?

46:20
So I'll, I'll start by answering that at the high level, Joel from my team, I wish to jump in with anything more.

46:27
So really what we've tried to do in the analysis is map the HS codes to the safeguard production variables.

46:35
So as, as we've heard, there's 73 commodities under the safeguard mechanism that we've then grouped across the 37 commodity groups.

46:44
We've then done the analysis based on the production variables that relate to each of those 37 commodity groups and look to map those against the relevant HS codes.

46:55
But Joel may wish to add to that or Xavier, if there's anything specific, happy to follow up one on one in terms of the particular codes and particular commodities you're interested in.

47:06
But Joel, did you want to add it all to that?

47:07
OK, All right, very good.

47:10
And then, yeah, in terms of why we're calling it now a border carbon adjustment, I guess that's the generic sort of policy term.

47:16
And, and really what we've been thinking through as part of the review is thinking about feedback as as Frank said, as we know, the EUC BAM has been in its first pilot phase.

47:28
The UK as you've pointed out there has been also consulting and is pursuing AC BAM.

47:34
But really we wanted to make the point that that any policy that Australia produces and pursues would be designed to reflect the Australian circumstances.

47:44
And so we're looking to use the generic policy term of border carbon adjustment to reflect that.

47:50
That really any, any additional policy would be designed very much to be appropriate for Australia's circumstances and particularly as it looks to mirror the safeguard mechanism.

48:01
But Frank, did you want to add anything to that?

48:05
Yeah, precisely and thank you very much for for the question.

48:08
There is indeed a specific here and that would perceive that the acronym C band these days is used synonymously with the particular policy instrument that the EU are currently implementing.

48:22
Right.

48:22
And we do with this, you know, by not calling what we analyse an Australian C band, we want to signify that any such mechanism that might be considered for implementation in Australia would logically be tailored to Australian circumstances and would be tailored to the specific situation also in the region that we trade in, that we live in and that we cooperate with.

48:51
And so, you know, there are of course, very significant opportunities in, in the design of such a mechanism as well as the implementation with an emphasis on working with trade partner countries to make this something that is that is truly a level playing field and that truly maximises the opportunities in the transition to lower emissions industrial production in the Asia Pacific region.

49:22
And so that's a that's a big picture objective that would naturally be Australia's objective in that.

49:30
And by not using the established acronym, if you will, we are we are making an attempt here to to highlight that is an opportunity for something that tailored to Australia's interests and tailored to the circumstances answers in the region.

49:47
Thanks Frank.

49:48
So the next question just has some some elements that we might just try and clarify as we answer the question.

49:53
And so it says that the consultation paper identifies that carbon leakage risk is assessed to be most material in export sectors such as steel, alumina and aluminium.

50:04
What do you think this would have on downstream products along the supply chain?

50:08
Wouldn't they be more expensive?

50:10
So I'll just start by answering that and then I'll hand to Frank.

50:12
And so I guess my first reflection that is in fact that carbon leakage risk is assessed to be most material in the import sectors of cement, clinker and lime, whilst there is some potentially emerging risk, particularly in steel and then also a watch point in aluminium and alumina.

50:32
Just wanted to clarify that in fact, it's in these import competing sectors that the carbon leakage risk is found to be most material.

50:40
And then go to the second part of the question.

50:42
And I think there's an assumption there that should a BCA be a broader carbon adjustment be implemented, what would the effect be on downstream products?

50:51
So the review has also looked at that and we've found that the effects would be very, very small.

50:57
And there's there's a tables on box 4 on page 77 and 78 talks through that in some detail.

51:05
But I might just hand to Frank to elaborate on that answer.

51:08
Thanks.

51:10
Yeah, really not much more to add.

51:12
The carbon leakage risk is assessed to be most material for those specific import competing commodities and we we do not see border carbon adjustments as a suitable solution for export commodities.

51:28
So, so other approaches including of course you know the existing policy settings as well as public investment in the in the reviews assessment are more suitable for these export oriented sectors in terms of downstream products.

51:43
Exactly.

