

Perception of the Planned EU Carbon Border Adjustment Mechanism in Asia Pacific — An Expert Survey

> Regional Project Energy Security and Climate Change Asia-Pacific (RECAP)

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1. Foreword

In the past few years, the European Union (EU) has had to cope with a multitude of challenges that have repeatedly shaped its external perception. However, its climate protection policy is a constant. On the international stage, the EU is perceived as a reliable player in climate protection. The EU's commitment to become climate neutral by 2050 underlines this approach once again.

The planned introduction of a EU carbon border adjustment mechanism (EU CBAM) is therefore a logical consequence. The idea is to price the CO2 emissions of goods that are consumed in the EU but produced outside the EU without corresponding regulations. Even if the climate benefits of the EU CBAM is doubtless, it could have significant effects on EU trade policy. Especially, since the EU has extensive and growing trade relations with Asian countries.

In the Asia and Pacific region in particular, the EU CBAM would also encounter a very heterogeneous climate protection landscape. Numerous countries are developing or already have their own CO2 pricing approaches. China, Japan and South Korea have even committed to CO2 neutrality targets. On the other hand, there are emerging countries like India and Indonesia, which are less able to implement zero carbon targets in the same time.

As part of this survey, individual perspectives from the region have been investigated. They show how the planned EU CBAM is perceived and which criteria could increase its acceptance. The results are important for its implementation. Since in an initial reaction many experts in this survey see the EU CBAM as a unilateral protectionist measure.

At the same time, these experts also point out which basic requirements have to be met for an EU CBAM. Compliance with multilateral WTO rules, the importance of a voluntary bottom-up approach similar to that of the Paris Climate Agreement and the recognition of existing CO2 pricing approaches are hereby of great importance.

The results of the survey are to be understood as a contribution to a debate about the EU CBAM, which is only just beginning and at the end of which the global pricing of CO2 could take another hurdle in terms of global climate protection. In addition to the general perception of the EU CBAM, many opinions and ideas can be found that may provide practical information on how it might impact the region.

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2. Executive Summary

Although global climate action is growing, under the current unconditional commitments made by Parties to the Paris Agreement, global temperatures are predicted to rise by more than 3°C by the year 2100, far above the goal of 1.5°C. As regions progress in their climate action at different rates, there is a danger that progress in one region, such as the European Union, will be negated by a lack of action in another and that carbon intensive production moving to regions with fewer regulations could cause an overall increase in CO2 emissions. To combat this, the EU intends to introduce a carbon border adjustment mechanism (EU CBAM) that will ensure that the price of imports reflects more accurately the carbon content of the goods. This type of mechanism has not been successfully introduced before on a large scale and the reaction of the EU's trading partners to the measure will be critical for its success.

This report explores the perceptions of stakeholders and experts in Asia Pacific on the introduction of the EU CBAM, focusing on eight key-impact countries – Australia, China, India, Indonesia, Japan, Singapore, South Korea, and Thailand. These countries make up four of the top 10 import partners for the EU (China, Japan, South Korea and India) and are among the top 10 largest economies in Asia Pacific. As such, the reactions from these countries will greatly determine the level of acceptance or resistance the EU will face in implementing the mechanism. Other countries in Asia Pacific will also be influenced greatly by the reactions of these eight countries.

To investigate this topic, GlobeScan conducted 70 in-depth expert interviews, with a minimum of eight interviews from each of the eight focal countries. Respondents were identified from a range of sectors – academia, private institutions, corporates, governments, and non-governmental organisations. In order to speak freely about governments or institutions with or for whom they work, we elected to anonymise the respondents. The interviews were conducted via internet calls between 19th of November 2020 and 6th of January 2021 and lasted an average of approximately 45 minutes. Respondents who are nationals of the country about which they were speaking were targeted, with the remaining experts comprising those that had been focusing their work and/or research on a particular country for more than 10 years.

We asked experts about: the level of knowledge of the EU CBAM among different stakeholders in their country of expertise; the country's perceptions and reactions to the mechanism; how much they anticipate the mechanism affecting their country; how the EU should approach the EU CBAM; and how the EU can mitigate potential backlash from their country.

Experts agree that in most countries, knowledge of the EU CBAM is relatively superficial and that stakeholders are waiting for details of the mechanism to emerge before focusing on the topic. This knowledge varies by country; developed, likeminded (with regard to climate policy) countries that have high levels of trade with the EU are more likely to know about the mechanism. Perceptions of the EU CBAM will be coloured by stakeholders' previous interactions with the EU on climate measures as well as their ability to adapt to the mechanism, which will be influenced by the country's own development level and its progression on climate issues. Countries and producers that have progressive climate change policies in place are less likely to be affected by the EU CBAM, which may disadvantage developing countries.

To ensure the EU does not meet heavy resistance to the introduction of the EU CBAM, experts recommend a prolonged, in-depth engagement period between the EU and countries that will be affected by the mechanism. These talks should be bilateral and involve stakeholders from business as well as government. Experts recommend treating these discussions as negotiations as the EU may have to give some concessions. They also stress that the EU should introduce the EU CBAM slowly to establish proof of concept and allow countries to adapt.

To avoid the EU CBAM being regarded as protectionist, experts say the EU should use the revenue generated to help developing countries advance their decarbonisation efforts. They note that the goal should be to get these countries' carbon pricing to an equivalent level with the EU at which point their goods would no longer need to be charged. Acknowledging this equivalence of carbon pricing and providing a transparent outline of what is considered comparable is vitally important for other countries to regard the measure as fair.

Country-sp	ecific expert insights: Perception, impacts and mitigation
Australia	Australia is unlikely to be heavily impacted by the EU CBAM because Australia's trade of high-carbon goods to the EU are minimal.
	Australia will view the EU CBAM negatively because of its own politicised carbon landscape and negative perception of carbon pricing.
	The EU can learn from Australia's mistakes while introducing a carbon price and frame the mechanism as an opportunity for Australia, rather than a cost.
China	In the long term, China could benefit from a competitive advantage afforded by the EU CBAM but could see negative initial effects.
	China will likely oppose the EU CBAM and there is a potential for the mechanism to spark a trade conflict.
	China's level of opposition will depend on whether its emissions trading system (ETS) is recognised as equivalent to the charges imposed in Europe.
India	India perceives the EU CBAM strongly as protectionist, discriminatory towards developing countries, and contrary to international laws and agreements.
	Large producers in India could benefit from decarbonisation efforts that they have already made but smaller producers will struggle to adapt.
	India expects the EU to use the revenue generated by the EU CBAM to help developing countries decarbonise.
Indonesia	Indonesian perceptions of the EU CBAM will be heavily influenced by ongoing conflict with the EU over palm exports and will likely be negative.
	With adequate assistance, the EU CBAM could spur Indonesia on in their climate ambitions or help form their ongoing efforts.
	If the EU works with Indonesia as it did to reach an agreement on verified timber, the measure could be better accepted.
Japan	The steel industry, which is very influential in Japan, has already begun opposing the EU CBAM and will likely continue to do so.
	Companies in Japan will view their implicit carbon prices as making up for the low carbon tax and will seek equivalence with the EU carbon price.
	Transparency is important for Japan as it has a different method of calculating emissions levels than the EU and stakeholders are concerned about fairness.
Singapore	If the EU CBAM is fair and compliant with international rules and agreements, there will not be much pushback from Singapore.
	Singapore will be prepared for the EU CBAM and though it is unlikely to change Singapore's climate action path, it could spur them on to move faster.
	Singapore believes a multilateral, incentive-based approach would be more suitable to promote the climate agenda.
South Korea	There is unlikely to be heavy resistance in South Korea to the EU CBAM and the government is poised to act when details are announced.
	South Korea's ETS has an international component but may be too complicated to directly link with the EU ETS to avoid charges from the EU CBAM.
	There are no major efforts that need to be taken to make South Korea more accepting of the mechanism.
Thailand	Thailand will not oppose the EU CBAM strongly but there is concern that the mechanism will unfairly preference Thailand's trading competitors.
	🛟 The EU CBAM is not predicted to have a major impact on the Thai economy.
	Thailand will have a comparatively easy time meeting the challenges of the EU CBAM but is likely to do so in a reactive manner and stakeholders may find it administratively complex.

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Introduction

4.1 The EU Carbon Border Adjustment Mechanism

The United Nations Environment Programme (UNEP), in its annual Emissions Gap Report (2020), estimates that even if all current unconditional commitments under the Paris Agreement are implemented, temperatures are expected to rise by more than 3°C. Additionally, UNEP notes that the gap between the emissions trajectory we are on and the scientific advice for what is required to limit this temperature increase is widening. The longer the delay in closing this gap, the more disruptive and abrupt the necessary policy changes will need to be to reverse the trend. Although CO2 emissions are expected to have dropped by roughly 7 percent in 2020 due to the COVID-19 pandemic, this provides only a short-term respite from rising concentrations of greenhouse gasses in the atmosphere.¹

When the European Union (EU) introduced an emissions trading system (EU ETS) in 2006, the European Commission (EC) identified the issue of "carbon leakage" as a possible factor that could undermine the effectiveness of the measure. Carbon leakage refers to a situation in which businesses transfer production from one country to another to avoid costs related to climate policies. Although one country may be able to reduce its CO2 emissions in this manner, there would be an overall increase in emissions globally. The Council of the European Union identifies energy-intensive industries such as non-metallic minerals (e.g., cement, lime, gypsum and glass), iron and steel, and chemicals as having a high risk of carbon leakage and felt it necessary to provide free allocations under the EU ETS to many sectors.² These free allocations diminish the effectiveness of the enterprise and are some of the primary catalysts for the EU shifting their focus towards a "carbon border adjustment mechanism" (CBAM). Although the EU has been discussing the possibility of introducing a CBAM for many years, talks have recently become more focused and in March 2020, as part of the EU CBAM. The EC has announced that the mechanism is set to be introduced in 2023 and the Commission is expected to propose its adjustment policy before the end of June 2021.

EU announcement in its European Green Deal Communication

As long as many international partners do not share the same ambition as the EU, there is a risk of carbon leakage, either because production is transferred from the EU to other countries with lower ambition for emission reduction, or because EU products are replaced by more carbon-intensive imports. If this risk materialises, there will be no reduction in global emissions, and this will frustrate the efforts of the EU and its industries to meet the global climate objectives of the Paris Agreement. Should differences in levels of ambition worldwide persist, as the EU increases its climate ambition, the Commission will propose a carbon border adjustment mechanism, for selected sectors, to reduce the risk of carbon leakage. This would ensure that the price of imports reflect more accurately their carbon content. This measure will be designed to comply with World Trade Organisation rules and other international obligations of the EU. It would be an alternative to the measures that address the risk of carbon leakage in the EU's Emissions Trading System.³

Any form of CBAM is still very rare in practice and poses a multitude of difficulties for its implementation. The EU attempted to implement a similar mechanism in 2008, with a directive on aviation emissions (2008/101/EC) that required airline operators to deliver emission allowances based on the amount of carbon dioxide emitted during a flight to or from EU airports. 23 countries voiced their opposition; China and India explicitly forbade their carriers from obeying the directive and the US adopted legislation to this effect. The strong negative reactions were based on the perception that, by taxing all of the fuel used during intercontinental flights, the directive was imposing extra-territorial regulation i.e., a tax based on

activities outside of EU airspace or over international waters and led to the EU withdrawing the measure for intercontinental flights.⁴ The US state of California has a cap-and-trade system with a carbon border adjustment on electricity, though its effectiveness has been hampered by pressure from covered firms, which resulted in changes to the design.⁵ Several legislative proposals for CBAMs have been introduced in the US and previously in the EU but, to date, the most recent EU CBAM has progressed the furthest toward implementation.

Proponents of the EU CBAM suggest that the measure could encourage the EU's trading partners to implement stricter climate measures and reduce the number of free allocations offered under the EU ETS. However, there are concerns that the EU CBAM will encounter resistance and difficulties in its implementation, similar to the resistance that the aviation emissions directive received in 2008. Many commentators suggest that CBAMs are not the most desirable instrument to combat carbon leakage. They raise concerns about: the veracity of claims that carbon leakage will significantly affect businesses or global CO2 emissions; the effectiveness of a CBAM in encouraging action from trading partners rather than heightening trade tensions; and the mechanism's alignment with the principal of "common but differentiated responsibilities" under the United Nations Framework Convention on Climate Change (UNFCCC).⁶ Commentators also warn of the danger of the EU and other developed countries becoming a "low carbon island" in which trade becomes split between countries that can produce low-carbon products (a green trading bloc) and those that cannot (a brown trading bloc). Such a scenario would be detrimental to developing countries who would be effectively barred from accessing markets in advanced economies and may have to increase output to compensate.⁷ Many commentators also perceive the EU CBAM as protectionist and believe the primary reason for its implementation is to protect EU businesses, a measure they say is in violation of World Trade Organisation (WTO) regulations. They also say that, in the spirit of the Paris Agreement, developed countries should be subject to higher climate targets than developing countries, a distinction they say a CBAM does not account for.⁸

4.2 What an EU CBAM could look like

The details of how the EU CBAM will be applied have not yet been agreed upon. The EU is currently discussing three possible implementation methods: a carbon tax on imports and domestic production, a customs duty on imports, and an extension of the EU ETS, all of which would require the calculation of carbon benchmarks for products to be covered by the measure.⁹ The methods are outlined below.

Possible EU CBAM Design Options

Option A — a carbon tax on both imports and domestic production

- An indirect consumption tax, similar to a sales tax.
- 🔁 Effectively paid by the end consumer.
- 3 Would allow for exemptions on goods that have been taxed comparably outside of the EU.
- When exporting from the EU, European companies covered by the ETS would be reimbursed the costs from certificate trading to avoid being charged twice.
- this method would require a cap reduction.
- The surrender obligation for domestic producers would have to be reduced accordingly to avoid double taxation.
- A decision on taxes requires unanimity in the European Council to be adopted.

Option B — a customs duty on imports

- 3 Importers pay a duty that is defined by the CO2 content of their imports.
- 🕄 Paid at the EU border.
- The Emissions Trading System (ETS) and other compensation methods within the EU can remain in effect.
- Would roughly offset the burden on EU producers from domestic climate protection measures.
- 🗱 This method would require increased international involvement.
- *t* It would require the renegotiation of existing tariff arrangements under WTO trade rules or regional and bilateral trade agreements.
- A decision on customs duties requires unanimity in the European Council to be adopted.

Option C — an extension of the EU ETS to imports

- Importers would pay for ETS certificates unless they can prove that they have already been charged accordingly in their home country.
- the ETS would have to be expanded as some certificates are planned until 2030.
- Reimbursement for exporters or other compensation mechanisms for domestic industry to create a level playing field would continue to be possible.
- The type of allowances accepted could be EUAs, a separate pool of virtual allowances or allowances from other established markets with clear emission caps.
- 1 It would require a qualified majority vote in the European Council to be adopted.

Methods

he Regional Project Energy Security and Climate Change Asia-Pacific (RECAP) of the Konrad-Adenauer-Stiftung e.V. commissioned GlobeScan, an independent international research consultancy, to conduct a thought leadership study to better understand what impacts, if any, the upcoming EU Carbon Border Adjustment (CBAM) will have on countries in Asia-Pacific and how best to implement it. This research focuses on eight key-impact countries — Australia, China, India, Indonesia, Japan, Singapore, South Korea, and Thailand — and provides insights into how these countries, and the region as a whole, are affected by the incoming EU CBAM. These countries represent a combined population of almost 3.5 billion people or 45 percent of the world's population and were chosen as representative for their region and as countries of particular importance. The response of these countries to the EU CBAM will greatly determine the likelihood of success of the mechanism.