51:44
So in terms of any price impacts, right, they may be material enough for a specific base commodity to help drive change towards cleaner production settings and investment with of course what is desired.

51:59
However, as a share of of the of the costs of a final product or in most cases even an intermediate product, the the price effects would simply be tiny.

52:12
And that is indeed illustrated in those selected product price examples that are that are contained in the consultation paper.

52:22
Frank.

52:22
So the next question says, how does the review team consider the risk for Australia to intensify trade tension with nations that provide Australia's imported product?

52:31
How can we partner with other AIPAC nations to implement equivalent policies so that Australia is not solely exposed to such trade tension risks?

52:39
And so I guess I'll, I'll start off again and then happy to hand to Frank.

52:43
And so I'd say that the relationships with international training partners has been a really important element of, of this review.

52:50
And we've been really grateful for the engagement we've had to date with other international countries.

52:56
And so the review team, Frank, myself and others, I was able to travel to, to meet directly with trading nations both in the East Asia and in Southeast Asia and really grateful to hear those perspectives.

53:12
So, so as well as the multilateral and plurilateral initiatives that Frank spoke about earlier, we've really been very keen to ensure that we're talking appropriately and taking on perspectives of Australia's important trade partners as we undertake this review.

53:28
Frank, was there anything you'd like to add to that?

53:31
Yeah.

53:31
And look, it's really important not to confuse a border carbon adjustment that is designed to provide a level playing field no matter where producers are located with some kind of protectionist measure, right.

53:48
And so I think we have on our hands in part a very significant communication task in that regard.

53:56
And we're certainly hoping that this consultation and the underlying paper helps with with that task of of explaining objectives, intent and potential design that accords with with those objectives and intent.

54:11
And the objectives and intent that this review would recommend would never be protectionist in any way.

54:16
In fact, it's fully aimed at efficiency and a well functioning international trade framework.

54:23
And I think that's actually, you know, also the feedback that that we of course received internationally.

54:30
There are perceptions that have been shaped over previous years, but there's also very ready recognition that a mechanism that actually adheres to these, that principles of creating a level playing field will in fact result in significant opportunities to producers that produce commodity at low emission settings, irrespective of where they are located.

54:56
That that really is the key here.

54:59
And you know, as we've been at pains to point out, all of this analytical work and the recommendations that will emanate from the review do take place with a very strong recognition of the importance of trade to Australia.

55:16
The importance of a free and and rules based trading framework including WTO concerns and of course the very positive trade relationships and investment relationships and relationships more generally with the countries in our region and beyond.

55:33
Thanks Frank.

55:33
So the next question follows on really nicely from that.

55:36
So it says, can you please elaborate on why I bought a carbon border adjustments on exports couldn't be designed to be compliant with international trade rules when exporting to countries with lower 0 carbon costs.

55:47
Whereas it's adjustments to imports into Australia can be designed as compliant with international rules when calibrated to the safeguard.

55:53
So once again I'll kick off by saying so we have really thought very carefully about that and sought advice from Australia's government.

56:00
International law experts are both within the Department of Foreign Affairs and Trade, but also in the internal General's Department Office of International Law.

56:08
And their best advice is that there isn't a way to design A BCA in a way that it would be compliant with those international trade rules.

56:16
And then I guess as as Frank talked through in the slides, when we think about the policy objectives, when we think about the nature of an export border carbon adjustment, it effectively becomes a rebate on the the obligations placed domestically onto exports.

56:32
Now as we know the the vast majority of Safeguard production is actually export based and we would therefore be undermining the very incentives that the safeguard mechanism reforms have looked to put in place should should any BCA on exports be pursued.

56:48
And so it is for both of those competing reasons why the reviews preliminary funding is that BCA on exports would not be appropriate.

56:58
Frank, did you want to add anything to that?

57:01
Yeah, nothing really to add.

57:02
Thank you, Stephen for your question.

57:04
It really is a very clear cut picture in terms of the advice received domestically as well as internationally with regard to WTO compatibility.

57:17
Thanks, Frank.

57:18
I've just refreshed reloading back to where we were.