GlobeScan selected expert interview respondents, independently of KAS, based on the respondents' expertise on the topic as a whole and particularly their knowledge and local perspective of a particular country. Respondents were identified from a range of sectors — academia, corporations, private institutions, government, and non-governmental organisations. Often, experts recommended other suitable respondents who were then contacted for interviews where appropriate. Semi-structured interviews were chosen because they allow for a great degree of freedom for the respondent to speak on different aspects of the topic about which they may have more expertise. While experts gave insights into the background of the EU CBAM, the objective information on this topic presented in this report also comes from extensive desk research. Sections of this report that focus on the impacts of the EU CBAM on the focal countries were compiled from expert opinions and perceptions. In order to speak freely about governments or institutions with or for whom they work, we elected to anonymise the respondents. The interviews were conducted via internet calls between November 2020 and January 2021. On average, interviews lasted approximately 45 minutes.

A minimum of eight open-ended, semi-structured interviews in each of the eight countries, and additional interviews with international experts, for a total of 70 interviews, were conducted. In-country experts were locally based to get a national perspective on the topic. Respondents who are nationals of the country about which they were speaking, were targeted, with the remaining experts comprising those that had been focusing their work and/or research on a particular country for more than 10 years. In some cases, the comments made by the country experts have been summarised, synthesised, or reworded for clarity, but every effort has been made to preserve the original meaning and intent of the information given. Where the meaning of an answer or statement was unclear, it has not been included here to maintain the integrity of the interpretations. Where numbers and statistics were independently verifiable, we have done so and included references where appropriate. Where "experts" are mentioned in this report, this refers to the experts interviewed as part of this study.

The information provided by these experts form the basis of the text of this report. While expert opinion is based on decades of experience and offers deep insights that are otherwise unavailable, it is important to recognise the limitations of such information. This information complements, rather than replaces systematically acquired knowledge, as it provides qualitative rather than quantitative insights. The information gathered in expert opinion surveys may be subsequently added to or disputed by other experts and/or future published research. It also represents the opinions and insights of individuals who may be susceptible to their own biases or interpretations of events or data and is replicated in text via a facilitator who could bring their own biases or misinterpretations. Regardless, expert opinion surveys offer invaluable insights based on extensive first-hand experience and are of great value to the research.

Australia

Overview — Australia				
Key background points	 The federal government has been criticised for its poor climate policy, leaving the individual states to push forward decarbonisation efforts. Australia introduced a carbon price in 2011, but it was removed in 2014 and the issue has remained highly politicised ever since. Australia does not export many carbon-heavy goods to the EU. 			
Key expert insights	 Concern and awareness of the CBAM are low among stakeholders. Experts expect the effects of the EU CBAM on Australia to be minimal. The influence of Australia's own attempts to introduce carbon pricing will heavily impact how the EU CBAM is viewed in the country. The CBAM is not seen positively in Australia and the climate focus of the mechanism is not always acknowledged. The EU CBAM should be framed as a potential opportunity for Australia, rather than a cost. The EU can learn from Australia's mistakes with their carbon price to avoid long-term negative effects if the mechanism does not succeed. 			

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6.1. Background — Australia's carbon landscape and trade with the EU

The carbon landscape in Australia

The federal government of Australia, which is currently led by a Liberal-National Coalition, is regularly criticised for not setting ambitious targets for decarbonisation. Experts interviewed for this study note that the federal government in Australia is not viewed by the world as being progressive on climate action, and that decarbonisation is low on the federal political agenda. Approximately 10–15 years ago, both major parties (the Liberal and Labor Party) in Australia supported transparent carbon pricing but over the last decade, climate action has become highly politicised in the country, with some elected officials vociferously opposed to bearing any significant costs to fight climate change. Climate issues are strongly partisan and conservative parties have deep-seated rejection of initiatives such as carbon pricing. This, combined with internal dissent amongst government coalitions, has led to inaction and an inability to effect significant change. As a result of these divisions, the Labour party has effectively shelved plans for a direct and transparent carbon mechanism.

LE Both sides of the political debate are becoming more aspirational in their climate goals, but they are diverging further from a pathway to implement those aspirations. It is quite possible that we will go into the next election with a bipartisan position on 2050 net zero emissions, but bipartisan opposition to carbon pricing, which is hard to reconcile (General Manager).

There are several federal government policies to tackle climate change in Australia. Most significant is the national renewable energy target which has substantially increased the share of renewable energy in Australia's energy mix in the past several decades. The government also introduced a strong national carbon pricing policy in 2011, but despite achieving a reduction in the country's carbon emissions, the initiative faced significant opposition both politically and from the public, and was repealed in 2014.¹⁰ This carbon price was replaced by a policy of buying abatement credits through a domestic crediting scheme that has played a central role in the federal government's efforts to reduce carbon until the present day. There is also a safeguard mechanism in place which imposes emissions baselines on large direct emitting facilities. Baseline levels of carbon emissions are attributed to facilities and if they exceed these baselines, they must buy offsets to return to within their limit. In practice, experts agree that this mechanism is largely ineffective, with baselines set too high and few companies being materially affected, though updates in 2020 have improved this system. The federal government has also made substantial efforts to fund reforestation, renewable energy innovation, and clean energy finance, and is a member of the international Leadership Group for Industry Transition (LeadIT) which focuses on technology and information sharing on sectors such as steel, aluminium, and cement to reduce carbon emissions. Despite these efforts, experts agree that outside of the electricity sector, there is little decarbonisation progress in Australia, and the federal government has not gone far enough with policies to decarbonise the country as indicated by its lack of commitment to net-zero emissions despite heavy international pressure.

In contrast to the Australian federal government's slow-moving climate policy, there is an increasing level of activity from regional governments, state governments, and some private corporate initiatives which led to a strong focus on the promotion of renewable energy rather than mechanisms to price carbon. At state level, there are increasingly ambitious sets of renewable energy targets, though these vary from state to state and collaboration between states is minimal. As a result of these efforts by state governments and consumers, renewable energy in Australia is growing at a per capita rate ten times faster than the global

average,¹¹ even though subsidies are disappearing. According to the experts, there is also a widespread sense within the business and academic communities that a lack of ambitious climate targets and action will be detrimental to Australia in the long term.

Australia's trade with the EU

The Australian export industry is dominated by minerals such as iron ore, gold, and aluminium, and energy in the form of coal and natural gas. Australia exports primarily to the Asia-Pacific, especially to China, which is its largest trading partner. Despite cultural ties with the West, the most prominent Australian exports are not sent to Europe, with no European countries featuring in the top ten export partners for Australia.¹² Much of what was traded to Europe in the past was to the UK and with its departure from the EU, the share of exported goods to the EU has dropped even further. The goods that are traded to Europe include gold, coal and oil seeds. Australia is currently negotiating a free trade agreement (FTA) with the EU. This FTA went through its 8th round of negotiations in September 2020 and discussions are ongoing.

6.2 Australia's perception of the CBAM

Expert insights: What are the overall perceptions in Australia of the EU CBAM?

According to the experts interviewed for this study, the level of awareness, knowledge, and discussion surrounding the CBAM

varies depending on the sector, but remains low throughout government, business, and academia. One expert who has worked in the energy industry in Australia for over 15 years described the level of conversation within the industry as "non-existent", even within future strategy planning. Another who works on climate and energy policy said that it is only being discussed in the broadest possible terms, and not by many people. One suggested reason that it is not being considered in depth is that industries and government officials are waiting to see what form it will take before seriously considering it, though some stakeholders are beginning to look closely at it. Another reason suggested by Australian experts as to why it is not having a significant bearing on the conversations in Australia is because of Europe's relatively smaller role in Australian foreign relations compared with the Asia-Pacific or the US. One expert suggested that the FTA being negotiated between Australia and the EU could cause relations between these two entities to rise in prominence, meaning that topics such as the CBAM may receive more attention in the future.

Experts from the manufacturing sector, however, note that conversations are beginning to take place about the EU CBAM and that there is increasing awareness about its existence. They say that it is mentioned in passing in newspaper articles and that large businesses and the government are in an "educational phase" about the EU CBAM. However, they qualify this by saying most stakeholders are still unaware of the implementation of the CBAM or how it could affect Australia. There is also a perception in Australia that any type of adjustment mechanism will be talked about for a long time but not necessarily introduced.

When more attention is turned toward the EU CBAM, experts agree that the prevailing attitudes in Australia at a political level, supported by the main industry associations, will be negative. In part, this negative perception will not only be coloured by their own negative experiences with carbon pricing, but will also be seen as a cost for Australian exporters and any cost for exporters will be perceived negatively. The experts also note that, although the objective to decarbonise is recognised and people understand the reasons for the implementation of the EU CBAM, there is a perception in Australia that "the actual

goal" is to protect European industries that need appeasement. They suggest that there will be very limited acknowledgement that the measures are justified and, even as a measure to encourage climate action in other countries, it will be rejected in Australia as applying economic coercion to meddle in the internal policy affairs of another country.

Australian stakeholders may also perceive the EU CBAM as "the thin end of the wedge", so while the initial measures may not affect Australian industry greatly, further measures could have a significant effect. Further, if Australia's larger trading partners such as China or South Korea were to impose a similar measure because of the EU CBAM, this would greatly affect Australia.

Despite experts' predictions that the EU CBAM will be perceived negatively overall, they suggest that the current levels of concern for this are low, largely because of the perception that Australia will not be greatly affected by it. Current negative feelings, they suggest, will abate if the EU CBAM only targets commodities such as steel or cement, which Australia does not export to Europe in significant quantities. They also predict that perceptions could change as the CBAM is shown in practice to not be protectionist.

LE I think in practice that the negative views will simmer down as Australia will see that it is not intended as a stick to beat other countries to make them comply with EU policy; it will be seen more as making Europe's internal policies viable and in that case, we will see it constructively as a good option to emulate. (Head of Climate, Energy and Environment Policy) **55**

There are, however, a minority of people who view this as positive for Australia. Some groups will try to use the CBAM to urge the Australian government to commit to further climate action and some see the opportunities for expansion in the Australian industrial sector.

Expert insights: how much will the EU CBAM affect Australia?

The consensus among experts is that Australia will experience minimal, if any, effects from the EU CBAM in its energy or manufacturing

industries. Most experts believe that Australia's lack of an equivalent carbon price would mean that they would not be exempt from the adjustment, but Australia's main carbon-intense exports are sent to Asia, and steel or cement, which are perceived by experts as the most likely materials to be targeted by the adjustment, are not exported to the EU in large quantities. Even assuming that the CBAM was introduced for a small number of goods and expanded to cover a much wider range, experts note that Australia's primary exports to Europe, such as wine or agricultural products, do not have high rates of embodied carbon compared to other industries. However, gold is an exception, which was noted as a carbon-heavy material that is significantly exported from Australia to the EU. If Australian goods are covered by the EU CBAM, one expert mentions that Australian firms have a readily available avenue to purchase carbon offsets, which would reduce the complexity of the measure for these exporters. Overall, although the direct effects of the CBAM are not perceived to have a large effect on Australian exports, experts mention several indirect ways in which the mechanism could have an impact on Australia.

The EU CBAM could have knock-on effects for raw materials, which would affect Australian exports to Asia if these materials are then used in products that are exported to the EU. One expert says that if iron ore exported to China for use in steel production was affected by China exporting steel to the EU, it could

impact Australia. However, they believe that Australia is likely too far removed in the supply chain to experience major consequences from this.

Experts note that there have been discussions in Australia about the effects of the EU CBAM if travel emissions were to be included because of Australia's geographical location. However, they are generally confident that travel emissions would not be included within the scope of the mechanism, and Australia's geographical location would therefore not likely increase the level of impact the country will experience.

If the world were to split into a green and a brown trading bloc, as some commentators and experts have mentioned, experts see Australia as currently being on the side of the high-carbon-emitting developing countries given the current carbon reduction efforts. This could limit future growth opportunities for Australian exports.

However, one expert believes that a form of indirect carbon pricing through renewable energy targets could be interpreted as covering some of the carbon costs that are not levied on Australian goods. Under this scenario, the efforts of Australian states could make up for federal inaction.

When asked whether the EU CBAM could prompt Australia to become more ambitious in its climate goals or encourage the federal government to reintroduce a carbon tax, experts were sceptical. They note that while diplomatic pressure is important and people campaigning for climate policy reform at government level will use the EU CBAM to try to further put pressure on the government, other factors will dictate climate policy more heavily. The issue of carbon pricing and setting ambitious carbon goals has, as the experts say, become highly politicised and bipartisan, and agreement on the topic is unlikely. Because of the sensitivity and even toxicity surrounding the issue, climate action is not a strong political platform for politicians who are regularly accused of trying to introduce "another form of carbon pricing" when attempting to implement reform. This political landscape, coupled with the limited influence that the EU has on Australia compared to China or the US, leads the experts to say that the CBAM is unlikely to move the needle.

Although the likelihood of the EU CBAM shifting the Australian psyche to introduce a carbon price is low, there are ways that it can influence decarbonisation in Australia. One expert believes that, if international pressure is to influence Australia, it is by allowing Australia to see its competitive advantage with its resources, which would create opportunities for exports for Australia. Although the current federal government is not likely to be swayed by international pressure, it would respond well to anything that was framed as likely to create jobs or economic opportunities. Australia has huge potential for renewables and there is a small but growing awareness of the potential to produce hydrogen. Every state has their own hydrogen strategy, and an EU CBAM could trigger action in Australia if there is a perceived opportunity to produce steel. At the state level, Australia is discussing and planning for the possibility of creating renewable energy zones and re-industrialising, recognising the potential to produce hydrogen in liquid form as well as using it to create steel. Australia could then benefit from producing green steel and aluminium, and instead of exporting iron ore to China, it could export it to the EU. There are, however, several difficulties with this as innovation in Australia is low and the issues with long-term storage of hydrogen still have not been overcome. So, despite the potential, experts note that this possibility is far in the future and that government and industry have not made this link yet.

Expert insights: how should the EU approach the EU CBAM?

Experts believe that the main difference between the methods of implementation of the CBAM would be the reaction that it would receive

based on people's perceptions of the adjustment. They note that the prejudice in Australia against its own carbon tax would likely influence people's perception of the EU CBAM. They say that all three possible methods (Section 2.2) will be perceived negatively but there was some disagreement about which would be the most likely to be accepted. One expert suggested that Option A would be the easiest to sell because the burden would rest more on the consumer, while another said the lesser complexity of Option B would appeal to Australian industry and if this option were to be clearly labelled as a trade measure, this would also help people accept it. Another expert mentions that Option C would make the most political sense because it would avoid the association with a 'tax'.

Expert insights: how can the EU ease the transition and make the EU CBAM more acceptable to Australia?

As with experts in other countries, Australian experts stress the need for clarity on the EU CBAM, that it should be implemented on a small number of commodities to begin

with, and that the money generated could be used to advance the renewable energy infrastructure in developing countries.

As noted above, one expert also stresses that if the EU CBAM could be successfully packaged as providing opportunities for Australia to the point where local perceptions are shifted, the mechanism would be far more likely to be accepted.

LE If it could be sold as a tax on Chinese goods being manufactured and imported to Europe and highlight the potential for Australia to fill that gap, then suddenly it becomes an opportunity for Australia. The conversation about harnessing our renewable resources to create manufactured goods and then export them is in the very early stages, but something like a carbon border tax could add to that and potentially create a sense of opportunity rather than a sense of cost. (Senior Adviser) **99**

However, because of the tense political situation between Australia and China, Australia at this moment may have to align with its biggest trading partner to oppose the EU CBAM.

On a long-term basis, one expert believes that Europe should collaborate with other countries to share domestic policy data between cooperating countries to acquire mutual confidence regarding the carbon costs borne by producers in each place to inform the CO2 cost used for the EU CBAM. If the EU were to offer the potential to explore varying the rates or even making adjustments for particular countries based on this data as it emerges, this could inspire confidence in the participating countries. This approach would only work if the CBAM were to differentially apply CO2 rates to different countries, an option which some experts believe will dilute its effectiveness.

Several experts stress that the EU can learn from Australia's mistakes from trying to implement a carbon price in 2011, which experts agree was too ambitious to begin with and did not make the benefits clear enough.

LL Apart from the diplomatic climate, what we found with the carbon price was that the losers were concentrated and powerful and faced an immediate threat, and the winners were diffuse, i.e., they were future generations and the climate and therefore support were limited. There was not much incentive for people to fight strongly for the policy. (Manager) **33**

Experts stress that getting the initial policy in place is vital, but it should be low enough to avoid an overwhelming initial backlash while still being high enough that people see it as worth building on. They cautioned not to let the mechanism overshadow the purpose and pointed to Australia as a case study for a situation where, if it goes wrong, it will taint people's perceptions of similar policies for many years, thereby damaging global decarbonisation efforts.

China

Overview — China

Key background points	4 4 4	China is the world's largest emitter of CO2 but is increasingly ambitious in its carbon-reduction measures.China is in the final stages of introducing an emissions trading scheme, aided by the EU.China is the EU's biggest trading partner and the EU imports more manufactured goods and services from China than from any other country.
	43 43	The EU CBAM is overshadowed by discussion and collaboration on other climate action with the EU and internal climate policy implementation. China will likely oppose the EU CBAM, but the level of resistance will be influenced by the communication and messaging as well as the perception of whether the mechanism fairly acknowledges China's decarbonisation efforts.
Key expert insights	2 2 2 2	China strongly expects its ETS to be considered equivalent to the EU CBAM. In the long term, China could benefit from the competitive advantage afforded by the EU CBAM. There is a potential for disagreements about the EU CBAM to escalate into a trade conflict. This could undermine the momentum in China and the EU regarding climate change mitigation.
	£	Open communication and early engagement will be key for China's acceptance of the EU CBAM; getting the messaging right will be as important as the details of the mechanism itself.

7.1. Background — China's carbon landscape and trade with the EU

The carbon landscape in China

China is the world's largest CO2 emitter with 29 percent of global emissions, more than the US and the EU combined, and in 2019 the per capita carbon emissions rose above the EU for the first time, though it is still far behind countries such as the US or Australia.¹³ Although China's CO2 emissions dropped dramatically during the COVID-19 pandemic, they rebounded later in 2020.¹⁴ In September 2020, China's Nationally Determined Contributions (NDC) for implementing the Paris Agreement were rated as "highly insufficient" according to Climate Action Tracker.¹⁵ However, in recent years the country has been committing to increasingly ambitious climate targets and in late 2020, President Xi Jinping announced a number of updated targets for 2030. These include tougher goals for carbon emissions intensity, nonfossil energy share, and an increase in forest volume.¹⁶ President Xi also announced that China would aim for peak emissions by 2030 and carbon neutrality by 2060, and has now published a report outlining the key steps that it will take to achieve this.¹⁷ In its 14th Five Year Plan (set to be published in March 2021), China will outline the goals to direct the country's social and economic development for the next five years and beyond. This is seen by many as a test of how serious the pledge to reach carbon neutrality will be from a policy perspective.

China has many regulations in place to reduce carbon emissions across a range of sectors. There are currently seven regional carbon markets in China that cover cement, electricity, heat, petroleum, and oil extraction, and the government plans to introduce a national carbon market, regulations for which were announced in January 2021. The initial compliance phase (set to begin in February 2021) will cover CO2 emissions from power plants, with plans to extend the market coverage to cement, steel, and other carbon-heavy industries.¹⁸ The European Commission (EC) and the Ministry of Ecology and Environment in China worked together to develop this emissions trading scheme (ETS), though critics say that the current system has not implemented many measures that were recommended by European experts.

China's trade with the EU

China is the world's largest export country and is the EU's biggest trading partner.¹⁹ The EU imports more manufactured goods and services from China than from any other country. Exports from the EU to China represent only 55 percent of the level of trade of imports, leading to a large trade deficit.²⁰ In December 2020, the EU and China reached an agreement in principle on investment, which will further solidify this link and will aim to rebalance the economic relationship between the two.²¹ The EU is urging China to adopt fairer practices on market access and to address overcapacity (the difference between production capacity and actual production) in sectors such as steel, aluminium, and cement. China produces half of the world's steel, and exports large quantities to Europe, making this an important trade commodity.

7.2 China's perception of the EU CBAM

Expert insights: What are the overall perceptions in China of the EU CBAM?

The prospect of an EU CBAM and how it would affect China has been discussed for many years in academia.²²,²³ However, experts

interviewed for this study note that overall, there was not a great deal of discussion on this topic among carbon market experts, climate experts, environmental policy researchers or government officials in China. They note that the Chinese government has not held official discussions specifically on this topic with the EU. The experts believe that the primary reason for this topic having been overlooked among Chinese stakeholders is that there are more pressing, broader climate action issues for discussion among Chinese and European representatives, such as the EU Green Deal, the introduction of the ETS in China, and how the EU NDC will be adjusted. These discussions have overshadowed the EU CBAM, which has received very little attention in comparison. Another reason that the EU CBAM is not a topic of discussion is that the EU has not announced the specifics of how the mechanism will be implemented and experts believe that Chinese stakeholders are waiting on these before devoting attention to the topic.

Although not the primary focus, experts mention that the EU CBAM has been discussed as part of the EU Green Deal during workshops that were attended by government officials and stakeholders in the export business sector, but not a lot of attention was given to the topic. Experts in China say that foreign experts in the country, especially those from Europe, tend to be more aware of the details of the EU CBAM, while Chinese experts are not likely to know the specifics. Stakeholders in China who have been reviewing this in more detail are the trade experts, i.e., the Ministry of Commerce and their researchers, who have been researching WTO compliance, trade impacts, and how the different methods of implementation would impact China.

Experts agree that the EU CBAM will likely be viewed negatively in China by government, the business sector, and even among the climate community. From an economic perspective, most stakeholders in China will see the EU CBAM as a tax on exported goods, which will always be perceived negatively. One expert notes that this perception may even be heightened if the EU CBAM is only applied on selected products as it will appear that the EU is choosing sectors to bolster where it is not as competitive. From a legal perspective, there is little precedent related to the EU CBAM which will therefore be subjected to many challenges in China where it will be claimed that the mechanism violates WTO regulations. Experts believe that China will oppose the EU CBAM, not only because of the potential effects to exports, but also because of the unilateral nature of the measure if the EU does not actively engage with other stakeholders sufficiently.

Several experts in China also mention that they or others will perceive the EU CBAM as being contrary to the spirit if not the letter of the Paris Agreement because it is forcing other countries to be more ambitious in their NDCs, which are supposed to be voluntary and flexible for the participating parties. This view was articulated by members of the Chinese delegation to the United Nations at a climate change conference in Madrid in December 2019. China feels that it is pursuing its own emissions reductions targets as part of its commitments to the Paris Agreement, and having further costs forced upon it is not in keeping with the intention of the agreement. China will also be against the complexity that this will add to exporting goods to the EU, given the different methods for calculating carbon and the different standards between the EU and China.

Experts believe that China will likely resist against the EU CBAM and may join forces with countries such as India and Russia to oppose the measure. However, because of China's own policy development in this area, they note that the country's objections may be short term, while in the long term, they may support the mechanism. One expert believes that China will focus on post-pandemic economic recovery in the near future, but by 2025 would be far less likely to oppose the EU CBAM.

Several experts note that the perception of the EU CBAM will depend greatly on how the mechanism is packaged and what the messaging will be. The term EU CBAM, while in English is quite technical, is a very politically fraught term in Chinese and implies a level of coercion which will immediately introduce an element of distrust for the mechanism.

Experts also note that part of the projected initial opposition to the EU CBAM will be because of the lack of attention that Chinese stakeholders have devoted to the topic, leading to a low level of knowledge and understanding. They cautioned that lessons could be learned from the attempt to introduce the aviation sector into the EU ETS because of the inclusion of international airlines:

LE The EU began with a long, transparent process that included proposals and public consultation. During that time none of the major countries that would be affected engaged with the EU or followed the developments closely when it was introduced. Even though the EU engaged in a transparent, technically sound process to develop the legislation, which is also very legally sound, other countries perceived it as a very sudden move. (Manager) **33**

This difference of perspectives led to very poor reception from China and other countries to the aviation measures, and experts warn that this could be mirrored by the EU CBAM. Although the introduction of the ETS system in China means that stakeholders are paying more attention to the topic, they believe that they will not be following the exact policymaking and once it is introduced, it will be perceived as a sudden move.

Expert insights: how much will the EU CBAM affect China?

The prevailing viewpoint among experts is that the EU CBAM will not greatly affect China because they believe that China should be

exempt from additional costs to its exports since its own incoming carbon market will act as an equivalent charge. The experts note that, with the imminent introduction of the Chinese ETS system, China will have a strong case to bring to the World Trade Organisation (WTO) that it should be exempt from the additional costs of exporting to the EU. While the Chinese ETS system will initially only target coal- and gas-fired plants, it is set to expand to other high-carbon-producing sectors, such as steel and cement.

LL Given the fact that China has been developing carbon pricing for some time and is likely to have a functioning carbon market at the national level by next year, I am sure they will make the claim that if this comes in, China should be left out of any carbon adjustment going into Europe. (Research Fellow) **33**

If China does not extend its national ETS system to cover these commodities by the time that the EU CBAM is introduced, complications could arise because high carbon-emitting sectors such as steel, aluminium, petrochemicals, or chemicals are already subject to carbon prices in China's seven carbon market areas.

If the scope of the EU CBAM is different from what China has in its national carbon market, these regional carbon markets will introduce a lot of complication, as products may be exempt if they originate from one region, but not from another.

The difference in carbon prices in different countries was mentioned by experts in relation to the equivalence of the Chinese ETS system. As the Chinese carbon price will be significantly lower than the European carbon price, there is still uncertainty as to what the EU will accept as equivalent (if Europe includes this clause within the EU CBAM, which experts in China strongly believe it will).

L If the carbon price is €50 in the EU and is €5 in China, that could be perceived as problematic for carbon leakage, but in the context of the UNFCCC, with common but differentiated responsibilities, the EU will have to interpret what is a fair equivalent price. I don't think it would be fair for Chinese producers to have to pay the full cost that's applicable on carbon emissions in the EU. (Chief Representative) **J**

One expert notes that in this scenario, the EU is less likely to have issues with China's low carbon price because of its progress on climate action. S/he perceives the EU CBAM as a method to encourage countries that are taking little or no climate action and, because China is already ahead of other countries, the EU will not invest a lot of time and effort concerning themselves with the fairness or price of China's carbon, at least in the first stage of the mechanism. The fact that China is committing to climate action and moving forward with initiatives may be enough for the first few years.

Experts say that China could also benefit from a competitive advantage from the EU CBAM in the long term. If the Chinese ETS is regarded as equivalent to the carbon price in the EU, other countries such as India, which are not likely to have an equivalent national carbon price, will be disadvantaged in regard to their exports to the EU. Experts also note that if the EU CBAM is successful, China could also look to introduce a similar mechanism in the future if their own rising carbon price threatens carbon leakage, though they believe that this is a distant prospect that is not currently being considered heavily in China.

For low-carbon industrial sectors, e.g., renewable energy technology or product solution companies, experts suggest that the EU CBAM could be an opportunity for companies to provide solutions to high-carbon emission exports. High-emissions industries will require low-carbon technology and low-carbon consultation in order to remain competitive and the green, low-carbon industry in which China is a world leader could boom under the new adjustment.

Although experts believe that the EU CBAM will not greatly affect China, as noted previously, it may not be perceived this way by government officials or business stakeholders. Without bilateral consensus on the topic, the EU CBAM could worsen relations between China and the EU and lead to a trade conflict. As shown in recent trade relations with the US and Australia, China will not shy away from using trade restrictions to further its political aims. China could target industries such as German automotive sector as a retaliatory measure, with the claim that they are doing so to reduce carbon emissions in China. Experts caution that this kind of trade conflict could easily escalate.

While most experts indicate that the EU CBAM is not yet receiving enough attention from stakeholders in China to start preparing for it, one expert notes that, as the issue is on the agenda, China will take action to address it or to introduce adaptive measures as it did with the ETS. Experts believe that companies are not preparing because they do not expect the CBAM to affect them. **L** Industry is not preparing for the EU CBAM because they are hoping to later hide behind the government and ask the government to use political power to dismantle the whole thing. They consider it as an EU initiative and they are busy complying with the national targets, which they see will be their priority. (Manager) **35**

Industry leaders believe that if they are not exempt through their national contributions to the Chinese ETS, the Chinese government will intervene before the point that it would affect them.

Experts do not believe that the EU CBAM will influence China to adopt more aggressive climate action. They note that China is already implementing several major measures in this area and that the country has its own roadmap for how it will continue, regardless of international pressure. However, experts do note that the EU CBAM may incentivise China to speed up the introduction of already-planned measures, especially the addition of steel and cement to the Chinese ETS system, if these are included under the goods targeted by the EU CBAM and if the Chinese ETS is seen as equivalent. One expert from manufacturing commented that China has focused its efforts to bring in changes that they already planned to implement.

Some experts warn that if the EU CBAM increases tensions between China and the EU, it could actually have a negative effect on decarbonisation efforts. They note that China and the EU have been collaborating closely on climate and environmental policy in recent years and that this had been productive and effective. If tensions sparked by the EU CBAM were to damage that relationship and positive momentum, it could detract from the joint climate action and ambitious transition that China and the EU have been working toward. One expert says that the products that will likely be covered by the EU CBAM only represent a small proportion of the trade from China to the EU, so the loss of momentum from the souring of the relationship would outweigh the benefits of the EU CBAM.

LL If we are going to mess up our relationship just to address potential leakage issue in a small subset of products within the broader trading relationship between China and the EU, this would not be worth it for the broader climate agenda. (Chief Representative) **99**

Expert insights: how should the EU approach the EU CBAM?

One expert mentions that even at a workshop focusing on climate mitigation measures among Chinese experts who would like to

see stronger climate action around the world and in China, there was general opposition to all three proposed options and the prevailing sense was that none would help climate change mitigation.

The experts we interviewed for this study did, however, offer insights as to which method of implementing the EU CBAM they believe would be most suitable from a Chinese perspective (Section 4.2), though opinions were divided about which option would be most readily accepted by China. Experts agree that option B would be the toughest on Chinese industry and would be perceived as a new tax, which would be received very poorly in China. Some experts favour Option A, while others favour Option C. Some argue that Option A and its similarity to a consumption charge would be well received in China because it would also apply to EU products, would have strong legal rationalisation with the WTO, and would be easily understood. Most experts, however, agree that Option C would be the easiest for China to engage with

because of its own ETS system. They see Option C as furthering the alignment between the two systems, adding value to the Chinese ETS system, and would be the most likely option under which China could argue for exemption due to its own domestic policy.

Expert insights: how can the EU ease the transition and make the EU CBAM more acceptable to China?

All experts stress that early, open communication with China on the EU CBAM will be very important to make it more likely to be accepted

by China. If the EU makes unilateral decisions on trade policy, Chinese stakeholders will likely reject them on principle and, without open dialogue, the EU may face steeper opposition from industry and government officials that may not fully understand the likely impacts of the EU CBAM and do not see the underlying reasons for its imposition. There are many opportunities for discussion on this topic, as the EU and China regularly discuss trade and climate policy.

The way the EU CBAM is framed and the narrative around the topic will also be extremely important to manage for the EU. There is a current negative image of the mechanism and a low level of knowledge about it. Experts suggest that the EU should highlight the intended environmental objectives and why these objectives need to be met, rather than focusing on the mechanism itself. It is very important that the environmental goals are reflected within the workings of the EU CBAM; if it is perceived as protectionist, China will not be accepting of it.