57:22
So the next question is quote, it says other emissions reduction policies to the extent that they're effective reducing the emissions intensity of goods would be accounted for by reducing the total emissions subject to a broader carbon adjustment.

57:34
Would this be like other countries would see bans recognising the safeguard mechanism, which is not an explicit carbon price?

57:40
Could you please provide some examples of what other emissions reduction policies are?

57:43
Yeah, that's a great question, Bethany.

57:45
And exactly so that that's right.

57:46
We are as you'll be aware, working to seek to get recognition of the safeguard mechanism in for example, the AUC BAM.

57:55
And so it is very much that nature of those kind of policies that are not, not perhaps as explicit as some that we'd be looking at now.

58:06
We've we've intentionally for now left it a little bit open.

58:10
Because I think the process that we could anticipate would be followed would be that other countries may come to Australia and and say, well, we have this policy.

58:19
How could that be accounted for?

58:21
I I think that there is a natural line in which there needs to be some sort of implicit price, if not an explicit price to allow for that calculation to occur effectively.

58:34
So there's sort of a natural policy line that, for example, funding for decarbonisation would seem to be unlikely to be able to be recognised.

58:43
And so it is a bit of a spectrum of which we, we're pretty clear where the line falls that the, the, the exact types of policies that would fall within, as long as they provide a price signal, we'll be open to further design should the government wish to pursue a BCA.

59:01
But Frank, would you like to add to that?

59:05
Yeah, I think the the thing to add is that this is also potentially an issue where plurilateral initiatives such as the inclusive form of carbon mitigation approaches and similar initiatives might have a role to play in creating harmonised or at least interoperable approaches.

59:25
And so you know, whether a particular policy may or may not be counted to, you know, to be acquitted against or in comparison to an Australian domestic carbon obligation is of course a very vexed question, right.

59:43
And different different stakeholders, different industries, different governments will naturally take different positions on these.

59:51
And the desirable state would be to have an internationally agreed set of principles and rules for implementation as to how such policies will be, will be accounted in implementation of border carbon adjustment mechanism.

1:00:07
And so if you if you Fast forward to a world where perhaps a multitude of countries might be operating such mechanisms.

1:00:16
Then the desirable state will be a uniform assessment that individual national governments can draw on, or better still really I would say in the interest of efficiency, for a single set of assessments to actually be used by a multitude of countries.

1:00:34
So there's clearly some work there to be done, including for any decisions that might be taken for the design implementation in Australia, including with regard to details like these.

1:00:47
The promising ward ultimately is one that involves plural actual initiatives.

1:00:54
Oh, thanks, Frank.

1:00:55
I think the next question, thanks, Dennett is one for you, Frank or Joel.

1:00:59
So it says thinking about the modelling, are the results consistent with the broader adjustment working to limit leakage?

1:01:05
How capable is the modelling framework of answering that question?

1:01:08
Thanks.

1:01:11
Look, the the partial equilibrium modelling done by the review and I think we'll be handing to to Joel Doctor, Joel Ratas on that in a minute is certainly suitable to identify the carbon leakage risks that exist.

1:01:29
And at the same time, we know in principle that the the mechanisms that are put in for potential recommendation would be effective at addressing those carbon leakage risk in terms of the broad economic assessment through computable general equilibrium modelling.

1:01:49
In this context, that modelling is really mostly suitable as a rough illustration of potential magnitudes.

1:01:57
That model should not be interpreted as specific illustration of the effects of of reducing carbon leakage because the database that at this point is able to be inputted into those model models does not bear that of interpretation.

1:02:20
Joel.

1:02:24
Sure.

1:02:25
Thanks very much for your question Tenet.

1:02:27
I think a couple of quick points for me.

1:02:32
So the first sort of point is we're, we're not solely also reliant on the trade partial equilibrium modelling.

1:02:46
Our analysis is an integrated assessment across 3 pillars, sort of trade, investment and stakeholder feedback, all of which we we take into account when assessing the risk of leakage and also prospects and feasibility of a border adjustment, a mechanism to limit that, that leakage risks.