Experts believe that the EU also needs to provide transparent details on how the mechanism will be applied fairly. China's primary concern with the EU CBAM is that it will be unfairly targeted, and clarification on this will assuage a lot of fears among stakeholders.

Close collaboration between the EU and China will be key for the EU CBAM to be accepted. The EU should maintain a good relationship around the ETS introduction and highlight the mutual goals to allow for conversations on more sensitive topics. One Chinese expert also believes that the funds generated from the EU CBAM should be used for collaborative research and development on low-carbon projects. Another expert mentions that the EU could work with China to develop a unified technical standard for carbon calculation. If the EU supported research to compare the different methodologies to provide justified proof for their approach, China might see that for some sectors, their emissions are lower than the EU and that they could benefit from the EU CBAM.

Rather than make it more palatable, one expert suggests treating the inevitable objections from China as negotiation tactics. China may object to the EU CBAM based on WTO rules but regularly flouts those rules, so the EU needs to take this as a negotiation tactic and move forward in a constructive way. Overall, Chinese acceptance of the EU CBAM represents one of the most important hurdles that the EU will have to overcome for the success of the measure, but there are avenues to successfully navigate this.

India

Overview — India

Key background points	 India is the only G20 country that is on track to meet its commitments to keep the global temperature rise below 2°C. India has many initiatives for environmental change, including a coal tax and two carbon trading schemes. The EU is India's second-largest export market.
Key expert insights	 The prevailing attitude in India is that the EU CBAM is protectionist and will break international trade rules in the UNFCCC and WTO. The large steel and cement industries in India could benefit from the EU CBAM because of their high efficiency. Smaller producers, of which there are many in India, will not be able to adapt to the EU CBAM and will likely suffer. Many Indian stakeholders will expect some kind of equivalence with EU changes based on the national contributions. Indian stakeholders are up against a one-size-fits-all approach and believe that the EU should be assisting developing countries rather than punishing them.

8.1. Background – India's carbon landscape and trade with the EU

The carbon landscape in India

India has had a national plan on climate change since 2008²⁴ and has implemented many nationaland state-level targets and initiatives to develop its economy in a way that incorporates environmental measures. India submitted its nationally determined contribution (NDC) in 2015 with three main quantitative targets: reducing greenhouse gas emissions intensity by 33–35 percent from 2005 levels by 2030; achieving 40 percent cumulative installed electrical power capacity from non-fossil fuel-based energy resources by 2030; and creating an additional cumulative carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent from additional forest and tree cover by 2030.²⁵ India's commitments mean that it is the only G20 country that is on track to meet the goal of keeping the global temperature rise below 2°C, though it is not yet consistent with the Paris Agreement's 1.5°C limit.²⁶

In terms of its national climate policy, India has a scheme called Perform, Achieve, and Trade (PAT) which is a market-based scheme to reduce energy consumption.²⁷ Energy-intensive industries are given energy efficiency targets and companies that cannot achieve their goals can trade certificates with those that overachieve. India also has a renewable energy certificate (REC) system through which power distribution companies (DISCOMS) can trade certificates.

Although India does not have an explicit carbon tax, the country introduced a tax on domestically produced and imported coal in 2010 which was designed to fund a national clean energy and environment fund. However, in 2017, policymakers re-prioritised the use of revenues from taxation of coal production to compensate provinces for potential losses incurred from the implementation of a national goods and services tax.²⁸

The Indian government has discussed the possibility of introducing a carbon pricing instrument in the micro, small, and medium enterprise (MSME) sector and in the waste sector which will have compliance entities, much like the EU Emissions Trading System (ETS). However, little progress has been made on this since it was announced in 2019. The experts interviewed for this study believe that India is keen to emulate China's ETS system but does not have the capacity and will struggle with compliance issues.

Along with government-mandated energy reduction measures, private sector companies are taking up voluntary carbon neutrality targets. Many private companies in the country have committed to decarbonisation and net zero goals.

India's Trade with the EU

The EU and India have a strong trade and investment relationship. The EU is the second-largest destination for Indian exports after the USA, and trade in goods between the EU and India has increased by 72 percent in the last decade.²⁹ India primarily exports manufactured goods, chemicals, and machinery and vehicles to the EU. Negotiations for a comprehensive free trade agreement (FTA) between the EU and India were launched in 2007 but were suspended in 2013 "due to a gap in the level of ambition between the EU and India".³⁰ In late 2020, the Minister of Railways, Minister of Commerce and Industry, and Minister of Consumer Affairs, Food, and Public Distribution, Piyush Goyal, said that talks were resuming for an EU-India FTA.³¹

8.2 India's perception of the EU CBAM

Expert insights: What are the overall perceptions of the EU CBAM in India?

Experts agree that while there is some knowledge and recent engagement with the EU CBAM in some sectors in India, in-depth

understanding and engagement remains low overall. The European Roundtable on Climate Change and Sustainable Transition has begun to consult with Indian stakeholders about the EU CBAM and based on the outputs from these initial discussions, the Confederation of Indian Industry has created a specific work programme to examine this issue. Stakeholders from the steel and cement industries have begun to take note of the topic. The Indian government is aware of the mechanism and is keeping up to date with developments but does not have in-depth knowledge about the measure according to experts. In civil society and research, there are very few that investigate the topic. Although these recent efforts have increased the overall recognition of the EU CBAM, experts caution that comprehensive knowledge of the topic remains low, even among stakeholders that are likely to be heavily affected. They attribute this in part to the lack of detail that has been released about the mechanism and believe that knowledge and engagement will increase when further details are announced.

Although knowledge of the EU CBAM is far from universal, there is a high level of concern among those in India who are aware of it. The perception of the EU CBAM is predominantly very negative, and experts agree that it will be difficult for Indian stakeholders to see the mechanism as anything other than a protectionist, unilateral measure that will negatively affect India. The Indian government is strongly opposed to unilateral measures as it was to the EU applying ETS certificates to the aviation industry, and experts foresee a lot of pushback from Indian authorities on this measure. Experts note that government resistance to measures such as the EU CBAM has remained consistent over the last decade, despite changes in political parties, and is therefore likely to continue.

While some Indian industrial stakeholders believe that India could benefit from the EU CBAM (see the following section) for most of the production and export industry, experts relay that there is a feeling of concern that the mechanism will act as a trade barrier. Some stakeholders are concerned that implementation of the EU CBAM will create two distinct trading blocs where the EU will trade with the US while Africa and Asia will trade with each other.

Indian stakeholders also feel that the EU imposing restrictions on developing countries, and especially India with its comparatively advanced climate agenda, is unfair.

LL It is a little baffling when Europe-based think tanks are announcing that India is the only G20 country that is on track for a 2-degree world or a German-based think tank is saying that India is the fifth most climate-vulnerable country in the world. In the spirit of the Paris Agreement, India would say that we are waiting for the rest of the world to catch up with us, not the other way around, but the EU is introducing a unilateral policy which penalises India for reasons we do not understand. (CEO) **99**

There is a strong focus in India on the legality of CBAMs under UNFCCC and WTO rules. Many experts mention that it will be difficult for the EU to make the EU CBAM compliant with these rules, especially the common but differentiated responsibilities that were formalised in the UNFCCC, and that Indian stakeholders would be monitoring progress closely to ensure that the mechanism is compliant.

Experts in India also believe that the EU CBAM is contrary to the spirit of the Paris Agreement. They say that from the perspective of a developing country, stakeholders will view it as an imposition of an obligation and one that, by treaty, India is not obliged to undertake. They predict that the mechanism will cause friction and controversy, and note that the Paris Agreement is designed to promote "bottom-up action" rather than "top-down standardisation", and that responsibility lies with developed countries to reduce their own emissions rather than targeting developing countries.

LE It is a complete violation of the letter and spirit of the UNFCCC and the Paris Agreement is an agreement under the UNFCCC, so it is completely violating the spirit of the Convention. It undermines India's commitment and the goals of developing countries in terms of emissions intensity reduction targets. (Lead Principal Investigator) **33**

Because of the difficulties with compliance with international law, some experts do not believe that the EU CBAM will come into effect. Others suggest that it may overcome the current obstacles but will include so many dispensations and exemptions that the negative outcomes of the mechanism will significantly outweigh the positive impacts.

Expert insights: How much will the EU CBAM affect India?

Many experts mention that without a detailed framework of how the EU CBAM will be applied, it is difficult to speculate on the full extent of

the impacts that the mechanism will have on India. They do, however, identify some areas that may be affected.

Because India exports such a large percentage of its goods to the EU, experts suggest that any trade measure would have a large impact. They specify the textile and agriculture industries as some that would be heavily impacted if they are included within the parameters, as these goods are often made and exported on a small scale and these MSMEs are a very vulnerable section of the population. If goods from India are not considered to have undergone an equivalent carbon price, they foresee that increased costs of exporting goods to Europe could make India less competitive and thereby hurt the export market. If the EU differentiates the pricing based on sector or by the level of development of the country, there would be less of an effect. In response to these negative effects from the EU CBAM, experts predict that India would look to diversify its export partners and focus on its domestic market.

India is the world's second-largest steel exporter after China, and the EU is a significant importer of Indian steel, although the steel trade between the two has declined in recent years. Because steel is likely to be one of the first goods that will be targeted by the EU CBAM, the impacts on this trade could be significant for India. Within the steel industry in India, there are large corporations that produce steel with extremely energy-efficient techniques. According to experts, these corporations are confident that they are on a par with, or in many cases, are more efficient than producers in the EU in regard to their carbon intensity. If these companies can achieve equivalence with the EU, experts believe that they could be more competitive than their counterparts in Turkey, Russia or the Ukraine.

LE It would depend very heavily on the quantification, but I do think this is an opportunity for some Indian companies to be more competitive in Europe. Decarbonisation and energy efficiency are built into a lot of Indian businesses because people understand that becoming more efficient is financially beneficial in the long run. Many Indian companies are going to decarbonise quite quickly which could be an opportunity to make India more competitive in our exports to the EU than other producing countries, provided there is a uniform framework to lay down the emission quantifications. (Director) **99**

While large businesses may see opportunities for expansion, smaller ones will struggle greatly to adapt and will absorb the additional costs. Experts warn that steel or cement MSMEs have not taken any steps toward measuring or reducing their carbon footprint, and if the EU CBAM is applied and some companies are able to achieve equivalence while others are not, the large steel and cement companies in India could further push out the smaller companies.

Experts mention that the EU has not yet given any details as to whether if or how other countries can be considered equivalent in regard to their carbon price to avoid the additional charges levied by the EU. Goods in India such as steel are using energy-saving certificates, which has a cost, are subject to the REC mechanism where they have an obligation to purchase renewable energy certificates, and they are paying tax on coal. Experts mention that it is not yet certain how the EU will define equivalence but believe that Indian goods may be approximately charged because of these measures.

Experts do not believe that stakeholders in any sectors have started to substantially prepare for the EU CBAM. The lack of details on the methods of implementation, combined with the knowledge that the Indian government is very likely to oppose the measure, have led stakeholders to wait and follow the developments without yet initiating action.

When asked if the EU CBAM could encourage India to take more aggressive climate action, experts suggest that it could help in certain sectors to some extent, but that on its own, the mechanism would not change India's path. They suggest that if the US were to follow suit, India would likely have to respond but note that India has carbon-reduction plans that are already underway and will likely continue to follow this track regardless. Some experts mention that for some sectors, the EU CBAM could encourage them to move further toward transparency and that industry could put pressure on the government for its own interests. However, they note that industry has been pressuring the government for more clarity on carbon pricing without any effect.

LE I like the concept of the EU CBAM. I do think that the mechanism could encourage decarbonisation to a large extent, but I do not see that happening across the board. It could affect the top ten manufacturing industries in the country, but beyond that is unlikely to have a major impact. (Director) **33**

Expert insights: How should the EU approach the EU CBAM?

Expert opinion in India is divided as to which of the three options (Section 4.2) would be the most beneficial for the country. Some

experts suggest that Option A would likely be the most benign and is the most practical and fair method of the three. They value the possibility that some goods may be considered to have been charged an equivalent carbon price and would therefore not be charged. However, they stress that they consider none of the three options to be acceptable and see potential pitfalls with all three.

LE Industry associations and industry leaders are of the view that there should not be a disincentive approach such as the EU CBAM, and that an incentive approach will be more effective whereby the EU collaborates with India to build capacity and provides technology to small companies. The EU CBAM can exist in the background but in the meantime the EU cooperates with India. India is willing to become greener, but we have capacity constraints. (Professor) **33**

Expert insights: how can the EU ease the transition and make the EU CBAM more acceptable to India?

Several experts mention that there may not be any way to completely avoid resistance from the Indian government against the EU CBAM, but there may be ways to minimise

the negative reactions. An important point that is stressed by many Indian experts is that the EU acknowledges the rules of the UNFCCC, the WTO, and the Paris Agreement, and adheres to them in the development of the parameters of the mechanism. Experts believe that the EU should have bilateral discussions with India to understand and mitigate its concerns about this. The EU and India have a clean energy and climate partnership but there is not currently an avenue for discussion to be built into this. Experts believe that this could be a good channel for opening discussions. India needs to be involved early and experts stress that a public consultation process is not sufficient since India needs to be actively engaged. Experts also note that educating the government sufficiently will be very important to avoid resistance that is caused by misunderstandings.

Many experts believe that having a small pilot phase, possibly on a less-sensitive sector, would help establish proof of concept for the mechanism and gain the trust of stakeholders in India. Allowing for industry feedback within this phase could help smooth the process. Experts likened this to the introduction of PAT in India, which started in 2012 on 478 designated consumers who were instructed to reduce their energy consumption and has since grown to 735.

Experts also stress that industry stakeholders should be included in the conversations, and not just government officials.

LE I would rather have industry stakeholders as part of the conversation from day one. Bilateral talks often happen government to government and with select trade delegations, who are basically an extension of the government, but that is not typical of the industry. So that is something I see as a definitive gap. (Director) **JJ**

Experts believe that it is critical for the EU to be transparent in its use of the revenue generated and use it to help developing countries decarbonise. By giving the money back to India for low-carbon technology development and access to up-to-date technology, experts in India believe that the mechanism will be more widely accepted. This would also assuage many of the political fears that the EU CBAM is primarily being introduced for protectionist purposes.

Many experts are against the EU implementing a "one-size fits all" approach that does not differentiate between countries. They believe that developing countries should receive reductions on the fees that they would have to pay. Some experts see this differentiation as necessary if the EU wants to make the measures WTO- and GATT-compliant.

Experts note that the EU should approach the EU CBAM as a negotiation. They say that reciprocity has been the basis of EU integration and that similar reciprocity needs to exist between Europe and India so that the measures are not unilateral. As with trade deals, experts note that "a grand bargain" must be reached in which both sides make concessions. They suggest, for example, that the EU can agree to work with India on a technology deal, green hydrogen, or developing the next battery. Experts also mention that the EU will need to have a plan for companies that are more efficient than EU companies, as experts point out, for example, that India could start putting a price on cement exports from the EU.

Indonesia

Overview — Indonesia		
Key background points	 Indonesia is in the initial stages of its carbon reduction policies and is currently updating its Nationally Determined Contribution (NDC). The Indonesian government is currently considering a carbon pricing mechanism but has not yet decided what form it will take. Indonesia has had two major climate-related trade interactions with the EU in the last five years, one positive (timber) and one negative (palm oil). 	
Key expert insights	 Indonesia's focus on its NDC and its attempts to introduce carbon pricing mean that knowledge and awareness of the EU CBAM is very low. Indonesian stakeholders expect that the EU CBAM will have a significant effect on Indonesia which will be exacerbated by the lack of engagement officials will likely have had with the mechanism by the time it is introduced. Indonesian stakeholders' perceptions of the EU CBAM will be heavily influenced by the ongoing issues with palm oil trade. The EU can learn from the verified timber agreement with Indonesia to make the EU CBAM acceptable. The EU CBAM has the potential to spur Indonesia on in its climate ambitions if the EU helps Indonesia prepare for the measure. If the revenue generated from the EU CBAM is used to help Indonesia develop capacity for its own carbon reduction measures, the mechanism is far more likely to be accepted. 	

9.1. Background — Indonesia's carbon landscape and trade with the EU

The carbon landscape in Indonesia

Indonesia's CO2 emissions have been growing steadily for the last 30 years and although the rate of increase was significantly lessened in 2020 due to the economic downturn as a result of the COVID-19 pandemic, the country has not focused on a low-carbon recovery plan and emissions are expected to continue to increase at pre-pandemic levels.³² Since the early to mid-2010s, Indonesia has increased its focus on economic growth at the expense of environmental protection, and the push for climate policies has declined. In late 2014, the Ministry of the Environment was combined with the much larger Ministry of Forestry, the focus of which is increasing forest production, while support for climate decarbonisation measures at governmental level is low.

Indonesia has been criticised for inaction on climate policy since signing the Paris Agreement and the country has not progressed far beyond submitting its Nationally Determined Contribution (NDC). Compared with a "business as usual" approach, Indonesia is aiming for a 29 percent reduction in greenhouse gas emissions by 2030 without outside help or a 41 percent reduction with outside help. Indonesia is on course to meet these targets, but is not seen as ambitious enough to align with global ambitions and requirements.³³ Indonesia does not have a long-term plan for climate change mitigation as mandated by the Paris Agreement but is in the final stages of updating its NDC and is developing a long-term strategy for lowering carbon emissions and increasing climate resilience.

Emissions from deforestation and land conversion are the main climate issues in Indonesia, followed by the energy sector. In terms of climate change mitigation strategies, Indonesia's focus up to 2020 has been on the forestry or land-based sectors, while the focus from 2020 to 2030 is set to be on the energy sector. Indonesia has a national plan to increase renewables in the energy mix, land-use change mitigation policies, and policies to phase out diesel powerplants. Indonesia is currently in the process of discussing a carbon pricing policy as one of the main focuses of its climate policy. The government is trying to balance a cap on carbon emissions with economic investment as there is a concern that a tax would hinder investment in Indonesia.

Indonesia's trade with the EU

The EU is Indonesia's third-largest trading partner after China and Japan. Since 2016, the EU and Indonesia have been negotiating a free trade agreement to further deepen investment and trade relations.³⁴

Indonesia and the EU have had two major climate-related trade interactions that the experts interviewed for this study mention as being significant. In 2016, Indonesia became the first country to export "verified legal" timber to the EU through the EU's Forest Law Enforcement, Governance and Trade (FLEGT) licensing system for the certification of wood. For nearly a decade, the EU supported Indonesia in developing the certification system, which has allowed Indonesia to adhere to the strict rules on illegally harvested wood that the EU has put in place. Indonesia introduced a national timber legality assurance system called SVLK (Sistem Verifikasi Legalitas Kayu) in 2009 and this was upgraded to meet EU requirements. The bilateral agreement is seen as being successful in its implementation and operation by both Indonesia and the EU.³⁵

Conversely, the implementation of the EU's Renewable Energy Directive II (REDII), which will result in a gradual ban on counting palm oil biofuel in the EU's target for the share of renewables in 2030, is seen negatively by Indonesia. The ban, which was introduced in 2018, results from a determination by

the European Commission to treat palm oil as "high-risk" (the only biofuel feedstock crop to be labelled as such) based on the indirect land use changes that result from its production. As the world's largest producer and exporter of palm oil, Indonesia is particularly affected by the ban and regards the EU's unilateral approach and the ban's disproportionate effect on developing countries as protectionist and unfair.³⁶

9.2 Indonesia's perception of the CBAM

Expert insights: What are the overall perceptions of the EU CBAM in Indonesia?

Indonesian experts agree that there is a very low level of knowledge about the EU CBAM in the corporate or government sectors, and even in

climate policy and carbon policy spheres, there is very little discussion or awareness of the topic. One expert mentioned that the palm oil sector is aware of the measure because of the ongoing dispute with the EU over palm oil exports, but this does not carry over to other industries. Experts suggest that as a developing country, the topic is not high on the list of priorities and within climate discussions, Indonesia's updates to its NDC and the planned introduction of its own carbon pricing mechanism take precedent. A government expert notes that the EU CBAM had been presented to the government but was discussed as a potential trade barrier to developing countries and has not yet been officially addressed. In late 2020, the EU started to engage ministries and stakeholders to have discussions on the topic, but this has not been a continuous process. Experts note that most stakeholders are in the very early stages of understanding and digesting the mechanism before they assess what the real-world impacts will be.

Many Indonesian experts note that the perception of the EU CBAM will certainly be influenced by the EU's decision to ban imports of palm oil and that the two measures are likely to be inextricably linked in discussions. The fact that palm oil is the only biofuel that has been targeted as high risk is widely perceived in Indonesia as a measure to protect Europe's crops of rapeseed and soybeans for use in biofuel. The palm oil sector and the government believe that Indonesia is making significant strides toward more sustainable palm oil and see the EU's unilateral measures as being heavily influenced by non-governmental organisations which they perceive as biased. The government, because it does not have a functioning database for carbon emissions, cannot respond on the same level as the research organisations. Experts predict that any industrial sectors along with the government will see the EU CBAM as further market distortion targeting developing countries.

LE This will be quite a contentious issue in Indonesian-EU relations. The government is adamant that Indonesia is in the right and that the EU is acting unfairly and treating Indonesia in a way that is not equal to the way the EU treats other trading countries. There will definitely be hurdles in discussing any new restrictions. (Associate Director) **33**

Experts stress that it is important to consider Indonesia's position on the EU CBAM in the context of Indonesia being a developing country. They view this as the most significant factor deciding whether a country will be equipped to deal with the measures. Experts note that the government will argue that it is the remit of developed countries to reduce carbon and that the CBAM is contrary to this. The Indonesian government is looking closely at the mechanism to ensure that it is compliant with WTO and UNFCCC regulations as these are the country's primary concerns, before considering the effectiveness of the measure for environmental policy progression.

Expert insights: How much will the EU CBAM affect Indonesia?

Many experts in Indonesia see the EU CBAM as a barrier to Indonesian exports and therefore predict that the mechanism will have a significant impact on Indonesia's

competitiveness in its exports to the EU. Experts believe that the biggest potential effect that the EU CBAM could have on Indonesia, given the types of products that are likely to be covered, would be if the CBAM is applied to the textile industry. They suggest that the steel industry can prepare and absorb the additional costs but believe that the textile industry would have more difficulty adapting because it is more diverse.

One expert suggests that the additional measures imposed by the EU on imports would cause Indonesia to further focus its trade on the Asia-Pacific.

L When there is resistance in the EU market to Indonesian products, we will adjust by exporting more to India. So, the first changes are likely to be shifts in Indonesia's export destinations. Without help from the EU, developing countries have to be pragmatic and look for other markets. This will have high economic costs for Indonesia as the profit from exporting to these countries will be lower. (Associate Professor) **J**

Experts note that even if the measure does not cover a wide range of products, companies that produce goods that fall under the EU CBAM and export them to the EU will be poorly prepared to deal with the mechanism. They note that not many companies record their emissions data in Indonesia so it will be a major challenge for them to interact with the EU on the EU CBAM.

Some experts mentioned that if it is not implemented with the involvement and consent of Indonesia, the EU CBAM could put further pressure on already-strained trade relations between Indonesia and the EU.

When asked about the potential indirect effects of the EU CBAM to advance Indonesia's carbon reduction policies, experts are optimistic. Many agree that, with help from the EU, the EU CBAM could be a galvanising factor that spurs Indonesia on to adopt a tougher climate policy. As this is already a topic of discussion in Indonesia, experts say that the government will not need to be convinced of the importance of implementing low-carbon initiatives but can be influenced on the timescale and exact operation of these initiatives.

Indonesia is considering several options at the moment for its carbon reduction policy and one expert recognises that the EU CBAM could dictate the structure of the policy that is implemented. It could push Indonesia to pursue the tax option over other options such as carbon offsets or voluntary mechanisms so that Indonesia could gain equivalence with the EU system to avoid paying a price for its carbon at the EU border. Experts believe that the EU CBAM is an opportunity for Indonesia to develop its ETS system so that it can reach equivalence with the EU measures, although Indonesia will struggle with not having historical data on its emissions.

One expert indicated that the EU CBAM will not be the only driving factor for increased climate ambitions in Indonesia, but says that combined with other factors such as the regime change in the US, it could spur Indonesia on to begin calculating its emissions more accurately and eventually reduce its carbon emissions. It cautions, however, that this will depend on the reaction of China, because Indonesia will likely follow China's actions here.

Expert insights: How should the EU approach the EU CBAM?

Most experts do not perceive a large difference in the direct effects on Indonesia of each of the options being discussed to implement the EU CBAM (Section 4.2). They

do, however, note that anything framed as a tax will be perceived as a protectionist barrier to trade, rather than promoting collaboration between countries. The issues surrounding palm oil will exacerbate negative perceptions of this and will make Options A or B less likely to be accepted.

One expert commented that the three proposed methods are based on disincentives, but for developing countries, the negative impacts on their GDP from reduced levels of trade will reduce their own abilities to decarbonise. In this scenario, these methods will not be as effective as an incentive method would be for Indonesia, whereby the buyer, importer or the EU provide incentives for goods made with low-carbon emissions from developing countries.

Expert insights: How can the EU ease the transition and make the EU CBAM more acceptable to Indonesia?

The most important step mentioned by Indonesian experts that the EU can take to make the implementation of the EU CBAM

acceptable for Indonesia is to acknowledge the local context and challenges that Indonesia will face in reacting to the mechanism and seek to alleviate these difficulties. As a developing country, Indonesia is focused on economic development and improving the quality of life for its citizens. The country is already struggling to implement carbon reduction measures and experts agree that it will need assistance if it is to adapt to the EU CBAM.

Many experts mention the revenue that will be generated by the mechanism and believe it should be used to promote decarbonisation measures in Indonesia and assist companies in their efforts to reach equivalence with the EU emissions standards so they will not be negatively affected. They note that Indonesian companies have very little experience measuring their CO2 outputs and do not have the capacity to engage with the EU on this level. Others believe that the EU CBAM should be introduced in conjunction with measures that promote development in Indonesia. By helping Indonesia to develop sustainably, the EU would not only help the country decrease its carbon footprint, but it would also prove that the EU CBAM is not being implemented as a protectionist measure.

LE For the EU CBAM to succeed, the EU needs to support Indonesia and earmark some of the revenue from the tax to support companies to produce a cleaner product. It will look bad if EU claims that the measure is to reduce global emissions but use the revenue for development in Europe. Accountability is very important for the use of the revenue. (Associate Professor) **33**

The most effective method for the EU to help Indonesia to adapt to the EU CBAM would be to increase capacity and help Indonesia develop a database on the carbon contents of products, as it does not currently have one.

Several experts mention Indonesia's ongoing talks about its own carbon pricing mechanism. An expert familiar with the draft regulation that Indonesia is currently designing does not believe it is sufficient for the introduction of a working carbon pricing instrument and that significant work will be required to make

it fit for purpose. They suggest that the EU can offer expertise on the technicalities of how to implement an ETS, enhance capacity in Indonesia, and provide funds for the establishment of market infrastructure. If the Indonesian government can align with the EU to ensure that the methodology for its carbon pricing mechanism is consistent with the expectations from Europe, there can be a smoother transition for measures such as the EU CBAM. However, experts caution that implementing a certification scheme such as an ETS in a developing country is typically very complicated as there are associated administration costs as well as the need for an independent body to administer the scheme.

An expert from the Indonesian government points to the bilateral agreement between the EU and Indonesia for verified timber as a good example of how to approach the situation. Here, the EU used a targeted approach that took the needs of Indonesia into account and assisted Indonesia in preparing for the measure, which made it more successful for both parties. Other experts agree and contrast this method to the way in which the EU handled the palm oil ban.

LE For the verified timber, the EU helped build capacity and developed a monitoring tool to ensure that the timber that is exported to the EU meets their standards. However, the palm oil ban was the opposite experience: the EU shut Indonesia out and did not acknowledge their efforts or help them, so this measure received a lot of negative attention and ill will. From these two contrasting experiences, we can see what works and what does not. The EU should draw from these experiences. (Senior Advisor) **33**

Experts agree that approaching the EU CBAM in the way that the EU approached verified timber would garner positive support for the mechanism. They also indicate that working closely with Indonesia could alleviate some of the tensions around the palm oil disagreement and suggest that the implementation of the EU CBAM will need to be approached as a negotiation, with concessions from both sides.

Other ways in which experts believe that the EU can alleviate the difficulties that Indonesia will face as a result of the EU CBAM and to promote acceptance and goodwill of the measure are: to focus on EU companies with subsidiaries in Indonesia; to make the mechanism clear to companies so they can easily see how improving their practices will directly benefit them; involve local experts to provide nationally determined values complemented by internationally accepted values; and to focus on the socialisation and messaging surrounding the EU CBAM to make it clear that the mechanism is not protectionist and does not violate WTO rules.

Indonesia –

Japan

Overview — Japan

Key background points	 Japan has pledged to achieve carbon neutrality by 2050. Japan has a low national carbon tax and two local emissions trading schemes (ETSs) but has been unable to implement a national ETS. Japan is a significant trading partner with the EU and signed a free trade agreement with the bloc in 2019.
Key expert insights	 The topic of the EU CBAM is receiving a good deal of attention in Japan and measures are starting to be taken to react to the mechanism. The Ministry of Economy, Trade, and Industry (METI) will be more involved in the country's reaction to this measure than the Ministry of Environment.
	Companies in Japan will view their implicit carbon prices as making up for the low carbon tax and will seek equivalence with the EU carbon price.
	The steel industry will vocally oppose the measure and will try to push METI to appeal to the EU.
	Transparency is very important for Japan as they have a different method of calculating their level of emissions than the EU and companies are wary of being treated unfairly.

10.1. Background — Japan's carbon landscape and trade with the EU

The carbon landscape in Japan

Japan has been steadily reducing its greenhouse gas emissions since 2013 and is currently on track to reach its 2030 Nationally Determined Contributions NDC goals but came under criticism for not increasing the ambition of these goals when it submitted an updated climate action plan in March 2020.³⁷ Subsequently, in October 2020, within one month of taking office, Prime Minister Yoshihide Suga pledged that the country will achieve carbon neutrality by 2050. This was a major shift from Japan's previous pledges to reach carbon neutrality by an unspecified date in the latter half of the century.³⁸

There are currently three carbon pricing initiatives in Japan. At national level, Japan has a carbon tax in the form of the Global Warming Countermeasures Tax. This was introduced in 2012 and is among the lowest carbon prices globally (around USD2.6/t-CO2). Japan also has two local ETSs, one in Tokyo and one in Saitama, and analysis has shown that the Tokyo ETS system has effectively reduced CO2 emissions without a negative impact on the economy.³⁹ The Ministry of Environment of Japan has previously attempted to bring in a national ETS, but this was deferred in 2010 and abandoned in 2012, and discussion around the topic stagnated until late 2020 with the change of the Prime Minister.⁴⁰ In December 2020, Prime Minister Suga met with the Minister of the Environment and the Minister of Economy, Trade, and Industry to discuss the introduction of a new carbon pricing path for the country, putting the Ministry of Economy, Trade, and Industry (METI) in charge of the process, relegating the Ministry of Environment to having observer status.⁴¹

In addition to its explicit carbon pricing, Japan has several energy efficiency regulations, feed-in tariffs, and volunteer action plans aimed at lowering carbon emissions. The revenue from these taxes is used to promote renewable energy and advance energy efficiency. More Japanese companies than those in other countries have embraced guidelines from the Task Force on Climate-related Financial Disclosures (TCFD) which covers carbon accounting within corporations.⁴²

Japan's trade with the EU

The EU and Japan are two highly developed economies that have relatively strong trade and investment links, though Japan's share of imports to the EU has been diminishing over the last five years while the EU's share of imports to Japan has increased and in 2019, the EU had a trade deficit of EUR 2 billion with Japan.^{43,44} Japan exports mainly industrial goods, especially machinery and vehicles, other manufactured products, and chemicals.⁴⁵ The EU and Japan have a Free Trade Agreement in the form of the Economic Partnership Agreement, which came into force in 2019. Once fully implemented, this partnership will have removed customs duties on 97 percent of goods exported from the EU to Japan, and on 99 percent of goods imported from Japan.