1:03:08
That's sort of the first point.

1:03:12
And then yes, we, we have broken apart the imports and export flows to look into how that would play out.

1:03:23
And that that is discussed in the paper.

1:03:25
I would say overall we'd be pretty confident that a closing that the the gap level in the playing field.

1:03:36
Have you already described it for the, the, the input side should address outstandingly risk in some of those sectors adequately.

1:03:49
But obviously we're in we're consulting on all of these these matters now including with your your good self.

1:03:55
So hopefully that's been.

1:03:58
Thanks, Joel.

1:03:59
So the next question is what key matters related to C BAM?

1:04:01
Is the refuse team seeing as needed for the Australian version of C BAM to be different from that of the version that will be implemented in the EU?

1:04:07
So some of those considerations are things like the scope of the safeguard mechanism.

1:04:11
So as we know, it's only scope one, whereas the EUC BAM covers both scope one and scope 2 are the EUC BAM also covers different products than what we're currently thinking could be initial candidates for, for any Australian BCA.

1:04:27
And then we've also been very grateful, in fact, to learn, learn from some of the initial lessons and reflections from stakeholders on the EUC BAM.

1:04:36
So thinking about things there, for example, including the need for confidentiality of provision of information.

1:04:44
And so yeah, really keen and being very grateful to hear perspectives on how the EUC BAM is working in practise and working through both what's most appropriate for Australia and having been been fortunate to learn those lessons, incorporating those lessons into policy design.

1:05:02
The next question is can exporters and obligated parties participate in the market for obtaining offset credits?

1:05:08
Thanks.

1:05:09
And so thanks very much for that question.

1:05:10
And so you'll see that the reviews posited that there could be two potential ways of meeting obligations under the under any future BCA should the government wish to pursue it.

1:05:21
And one is to pay in terms of pay a dollar amount and the other would be the potential to surrender IQ's.

1:05:31
And so as we know currently IQ's can't be exported internationally under Australia's climate law.

1:05:38
And so for those parties based outside Australia, it may be that the payment of financial amount is the most appropriate way forward.

1:05:49
But these are the kind of things that we'd certainly be thinking through in policy design should Australia pursue BCA.

1:05:56
Now there's two questions on modelling that I'll ask together and then hand to Frank and Joel.

1:06:01
So the first was if VACU prices were higher than assumed in the modelling, would this affect the finding about negligible at macroeconomic outcomes of a BCA?

1:06:10
And then the second is, will more detail be provided on the modelling assumptions, what are the base assumptions for input, input commodity prices in the model?

1:06:19
So Frank or Joel, would you like to deal with those things?

1:06:23
Second question first, what is currently being provided including appendix to the paper is the extent that can be provided.

1:06:34
There's of course other analytical efforts on underway.

1:06:39
And so yeah, I guess the, the answer to to that point is, is now at, at at this point will provide the information that can be provided the question of of different ACCU prices.

1:06:51
So the modellers will not particularly likely for, for, for keeping such a simple answer as I'm about to.

1:06:57
And that is more or less everything scales in, in the price, right.

1:07:02
The the the economic responses scale in the price and hence the overall economic effect scale own price as well to a first order.

1:07:27
I think Frank may have.

1:07:29
Yeah, I think he may have.

1:07:30
I just wasn't sure if that was me.

1:07:32
So why don't we keep going on some other questions and then handbag.

1:07:38
OK, perfect.

1:07:39
He he's unsound.

1:07:40
Apologies.

1:07:41
I think we've had a short IT interruption here.

1:07:44
I I guess we're audible once again.

1:07:46
Very good.

1:07:47
OK, I'll quickly recap the the modelling answer question.

1:07:50
No, we are not able to provide more specific modelling assumptions at this point.

1:07:58
Secondly, on different credit prices, essentially, roughly speaking, 1st order approximation, the modelled macroeconomic and trade results will roughly scale alongside a higher or lower credit prices, right?

1:08:20
Not, not one to one, but roughly scale along those ways.