10.2. Japan's perception of the EU CBAM

Expert insights: What are the overall perceptions of the EU CBAM in Japan?

Many of the experts interviewed for this study mentioned that the topic of CBAMs was receiving a lot of attention in Japan in the late

2000s up to the mid-2010s. Around this time, the USA was considering new legislation to implement a CBAM and, because the US is an important trade partner for Japan, the effect on Japan would have been substantial. Academic experts and government and industry stakeholders therefore assessed the likely impacts that this CBAM would have on the Japanese economy and the potential for Japan to implement one of its own. Neither came to fruition and the topic declined in prominence until the EU announced its intention to introduce the EU CBAM. Experts agree that the topic of CBAMs has begun undergoing a resurgence of attention since this announcement, and there are articles on the EU CBAM appearing in Japanese newspapers, though knowledge is not yet widespread. Stakeholders from all sectors that have an interest on climate policy are discussing the EU CBAM, but without details of how the measure would be implemented, there has been no consensus as to how CBAMs would affect Japan. Nevertheless, experts note that the government of Japan has been pursuing research on the EU CBAM and several Japanese industry associations engaged with the public consultation period in 2020 to submit their views, so engagement with the mechanism is high.

According to the experts, while Japanese stakeholders do not see the EU CBAM as affecting them greatly, the level of concern in some sectors is still high, whereas other sectors are more sympathetic to what the EU is trying to do. Within industry, there is an overall negative perception of the EU CBAM. Experts note that Japan has a history of opposing EU measures such as this, pointing to their heavy opposition to the attempt by the EU to incorporate the international aviation sector into the EU ETS. One expert notes that the Japanese industrial sector has already submitted objections during the public consultation period and will continue to oppose the introduction of the measure. These objections come from several different viewpoints and perceptions within the sector.

Several experts mention that in Japan, the EU CBAM is viewed not as a climate issue but as a trade issue, and believe that it is a trade conflict waiting to happen. They note that there is a perception in Japan that the main aim of the EU CBAM is protectionist and that the primary aim is not to reduce global CO2 emissions.

L However, the main objective of the EU CBAM is the mitigation of the negative economic impacts for the EU's domestic industries, not for carbon reduction itself. (Senior Researcher) **J**

Experts note that Japan, among other countries, has recently announced plans to reach net-zero carbon emissions. In this context, they urge the EU to consider other countries' climate goals and steps forward and re-assess whether a CBAM is necessary. They suggest that continuing to promote the EU CBAM over coordination with countries to strengthen their domestic carbon policies will add to the sense that this is a protectionist measure.

LL If the major economies can agree on the large-scale emissions reduction plans and implementation of the policies to achieve them, I do not see any necessity for CBAM. (Senior Researcher) **JJ**

Japanese companies also believe that they have already achieved a high level of efficiency and that a further price on carbon would be unfair. Experts explain that they are concerned that their contributions to implicit carbon prices and voluntary contributions mean that they will be over-taxed, as well as having an added burden of calculating their carbon emissions within a different system, which is seen as a non-tax barrier to trade.

As one of the commodities that is likely to be targeted first, experts note that the steel industry in Japan has been paying particular attention to the introduction of the EU CBAM and has been vocal in its opposition, despite the relatively low exports of steel from Japan to Europe. The primary objection comes from a perception that the EU will not be able to impose a fair cost on steel products that come from Japan given its different methods of calculating embodied carbon. In Japan, CO2 emissions are calculated with considerations such as waste heat recovery, which the EU does not recognise. The respective methodologies of calculating carbon are deeply embedded in the various policies in respective countries, which experts perceive as likely to lead to conflict on this matter.

LE The EU is very climate-centric, but the real daily economics are forgotten and their rush to introduce policies will lead to division with countries such as Japan, which is following the same trend with a different approach. (General Manager) **J**

Experts suggest that the Japanese steel industry has already begun preparing to oppose the EU CBAM and has been informally communicating with EUROFER and World Steel to collect information. They are also holding frequent discussions with the government, particularly METI. As one of the most vocal and influential industries in Japan, experts from the steel industry suggest that it is appealing to METI to resist against the EU. One government expert cautions that METI is larger and more influential than the Ministry of Environment, which they say is unlikely to oppose or support the mechanism publicly.

Despite the overall negative perception of the EU CBAM within the steel industry, some experts mention that it is viewed positively by some stakeholders. An expert familiar with the industry suggests that Tokyo steel, one of the major steel manufacturers and exporters, will react more positively than others within steel manufacturing because they use electric furnaces which have drastically lower CO2 emissions. Tokyo Steel represents a substantial portion of the industry, but with all other major steel makers against them, they will be in a significant minority and the steel industry is likely to work together to put up a united front.

Outside of the industrial sector, experts note that Japan has not expressed a strong negative reaction to the EU CBAM. They believe that, in some ways, Japan is sympathetic to what the EU is doing. In climate change negotiations, Japan and the EU collaborate and work together, so there is a positive platform to start from and one expert believes that, as an OECD country, Japan will not object too fiercely overall. Another expert mentions that after the announcement of Japan's 2050 net-zero carbon emissions goals, the mindset of stakeholders, even within the large steel companies, is beginning to change and s/he believes that with time, stakeholders will become more amenable to the idea of a CBAM.

Expert insights: How much will the EU CBAM affect Japan?

Experts believe that the EU CBAM will not have a great impact on Japanese trade flows or on the economy. They note that Japan

does not export the carbon-heavy raw materials that are currently believed to be the ones that will be first targeted by the EU CBAM. There are high-grade steel products that are exported from Japan to the EU, but these exports are noted to be small in amount. Japan no longer has a significant aluminium industry and although there are a lot of assembly factories in the EU that import parts from Japan for products that are then sold in the EU, experts expect that the effect on these goods will be limited.

Some experts believe that the low level of carbon pricing in Japan will mean that goods that are exported to the EU will not be considered to have been charged an equivalent carbon price, though others believe that the implicit carbon pricing in Japan should be treated as equivalent to the EU. According to the experts, many Japanese companies are likely to compare their voluntary contributions and energy taxes to the EU CBAM and ask for their products to be exempted because they are equivalently taxed in Japan.

Despite the perceived low direct consequences for Japan, experts note that the indirect costs of implementing the EU CBAM could be significant. Experts from the steel industry believe that the EU CBAM will affect the world's steel markets and that the impacts would be negatively felt by the steel industry even in Japan, which would be a heavy burden. They also mention that a poorly designed CBAM may hinder high-grade steel's contribution to the emission savings in importing countries, as this product is used primarily in the manufacture of energy-saving technologies, but the process of creating this steel is carbon intensive. They predict that this will be a large burden for companies that are already complying with domestic reporting systems.

Some experts mentioned that the EU CBAM could cause political tensions that would spill over into several different sectors and could cause a political rift between Japan and the EU, possibly culminating in a trade conflict.

Although the predominantly held view among experts is that the likely indirect impacts of the EU CBAM will be negative, some see potential positive impacts. Some companies which are supplying to companies that have already announced aggressive climate targets might welcome this measure as they are already on the path to low-carbon trade and one expert mentioned that if Japan continues on its path toward carbon neutrality, the EU CBAM will benefit both the EU and Japan. However, if Japan stalls in its progress, it will lose out from the exchange.

When asked if the EU CBAM could spur Japan to improve its own climate ambitions, Japanese experts are optimistic that this could happen, despite the Japanese steel industry's expected and stated intention to oppose the measure. One expert with ties to the Ministry of Environment in Japan says that the issue of carbon pricing at national level in Japan has always received a large amount of resistance from energy-intensive sectors, but the forthcoming introduction of the EU CBAM has brought this issue back to the table and has already spurred the discussion on Japanese domestic policy to introduce stricter climate measures. Another expert mentions that the Japan Business Federation known as Keidanren, which consists mainly of electricity and steel companies, has been strongly opposing national carbon pricing measures in Japan for the last decade. With the introduction of the EU CBAM, this expert believes that the arguments they have been using will now be less effective and the possibility of a national carbon price in Japan will be significantly more likely and will have positive impacts on Japan's overall decarbonisation journey.

Other experts say that the EU CBAM will drive Japanese companies to be more transparent in their carbon footprint or lifecycle assessment of carbon emissions if they intend to prove equivalence with the EU system, and that it could urge companies in Japan to reduce their carbon intensity. This would be especially true if the EU were to advance the CBAM to include Scope 2⁴⁶ emissions as these are a significant issue in Japan.

Experts do not think that it is likely that Japan would implement a CBAM of its own in response to the EU CBAM. An expert in the manufacturing industry suggests that Japan's import/export ratio would mean that a CBAM would not be appropriate and other experts who had previously looked at the viability of a CBAM for Japan agreed.

Expert insights: How should the EU approach the EU CBAM?

If Japanese companies are not considered exempt from the EU ETS system, the consensus of most of the Japanese experts was that Options

A or B would be preferred over Option C (Section 4.2). Several experts agree that the unpredictability of Option C would make it unattractive to Japanese government officials as well as businesses. One expert indicates that the Japanese Business Federation does not like unpredictable fluctuations, which occur in the European ETS system, and this is one of the primary reasons they do not support a national ETS in Japan. Experts also perceive Option C as involving the most work for exporting parties and anticipate that Japanese businesses would be against the added burden. Experts do not see a strong preference in Japan for Options A or B, though one expert suggested that Option B is the simpler of the two for Japan.

Expert insights: How can the EU ease the transition and make the EU CBAM more acceptable to Japan?

Experts mention that Japanese stakeholders want and expect a long dialogue period with stakeholders after a clear proposal

is drafted. They believe that communication and engagement with Japanese stakeholders are key to the measure's success in Japan. One expert mentioned that Japanese stakeholders had been surprised by a chemical directive — the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) — that the EU announced in 2006 and that engaging with those who would be primarily affected over a long period would allay some difficulties. However, another expert suggested that Japan would not be the most difficult country to manage throughout this process and recommended approaching developing countries first to ensure fairness before engaging with countries such as Japan.

Experts also mention that the measures need to be transparent, robust, and straightforward. They warn that stakeholders in Japan will remain wary of complicated measures that create uncertainty for their future dealings with the EU. Because the EU and Japan have different methods of calculating the CO2 content of products, experts say that Japanese exporters will need a straightforward method of calculating the difference that they consider fair. According to an expert in the steel industry, the EU must develop a verification procedure that involves a third-party audit, as a fair taxation process requires transparency and credibility. **LL** The only possible approach to explore and develop globally agreeable border adjustment measures on the carbon-intensive steel trade is to ask experts in the sector, perhaps through the World Steel Association, to consider the feasibility and development of fair and mutually agreeable transparent measures. This neither guarantees the quick and smooth development of such measures, nor even comes up with a feasible workable solution. But this might be the only way to approach this technically complex and politically sensitive issue without stimulating a trade war in the global steel trade. (Executive Assistant & General Manager) **33**

One expert mentioned that the non-protectionist nature of the EU CBAM must be made clear to Japanese stakeholders to avoid the possibility of a trade conflict, and that focusing on a limited scope in the energy sector would highlight the environmental links and make it seem less like it was being done for economic reasons.

Singapore

Overview — Singapore

Key background points	 Singapore is a small, export-heavy country that strongly favours multilateralism and adhering to international rules. Singapore has a low carbon price in place; the country is focusing on emissions reduction actions to increase efficiency because it is poorly suited to renewables. Singapore has had a free trade agreement with the EU since 2019.
	 The EU CBAM is comparatively well-known in Singapore, due in part to the high level of scientific literacy in the country. The country will likely be well prepared for its implementation. Singapore will be sympathetic to what the EU is trying to do and may even see a benefit from it.
Key expert insights	 Singapore will look closely at the EU CBAM to ensure WTO compliance. If it is fair and efficient, there will not likely be much resistance from Singapore.
	The EU CBAM is unlikely to change Singapore's climate action path but could spur it on to move faster.
	Singapore believes that a multilateral, incentive-based approach would be more suitable to promote the climate agenda.

11.1. Background — Singapore's carbon landscape and trade with the EU

The carbon landscape in Singapore

As a low-lying island at a tropical latitude, Singapore is very exposed to risks from climate change and extreme weather fluctuations. The country itself has a low carbon footprint by virtue of its small size, but has a high level of CO2 emissions per capita. Singapore's energy mix is dominated by natural gas and is classified by the United Nations Framework Convention on Climate Change (UNFCCC) as having an alternative energy disadvantage. The winds there are light, and hydropower is not possible so the only potential for renewable energy is through solar, but this potential is low and space for solar panels is limited. Singapore will have to rely on natural gas for the foreseeable future and is therefore focusing its carbon reduction efforts on improvements in energy efficiency. The country is trying to promote this decarbonisation without compromising economic growth and prosperity, which is slowing its climate action.

Singapore is set to substantially overachieve its 2030 climate action targets but, because these commitments are regarded as very weak, the country is not seen as living up to its commitments according to the Paris Agreement.⁴⁷ The country announced in February 2020 that it would peak its greenhouse gas emissions by 2030 and will work toward halving its emissions by 2050, but has not announced a date by which it intends to reach carbon neutrality, only stating that it will be as soon as is viable in the second half of the century. Singapore has a climate action plan that is set to be published in 2021, likely after the COP26. The country's goal is twin growth with transitioning of the country to a greener economy. Although climate action in Singapore is recent, and has been criticised for not being ambitious enough, as the most developed country in Southeast Asia, Singapore is somewhat of a "pathfinder" in the region and can help Association of Southeast Asian Nations (ASEAN) countries with their decarbonisation.

Singapore introduced the Carbon Pricing Act in January 2019.⁴⁸ Under this act, any industrial facility that emits over 2,000 tonnes of CO2 equivalent (tCO2e) annually must register and submit a yearly emissions report. Any industrial facility that emits more than 25,000 tCO2e annually is subject to taxation. Singapore's carbon tax was introduced as a fixed price system with a view to linking up with other markets in the future, as Singapore is too small to implement an emissions trading system (ETS) of its own. The price for carbon is currently low at \$\$5, but there are no exemptions for certain products or sectors and it is set to increase the price to at least \$\$10 at the end of the transition period in 2023. When it was implementing its carbon tax, the Singaporean government announced that it would use the money generated (projected to be nearly \$\$1 billion) to promote energy efficiency. This went a long way toward making companies and government entities accept the measure and greatly eased its transition.

Outside of government policy measures, businesses in Singapore are increasingly interested in sustainability. The General Insurance Association of Singapore has been involved in building a sustainable corporate environment in the country since late 2017. Environmental sustainability is also included in the curriculum at school level, so awareness of climate topics among the public is high.

Singapore's trade with the EU

Singapore is a major trade hub, and the EU is Singapore's third-largest trading partner. Singapore's top exports to the EU are products of the chemical and allied industries, followed by machinery and appliances.⁴⁹ Singapore has negotiated bilateral free trade agreements (FTAs) with many countries and

in November 2019, the EU Singapore FTA entered into force. As a small export-orientated economy, Singapore is very vulnerable to changes in the overall global demand landscape and the country is located in a highly competitive market for exports among its Southeast Asian neighbours.