1:08:23
And that means that our fundamental result of negligible macroeconomic and trade impacts will still hold even at significantly different credit prices that then one might see in future.

1:08:36
Thanks, Frank.

1:08:37
And so I'm conscious of time and I'll just try and start moving through a little bit more quickly in that remaining time.

1:08:42
So let me try and answer 2 questions once.

1:08:46
So the first is, I think so much, Pauline, in terms of how might the new entrant best practise benchmarks be considered when working out the relevant benchmark for comparison.

1:08:54
So this is something that we have thought really carefully through.

1:08:57
I think it's, it's likely that we could look at if once again, should the BCA be pursued now #1 we'd have to look at which sectors there are new entrants.

1:09:06
Some of these sectors there may or may not be.

1:09:08
If there are new entrants, then really conscious of that as you say as implied in your question that benchmarks for new entrants are different.

1:09:15
And so we could look at some sort of weighted average across production facing the standard and those facing new entrant equally would think about TIBA is one of the other complicating factors.

1:09:31
And so, yeah, really conscious that that would need to come into the way in which that benchmark would be calculated for each sector depending on the the composition of production in that sector.

1:09:45
Now, so if I just quickly try and touch on the rationale of why not product emission standards in this context.

1:09:52
And, and I guess it's it's to to confirm that as Frank said, we certainly see a role for mandatory product standards in a range of different areas.

1:10:00
So Australia has them for air quality, for example.

1:10:03
But when we think about the particular instance of carbon leakage risk, we haven't been able to think of a way in which you could apply a mandatory standard, which is a reasonably blunt instrument in that it sets a particular emissions intensity for example, compared to imports into Australia.

1:10:20
It would be another obligation that would would be on top of the safeguard mechanism obligations and and therefore would be very hard to calibrate.

1:10:30
So in general, the feedback that we received right across the board actually in that first consultation was that product emission standards weren't well, well designed to deal with this risk.

1:10:41
Well, of course there's there's good policy reasons to use them for other policy elements.

1:10:51
So then the next question is a potential carbon border adjustment will add tariffs to imports to keep Australian industry competitive.

1:10:58
Australia, how will the government ensure that Australian safeguard facilities remain competitive when exporting to the global market?

1:11:04
So, yeah, thanks, Damon.

1:11:05
I mean this has been a really important aspect of our consideration.

1:11:10
We've thought about the carbon leakage risk for those commodities that are primarily export, things like aluminium for example.

1:11:21
That is one of the reasons why we've particularly highlighted that things like, yeah, aluminium, we've we've thought about particularly watching it in 2627.

1:11:31
We're conscious that there's a range of other support mechanisms in place, for example, green metals production support flagged under the feature Made in Australia.

1:11:42
And so you know, we've undertaken this review in the context of a range of other government programmes and policies to look to drive low emissions production in Australia.

1:11:52
And so have particularly called out where we think we need to just really carefully review commodities in the 2627 review to ensure that that that risk hasn't increased.

1:12:10
Let me answer the administrative question and then I'll try and cover off with Frank the remaining ones very quickly.

1:12:18
So yes, with the positive cease to smoke, seems that you've had a difficult experience in another different consultation.

1:12:29
So yeah, please feel free to email the the email address on the slides which we can, I'll get someone to drop into the link and really happy to answer any preliminary questions here.

1:12:42
Understand you don't want to waste your time, so happy to answer anything quickly so you can make that decision.

1:12:48
And then Justin, yes, that does refer primarily to the green hydrogen under the feature Made in Australia framework exactly as well as Hydrogen Head Start, which was previous.

1:13:04
All right, the next one says EUC BAM is closely linked with the EUETS and carbon pricing.

1:13:08
Is there any equivalent trading mechanism applies to the Australian emissions trading market when considering Australia carbon adjustment mechanism?

1:13:17
I mean, really it's a safeguard mechanism and the arrangements as they relate to the use of the potential of Australian carbon credit units and also safeguard mechanism credits which can be traded, other things that we think about there in terms of the way that any BCA would look to mirror the safeguard mechanism settings.