11.2 Singapore's perception of the CBAM

Expert insights: What are the overall perceptions of the EU CBAM in Singapore?

The experts interviewed in Singapore for this study believe that people working in the climate space are generally aware of the EU

CBAM. They agree that stakeholders in Singapore may be predisposed to knowing and understanding climate-related issues because of the potential negative effects that will befall the country from climate change, the high level of scientific literacy in the country, and the country's interaction with global CO2 reduction measures, as well as its own experience with implementing a carbon tax.

Although the EU CBAM is now a relatively well-known topic, it has only recently emerged as a topic of discussion in Singapore and there has not been a lot of attention directed to it, primarily because the EU has not yet released the specifics of how it will be applied. An expert from the steel industry in Singapore says that, although some people in the sector are talking about the EU CBAM, it is still new territory. According to experts in the government, they are monitoring the EU CBAM closely and working with the Ministry of Trade and Industry in Singapore to consider how the country will be affected. The topic was mentioned in discussions with the EU about the EU — Singapore FTA in late 2020, though it was not the focus of the discussion and the EU did not give any additional specifics.

Experts agree that the perception of the EU CBAM in Singapore will be influenced by Singapore's similar environmental goals as well as its own concerns about competitiveness and carbon leakage, having implemented its own carbon tax.

LL In Singapore, we understand what underpins this CBAM, which is the competitiveness issue. Singapore is the first country among the ASEAN countries to implement a carbon price and we have similar competitiveness concerns with our regional competitors. So we sympathise with the EU. We want to see how we can nudge our regional competitors to at least apply a carbon price. If the EU CBAM is designed properly, it could potentially be something useful. (Assistant Director) **33**

Many experts in Singapore, including those in the government and the steel industry, readily acknowledge the environmental drivers of the EU CBAM. They recognise the same issues as when the carbon tax was introduced in Singapore and believe that the industries need protection from carbon leakage and that companies underperforming on their CO2 reduction measures need to be spurred on by mechanisms such as this.

Several experts mention that they believe that the EU will retract its plans to introduce the measure if global climate ambitions increase and other countries step up their carbon reduction commitments, and some experts reference comments from the European Commission to support this belief. There is therefore a sense in Singapore that it should wait to see if the measure will be implemented before making concrete plans to prepare for it.

Singapore's primary concern about the EU CBAM is that it should be fair in its introduction, and specifically that it is WTO compliant.

LE Both the EU and Singapore believe very strongly in adhering to the rules, such as those from the WTO, The General Agreement on Tariffs and Trade, and the UN. This is certainly true for a small country such as Singapore, which plays by multilateral rules as much as possible because it benefits a lot from them. The government will be watching closely to ensure that the rules are adhered to. (Research Fellow) **55**

Experts anticipate that there will inevitably be some backlash but maintain that if the measures are fair and efficient, much of the resistance will be abated. They believe that if the EU can make the CBAM WTO compliant, there will not be a high degree of resistance from Singapore and in fact, Singapore is likely to work with the EU to achieve success.

Although Singaporean experts do not perceive that there will be a high degree of resistance from Singapore to the EU CBAM, they are concerned about the unilateral nature of its introduction and note that there is a perception in the country that other measures may better achieve the EU's stated goals. For a lot of Singaporean stakeholders, the EU has a reputation for being strongly value-driven, but to the point that their values are externalised without strong regard for whether others share their values or have the means to adjust to new regulations. The Singaporean Prime Minister made a speech at the G20 meeting urging countries to avoid protectionism in light of COVID-19, and Singapore strongly supports the EU using diplomacy and multilateral measures before resorting to unilateral CBAMs.

Expert insights: How much will the EU CBAM affect Singapore?

Some experts believe that the EU CBAM will have a significant effect on the trade between the EU and Singapore because they are close

trading partners. As Singapore's third-largest trading partner, a small increase in the cost of exporting Singaporean goods to the EU could amplify the effects on its economy. Experts note that smaller companies would be particularly affected by this, whereas larger companies may be able to absorb the added cost. Although they are not generally thought to be the first goods that will be targeted, experts predict that, if electronics or pharmaceuticals were included in the EU CBAM, this would have a big impact on Singapore's exports to the EU. Electronics especially are one of the pillars of the Singaporean economy, and many are exported to the EU. Experts also refer to the large number of goods that are processed through Singapore as a transport hub. One expert suggests that Singapore could be heavily impacted if the country from which it is sourcing products has not determined a carbon price, thereby leaving Singapore to determine the price for them.

Depending on how the EU CBAM is implemented, one expert suggests that countries could use Singapore as a conduit to avoid being taxed on their exports to the EU if there is an exemption for Singaporean products because of the FTA or because of equivalence based on their carbon tax. If the country of origin is not properly accounted for, this could undermine the environmental efforts of the mechanism.

Other experts, including one from the manufacturing sector, did not foresee a major impact resulting from the EU CBAM. They suggest that Singapore's commitments to the climate agenda will negate many of the negative effects of a CBAM. Because Singapore is pushing the same climate agenda as the EU,

the country is less likely to be heavily affected by the measures than its ASEAN competitors and could therefore become more competitive in its exports to the EU.

L When it comes to environmental policy tools, I think you can count on Singapore to have an army of researchers and policymakers to investigate them and try to make the most of a tough situation. (Research Fellow) **33**

Some experts believe that the EU CBAM could adversely affect trade agreements at first, but within 3–5 years will prompt a positive upward trend toward better trade ties between countries and better carbon accounting. They see it as a firm step toward climate action being taken.

Many experts mention that the effects of the EU CBAM on Singapore are still hard to predict. Singapore is heavily reliant on trade and changes to global trade flows can have major effects on the country. However, without knowing the details of the mechanism, experts cannot say what these effects might be. Experts are also seeking clarification on the possibility of exemptions from the mechanism for Singaporean goods based on their national carbon tax. Although the carbon price in Singapore is significantly lower than the carbon price in the EU, they note that it is applied to all goods and therefore believe it could be considered equal. One expert suggests that Singapore will, by necessity, need to wait and see how their other trading partners react to the measure before they can predict the country's reaction. They mention that Singapore is not in a position of sufficient power to influence these trading partners and it could be difficult to reconcile differing trade rules as a re-exporter.

An expert from the government says that, although government ministries and private companies in Singapore have begun considering and discussing the EU CBAM, they are not yet preparing because the design of the mechanism has not yet been made clear. However, experts agree that stakeholders in Singapore are paying attention to the issue and will be ready when the EU CBAM comes into effect.

When asked whether the EU CBAM could accelerate climate action in Singapore, experts believe that it could inspire Singapore to move faster but that it will not change its overall plan. They believe that Singapore will continue with its climate action ambitions with or without the EU CBAM.

LCThere is a difference between a nudge and a shove. Singapore is prepared to move forward on climate action, and we have planned some of the steps to progress. We are confident that the measures we have prepared can be achieved, so for Singapore, who is already walking this path, the EU CBAM could nudge us from a walk to a run. This is not a bad thing; we want to do this, and we are capable of doing this. For some countries around us, it will be more like a shove, as they are not yet prepared. (Associate Professor) **T**

One expert suggests that the introduction of the EU CBAM could shape a regional carbon market in Southeast Asia. Although a regional carbon market is not at the forefront of planned measures, it is something that some stakeholders in Singapore believe would be suitable to implement. If this could be orchestrated and harmonised with the EU CBAM requirements, it could promote much freer flow of trade.

Expert insights: How should the EU approach the EU CBAM?

Experts in Singapore do not identify a great number of differences between the options (Section 4.2) in terms of the ways that they

would affect Singapore. Most important to Singapore is compliance with WTO rules, and experts identify different options as being preferable, largely based on this criterion. Some see Option A as the most likely to meet WTO principles, while others see Option B as the most fair and unbiased. Exemptions on comparably taxed goods was also a driving factor for Singaporean experts in their preference for one method over another.

Many Singaporean experts, however, mention that they do not believe a CBAM to be the best approach for the EU to pursue at this time and say they do not believe that any of the three options are suitable.

L Having a carbon price would be good and it will catalyse climate action at a global level, but a CBAM is a unilateral measure. If we can achieve a global carbon price, for example through carbon trading, or if we can pursue multilateral cooperation under the WTO and UNFCCC, then perhaps unilateral action would not be needed. (Director) **J**

Experts also suggest a positive trade agenda where the trade in green goods and services is promoted and trade barriers removed, rather than charging for high-carbon goods. Experts note that Singapore would prefer a multilateral solution because of the risks of the countries that are affected by the EU CBAM responding with trade restrictions, which could upset global trade.

Expert insights: How can the EU ease the transition and make the EU CBAM more acceptable to Singapore?

Experts in Singapore value fairness, conformity to existing rules, transparency, and efficiency, and these must be adequately

addressed if they are to accept the EU CBAM. It is important that the mechanism is not perceived as protectionist, and Singaporean experts stress that the onus is on the EU to demonstrate this. Experts point to issues such as double taxation as a major obstacle for proving a CBAM's legality if not accounted for.

LL Rather than focusing on the details, the EU should set out a number of principles outlining the reasoning behind the EU CBAM: how it will be used; what assurances they can give that the measure is legal; and what good can come from the proceeds of the revenue. (Associate Professor) **33**

Singaporean experts believe that the most acceptable use for the money generated by the EU CBAM would be to help developing countries with their carbon reduction measures. One expert notes, however, that this will cause issues as the revenue generated from developed countries will be used outside of their own country and for a country such as Singapore, which is classified as developing but is highly developed in many ways, this would be a grey area.

Experts stress that if the relevant stakeholders in Singapore are given enough time to understand the mechanism and how to engage with it efficiently, they will be accepting of it. Having clear, understandable communication from the EU on how the EU CBAM will affect companies will go a long way toward alleviating concerns in the country.

Experts mention that the EU CBAM should start with small ambitions, as did the Singapore carbon tax. Starting with industries and those sectors with very high carbon content will avoid uncertainty and resistance. They suggest that bringing industry into the conversation from the outset will also help the measure to be accepted.

South Korea

Overview — South Korea

Key background points	 South Korea has the second-largest emissions trading scheme (ETS) in the world, after the EU. In December 2020, South Korea announced that it planned to achieve carbon neutrality by 2050. South Korea is a major exporter, and the EU is its third-largest export partner.
Key expert insights	 Knowledge of the EU CBAM is widespread but is relatively shallow and theoretical rather than practical. Most South Korean stakeholders have not yet started preparing for the EU CBAM, but it is being discussed widely and the government is poised to act when further details emerge. South Korea's ETS already has an international component but may be too complicated to directly link with the EU ETS to avoid the EU CBAM. There is unlikely to be heavy resistance in South Korea to the EU CBAM and there are no major efforts that need to be taken to make the country more accepting of the measure. The EU CBAM could encourage South Korea to increase its climate action, but most likely only in conjunction with other factors.

12.1. Background – South Korea's carbon landscape and trade with the EU

The carbon landscape in South Korea

South Korea continues to rely heavily on coal but is making progress with its decarbonisation efforts. In July 2020, in response to the COVID-19 pandemic, the Moon Jae-in administration announced a Green New Deal which outlines plans to invest in new green infrastructure, ramp up the supply of clean energy, and electrify the transportation sector. Critics of the Green New Deal note that South Korea did not outline plans for a national carbon tax and that the country continues to finance coal plants domestically and internationally. South Korea's percentage of renewables is low, at around 7 percent. In South Korea, the Ministry of Foreign Affairs and the Ministry of Environment are supportive of environmental policies, while the Ministry of Industry and Energy, along with the private sector, are vocally opposed to climate action.

Although South Korea does not have a carbon tax, it introduced a comprehensive, wide-ranging emissions trading scheme (ETS) in January 2015. The South Korean ETS (K-ETS) is the second-largest in scale after the EU ETS and covers over 600 of the country's top emitters, which account for approximately 70 percent of its national greenhouse gas emissions.⁵⁰ The first phase of the K-ETS offered 100 percent free allocations, though this has been decreased to 90 percent in phase 3 which runs from 2021–2025. Within the framework of the K-ETS, the South Korean government allows the use of international offset credits up to 5 percent of the entity's emissions submissions.⁵¹ The country also has a transportation, energy, and environment tax, which puts a price on gasoline and diesel.

In December 2020, President Moon announced a plan to reach carbon neutrality in South Korea by 2050 and expressed an intent to increase the country's 2030 goals. Experts interviewed for this study expressed scepticism about reaching this target, given the government's continued emphasis on coal and its commitment to phasing out nuclear energy production. Given the consistently increasing energy demands in South Korea and the current small proportion of renewable energy in the country's total energy mix, they see this goal as overly optimistic. The Ministry of Strategy and Finance has announced their intention to achieve these decarbonisation goals through clean hydrogen energy and announced that the government is considering implementing a carbon tax or a diesel tax, but that details of these measures are not yet available.⁵²

In the private sector, an increasing number of companies have signed up to RE100 (a climate group in which companies pledge to use 100 percent renewable energy). Companies that want to commit to using 100 percent renewable energy have been hindered in the past by the monopolistic, state-run Korea Electric Power Corp. (KEPCO). KEPCO has not previously made it possible for companies to dictate the source of their energy and has prevented them from signing up to RE100. Since January 2021, KEPCO has allowed South Korean electricity consumers to specify that they are purchasing electricity generated solely from renewable energy sources.⁵³

South Korea's trade with the EU

South Korea is one of the top export countries in the world and exports account for 40 percent of the country's gross domestic product (GDP).⁵⁴ Its main exports are electrical machinery and equipment (28% of total exports), nuclear reactors, boilers, machinery, and mechanical appliances (13%), and road vehicles (12%). The EU is South Korea's third-largest export partner, and South Korea primarily exports machinery and appliances, transport equipment, and plastics to the EU.⁵⁵

The EU-South Korea free trade agreement (FTA) has provisionally applied since July 2011 and was formally ratified in December 2015. It was the first FTA between the EU and an Asian country and addresses non-tariff barriers to trade, specifically in the automotive, pharmaceutical, medical devices, and electronics sectors.⁵⁶

12.2 South Korea's perception of the EU CBAM

Expert insights: What are the overall perceptions of the EU CBAM in South Korea?

Experts agree that the level of awareness of the EU CBAM in South Korea is quite high. They note that the mechanism is mentioned by the

media and that it is a topic of discussion among relevant stakeholders in the environmental sector as well as the steel, cement, and automotive sectors. In November 2020, President Moon described the EU CBAM as a "fait accompli" and said that it would cause international economic regulations and the trade environment to change rapidly. Although knowledge of the topic is widespread, experts note that it is often theoretical and relatively shallow, including at a parliamentary level.

LL In Korea, while there is a good level of understanding about the theoretical aspects of CBAMs, knowledge is lacking at the practical level. I am sure that we could find many experts who could discuss the topic but practically, there are many tricky issues that we need to further consider, and in-depth knowledge of the EU CBAM requires very sensitive political understanding of the issues between the EU and Korea, and answers can be found only by collaboration between the two. (Director) **33**

Experts in South Korea report that there are some concerns about the EU CBAM, but overall, they do not expect a high level of pushback from stakeholders in the country. Experts suggest that the South Korean industry may push back against the measure where possible, but they believe that if the mechanism is scientifically based, fair, and transparent, it is unlikely to meet much resistance. One expert mentions that when the topic was being discussed in 2015, people did not perceive it as a protectionist measure and that the purpose was believed to be for enhancing climate action, but the mechanism has been perceived more as being protectionist since then. Several experts say that they understand and agree with the EU's reasoning for the EU CBAM. They see the measure as important and necessary to prevent carbon leakage. Some experts say they are confident that the EU can implement the EU CBAM within the rules of the WTO which would avoid a lot of backlash against the measure.