1:13:38
So I might hand to you, Frank, just to give a bit more of that sense of this one.

1:13:42
The next one is have you considered how the proposed BCA impact the cost of imported raw materials and finished products?

1:13:51
Yeah, yes.

1:13:52
And we spoke briefly about it earlier.

1:13:54
The paper does contain illustrative computations about the the possible cost pass through effect.

1:14:04
The bottom line here is that any impact on, on final products that are actually of interest to consumers is tiny, is really tiny.

1:14:15
And the impact on intermediate products such for example, a tonne of weight through the fertiliser for chain is also very, very small indeed.

1:14:23
And so we'd refer to to the path itself for the details on that.

1:14:30
Thanks, Frank.

1:14:30
So the next couple of comments, which we really appreciate.

1:14:34
And yes, thank you very much for giving those, both Stephen and Mickey San.

1:14:40
In terms of Ashley's question, we've actually detailed on page 20 of the report that other countries we've been fortunate to meet and that does include China.

1:14:51
So yeah, we have built in that feedback as we've received it from across different international trade partners, which we've been very grateful for.

1:15:01
And then Timothy, in terms of so the the examples that we've got there in terms of downstream impacts are those that we modelled.

1:15:15
I'm really happy to consider that, you know, keep the conversation about other potential analysis that would be useful to you in terms of things like large multi Storey buildings.

1:15:30
But Frank or Joel, did you want to add to that one at all?

1:15:35
Now look, I mean, you can apply those computations, of course, to, to any, any type of building or infrastructure project.

1:15:42
You know, we looked at wind turbines, for example, that that you choose to in terms of assumptions made specifically amount about the amount of, of, of concrete, for example, used or, or steel for that matter.

1:15:57
And and yet it's readily applied for, for any such such final product or, or building.

1:16:06
We we've done it for the illustrative example that's contained in the pad.

1:16:09
Very much Frank.

1:16:11
And that took a \*\*\*\* \*\*\*.

1:16:12
Oh, quickly charming.

1:16:13
Yeah.

1:16:13
So for the residential house, you know, the, the higher end was 0.01% even if there was, you know, five times as much cement in the, in it, it's sort of the numbers not going to change significantly so from zero.

1:16:29
But I think the point to be made here is that while, while the commodity itself, the cement of the clinker can experience some, some price by the time you go downstream to these final finish products, the, the, the prices of the mean that those effects are actually much more, much more modest.

1:16:46
And that's sort of the insight we're trying to draw out there.

1:16:49
Thanks.

1:16:50
And and of course if, if you allow me very briefly, we didn't mention that in the seminars contained in the paper.

1:16:56
Of course, these the, the, you know, potential price shifts within the upstream commodities provide an incentive for for product substitution to an extent as well, for example, in in building as well, right, which is ultimately also an, an element of an overall efficient response including for example, with regard to the mixes that are used in concrete, right.

1:17:23
So all of that is, is part of of an efficient price response as well.

1:17:30
Thank you so much, Frank.

1:17:31
Well, that looks like it's brought us to the end of the questions and neatly to the end of the time with you.

1:17:37
So with Many thanks again for your engagement.

1:17:41
We really do hope that that's been a useful webinar to you.

1:17:45
Amina's kindly put the our contact details there.

1:17:48
So please do feel free to reach out if there's anything or that we can do or provide information from Mickey son, I'm, I'm sorry, I'm not sure that there's a capacity to unmute you.

1:18:03
So, so we will, we may draw it to close there with apologies.

1:18:11
But yes, once again, really grateful for your time.

1:18:13
Please do feel free to reach out to us if there's any information we can usefully provide.

1:18:19
We look forward to continuing discussions over the next 4 weeks or so.

1:18:24
And really very grateful for any submissions you wish to put in by the 3rd of December.

1:18:31
So Many thanks again for your time and have a good day everyone.

1:18:34
Thank you.

1:18:36
Thank you very much and just not intended.

1:18:38
Reed's birthday cake illustration of the chat as well.

1:18:42
Thank you for your participation and look forward to your feedback.

1:18:46
Thanks all.