LL South Korea will probably be in favour of the EU CBAM. The industries may be against it, but policymakers are not likely to resist it because there is a diplomatic trend or flow that is moving in the direction of climate action, and if a country does not follow this trend, it makes them look bad. South Korea does not want to be excluded from global trends. (Adjunct Professor) **99**

Some experts, however, do not see the EU CBAM as benign and believe that it is not in the spirit of the Paris Agreement. One expert cautions that industry stakeholders who may disagree with the mechanism have considerable political influence and says that these stakeholders have begun looking at the measure to see the potential impacts that it may have.

Expert insights: How much will the EU CBAM affect South Korea?

South Korea produces a high percentage of its electricity from coal. Because of this, and the large proportion of South Korean exports

that go to the EU, some experts foresee that a price on carbon could be a significant burden for South Korean industry, especially the steel industry, automobiles, and petrochemicals. Many experts, however, mention that the effect of the EU CBAM would depend heavily on how the mechanism is implemented, specifically whether the implicit carbon prices in South Korea are considered equivalent to the charge in the EU so that goods exported from South Korea to the EU would be considered to have already paid a comparable carbon tax and not be charged.

LE I can imagine two possibilities. One is that there is no impact to South Korean exports because Korea has implemented a similar ETS to the EU. Because of South Korea's similar mitigation policy and carbon pricing, the EU may not apply additional costs on South Korean products. The second case is that even though both regions are doing their own carbon pricing, the EU might levy a carbon border tax on Korean products, which would negatively affect Korean heavy industry and carbon-intensive exports of commodities. It will depend on how the two regions can negotiate a proper mechanism for the carbon border adjustment between them. (Senior Specialist) **33**

Some experts are confident that South Korea's K-ETS would be considered equivalent to the EU's and would exempt the country from the adjustment because of the similar price per tonne between the two. They suggest that although there are differences, these are not major and that the two systems are overall quite similar. Other experts do not believe that the K-ETS is strict enough to be compatible with the EU ETS because of the high number of free allocations. They believe that there are large differences between the mechanisms that will not allow for easy comparison and that the cost per unit of CO2 in South Korea would be much lower than the price in the EU.

Experts identify that South Korea will need to make internal changes to prepare for the EU CBAM, though they believe that the government, when it has received the necessary information on the details of the mechanism, will prepare thoroughly to try to avoid the adjustment. They are confident that the government will fund research into how best to respond to the EU CBAM within the next year and will begin introducing measures so that it is ready to deal with the mechanism.

Some experts suggest that South Korean companies have already begun to react to the incoming EU CBAM. Companies, especially those that already export to overseas markets, have been putting pressure on KEPCO to enable them to sign up to RE100 and experts suggest that this is partly influenced by considerations around remaining competitive in a market that includes exporting to the EU once the EU CBAM is introduced.

Experts agree, however, that while discussions are ongoing on the topic and some companies have begun taking steps to respond to the EU CBAM, preparation has been minimal, if not completely absent overall, largely because the details of the measure have not yet been released. An expert from the steel industry says that stakeholders have discussed the EU CBAM and its objectives but cannot prepare for the mechanism without first knowing what form it will take. One expert described the current level of engagement as "discussion and brainstorming" but agreed that more details were needed before planning or action could take place.

GG From the South Korean industry perspective, I think everyone is just waiting to see what the actual outcomes of the EU CBAM talks are to see whether they will be affected, as witnessed in major trade associations and meetings. This reaction is typical of South Korea; the country has been very reactive in the trade war, watching how things unfold and then trying to readjust to survive. That is what has been going on in the past three years. (Adjunct Professor) **9**

When asked if the EU CBAM could encourage South Korea to improve its climate commitments, several experts see ways in which the mechanism could have an impact but caution that it is unlikely to have a major effect. They believe that it could be a contributing factor toward climate action but will not drive change in other countries on its own. One expert mentions that if the EU CBAM were to influence the US to bring in a similar measure, South Korean companies would be required to change their production style to adapt. Another expert suggests that the introduction of a CBAM by other markets that South Korea trades with in large volumes such as the US, Japan, or China, in addition to the EU ETS, could encourage South Korea to implement its own CBAM.

LL The carbon border adjustment mechanism may work as a catalyst for countries to realise that if they don't enable companies to have a carbon-free supply chain, they're going to lose access to markets or they're going to pay a penalty placed on their products when they enter the European market. (Director General) **33**

Some experts mention that the introduction of the EU CBAM could give South Korea momentum to pursue its 2050 net-zero carbon goals if there is a lot of bilateral negotiation around the measure. Others mention that it could act as a stimulus for South Korea's electricity policy, which they describe as in need of reform, or spur the government to adopt an explicit carbon tax in place of its complicated transportation, energy, and environment tax.

Expert insights: How should the EU approach the EU CBAM?

Experts have diverse opinions about which of the three options would be the best for South Korea (Section 4.2). Many stress that they

favour options that do not impose an adjustment on goods that are being charged at an equivalent rate in the country of origin to avoid double taxation. Several experts believe that stakeholders in Korea would be more likely to accept Option A because they would perceive it as non-discriminatory. Experts note that the other two methods will cause friction between the government and large companies, as the government will not easily be able to convince South Korean companies that those in the EU are experiencing an equivalent charge on their goods. Expert opinion differs on whether Option C would allow for the EU to link its ETS with South Korea's in a way that would allow for the easy trading of certificates. Some experts suggest that the K-ETS was designed specifically so that it could be linked to other trading markets, but others believe that the process of linking them is premature or would be very complicated. One expert who worked on the introduction of the K-ETS believes that Option C would not be the most beneficial for South Korea because joining the two ETS systems would be too complex.

Some experts believe that none of the three options are suitable methods for the EU to pursue climate action, and that the money and effort of implementing the EU CBAM would be better used by directly helping the developing countries that need assistance with their decarbonisation efforts. They stress that countries are working on measures to try to introduce climate action and that the EU CBAM will dilute these efforts.

Expert insights: How can the EU ease the transition and make the EU CBAM more acceptable to South Korea?

Because experts do not predict a large degree of resistance from South Korea to the EU CBAM, they do not see the need for major

initiatives to assuage negative feelings within the country. It is seen as important to South Korean stakeholders that the measure be fair and transparent and discussed with South Korean industry stakeholders before the EU finalises anything. They stress that a public consultation period is not sufficient and that South Korean industries will need time to become familiar with the measures, communicate with other sector stakeholders, and prepare for the implementation of the EU CBAM. Experts also express a desire for the EU to start small, with easily targeted commodities. Experts see a need for the EU to compare its system with that of South Korea so that it can establish the similarities between the two and identify common ground.

One expert suggests that the EU use the Partnering for Green Growth and the Global Goals 2030 summit as a platform to convince other countries to engage in this area. They note that the EU CBAM has not been raised as a key area, but the issues that it covers are very much at the heart of the agenda.

Thailand

Overview –	- Thailand
	- manana

Key background points	 Chailand is a very export-heavy economy, with 60 percent of the country's GDP made up of exports. Chailand has a voluntary emissions trading scheme but does not have a carbon price. Calks between the EU and Thailand to implement a free trade agreement stalled in 2014 but are restarting in 2021.
	 The EU CBAM will not have a major impact on the Thai economy. Thailand will not resist the EU CBAM strongly, and the government may use it to encourage businesses to adopt carbon emissions reporting mechanisms or CO2 emissions reductions measures. There is a concern in Thailand that other Mekong countries will be
Key expert insights	 favoured by the measure compared to Thailand, affecting their competitiveness. Thai stakeholders will see the mechanism as administratively complex and may struggle to interact with it.
	Thailand will have a comparatively easy time meeting the challenges of the EU CBAM but is likely to do so in a reactive manner.

13.1. Background – Thailand's carbon landscape and trade with the EU

The carbon landscape in Thailand

Thailand is heavily reliant on fossil fuels for its energy needs but is showing promising signs of decreasing energy and CO2 emission intensity. In 2013, the Thailand Greenhouse Gas Management Organisation (TGO) introduced a voluntary emissions trading scheme (Thailand V-ETS). In the first two phases, this V-ETS tested the measurement, reporting, and verification of cement, pulp and paper, iron and steel, and petrochemicals (phase 1) and petroleum, glass, plastic, food and feed, and ceramics (phase 2), with phase 3 set to begin in 2021. The Thai government is currently in the process of developing draft laws for the implementation of a full ETS.⁵⁷ Since 2016, Thailand has had a vehicle excise tax which has levied a tax based on the emission rate of a vehicle's CO2. Thailand also has a levy on diesel, liquefied petroleum gas, and natural gas liquids. Reports suggest that these levies are due to be updated to provide stricter penalties on CO2 emissions.^{58 59}

Experts interviewed for this study say that the Thai government is considering a goal to reach net zero carbon emissions and that the Office of Natural Resources and Environmental Policy and Planning (ONEP) is studying long-term emissions to determine when this would be feasible. Experts expect the Thai government to publish their long-term climate plans in 2021 and to outline the measures the country will take to fulfil its commitments under the Paris Agreement. These measures are expected to address mandatory reporting from companies on their CO2 emissions but are not expected to outline plans to introduce a carbon tax.

In 2020, Thailand updated its nationally determined contribution (NDC) and committed to a 20 percent reduction in greenhouse gases compared with a "business as usual" scenario without international help, or a 25 percent reduction with adequate and enhanced access to technology development and transfer, financial resources, and capacity-building support.⁶⁰ Renewables currently make up approximately 10 percent of Thailand's energy mix, and the adoption of renewable energy has been growing in recent years.⁶¹

Thailand's trade with the EU

Thailand is very dependent on exports, which accounted for approximately 60 percent of the country's GDP in 2019.⁶² Thailand's manufacturing sector, including automobiles, electronics, and food processing, is to a large extent export-oriented, so the country is vulnerable to global and regional economic changes.⁶³ The EU is Thailand's fourth-largest export partner after the USA, China, and Japan, and Thai exports to the EU mostly comprise machinery, electronics and transport equipment, miscellaneous manufactured articles, and food products.⁶⁴ Negotiations for an EU-Thailand Free Trade Agreement (FTA) were launched in March 2013 but were put on hold in 2014 following the military takeover in the country, but are set to resume in 2021.

13.2 Thailand's perception of the EU CBAM

Expert insights: What are the overall perceptions of the EU CBAM in Thailand?

Experts identify varying levels of knowledge and awareness about the EU CBAM within Thailand. Some experts suggest that the Thai

government and the private sector are not well informed about the topic and also suggest that those in the private sector who are aware of it do not consider it to be a high priority. There are several possible reasons that experts offer for why the EU CBAM is not well-known or understood in Thailand. They note that Thailand has been focusing its recent attention on updating its NDC and lowering its own carbon footprint, and that private entities have been focusing more of their attention on measures such as the EU ban on palm oil. Although Thailand is not a major exporter of palm oil compared to Indonesia or Malaysia, Thai companies are concerned about straightforward measures such as this rather than undefined and highly technical measures such as the EU CBAM. Similarly, in 2015, Thailand received a "yellow card" for its seafood industry from the European Commission, warning it about inappropriate working conditions and fishing practices. This was rescinded in 2019 but remains a more visible topic for Thai exporters than greenhouse gas emission accounting.⁶⁵ Experts also note that many policymakers in Thailand believe that the EU CBAM will not have an effect on them, or that they cannot do much to change the details of it, so they perceive it only as a technical adjustment that will not have an impact on their exports.

Experts say that the topic of the EU CBAM was discussed during talks in late 2020 between the EU and Thailand about the EU-Thai FTA. Although the issue is being discussed, experts note that within government, only a few agencies are paying attention to it, and in-depth knowledge is limited.

However, some experts note that there is a relatively high level of knowledge among climate-focused Thai stakeholders about the EU CBAM. They say that the prospect of the EU adopting a CBAM is not new and that discussion around the topic has been ongoing for some time, albeit not necessarily at a deep level.

LL We have been talking about the possibility of EU having this carbon border adjustment since around 2005 through 2007. After the Kyoto Protocol and the EU ETS, we started to discuss the possibility of the EU CBAM. I think we have been somewhat prepared since then, so the recent re-emergence of this topic wasn't a surprise among climate change scholars or experts in Thailand. When the EU announced their intention to pursue the CBAM again, discussion resumed around the topic, and these have slowed down because of COVID-19. (Research Associate)

In general, experts believe that the EU CBAM is fair (depending on the method of implementation) and acknowledge the need for such measures. They say that these views are also held by many other stakeholders, including at the government level. Several experts see the EU CBAM as aligning with the goals of the Paris Agreement and some predict that the mechanism will be positively perceived in Thailand. They say that Thailand may even welcome the EU CBAM if the measure complements the country's policies and goals. Experts describe the Thai government and many Thai businesses as likely to "go with the flow" in relation to climate change measures and they do not foresee a high level of resistance to the mechanism.

While many might see the EU CBAM as a positive step, experts allude to a feeling among some stakeholders in Thailand that the onus is on developing countries to take more of the burden for climate change mitigation measures and suggest that the mechanism does not align with this. They also express

reservations about the highly technical aspects of the mechanism and believe that Thai businesses will push back against this. Experts predict that businesses and many government officials will likely wait until the measure is implemented before reacting to it.

LE I think from a policy perspective within Thailand, whatever is chosen by the EU is unchangeable. The country will deal with it within the current preferential system of excises and duties. It hasn't yet impacted policymakers who are grappling with larger issues about exports to the EU so I think if the EU CBAM was brought up among stakeholders in Thailand now, people would not see the topic as worth discussing. (Director) **33**

One expert mentions that there could be some backlash in Thailand against the ever-growing number of measures that Thai exporters must adopt to export goods to the EU, including human rights obligations, governance obligations, and biodiversity loss mitigation obligations, and the introduction of another obligation could be seen as excessive. They expect that opponents of the EU CBAM will point to the exemptions to the EU ETS that have been in place since the adoption of the system and say that the EU should focus on these domestic issues before imposing charges on other countries.

Experts express concern about the implementation of the EU CBAM on Thailand's regional competitiveness if other Mekong countries are given dispensations while Thailand is not. They also believe that the EU's stated goal to adopt the mechanism in 2023 is too short of a timeline for Thai stakeholders. They point to the country's lost progress on climate goals due to the COVID-19 pandemic and believe that it would take the country three to five years to be ready for the mechanism's implementation.

Experts predict some challenges for Thailand in its ability to react to the EU CBAM. Thailand collects its carbon emissions data in a different way to the EU and the method is not as comprehensive. If the EU requires information to a greater level of detail than Thailand is used to, the country will struggle to adapt. Although Thailand has some experience with its V-ETS, there are readiness gaps that will have to be filled before it would be able to react to the more complicated EU CBAM.

Experts anticipate some pushback from the private sector, but also note the vocal NGOs in the country who they predict will oppose the measure because they will perceive it as being likely to negatively affect Thai producers and the economy. Many NGOs in Thailand primarily focus on the well-being of local people and are active in the climate change space where they advocate the rights of the Thai people.

Expert insights: How much will the EU CBAM affect Thailand?

Overall, experts do not see the EU CBAM as having a major impact on Thailand. Some experts see Thailand's level of readiness for a

measure such as this as high because of its past work on climate change mitigation measures. They say that Thailand has been working to mitigate climate change since the early 1990s and compared to the other Mekong countries which will have a hard time adapting, Thailand will have the capacity to react and will be comparatively unaffected. They also suggest that Thailand's manufacturing sector would not likely be the recipient of harsh measures. **LE** Very little of the manufacturing sector produces direct emissions from their production; most of the sector uses electricity. Furthermore, most of the high-carbon emission industries do not export their goods but rather produce them for the Thai market. We do not export chemicals or steel to the EU in large quantities so we do not expect a very large impact on our exports. (Associate Professor) **55**

Experts also note that Thailand does not have a shortfall of energy as do other countries in Asia such as India, and it does not need to fill its energy requirements from any source available. Experts therefore suggest that the country can focus on refinement and adopting alternative energy sources which will help it align with the EU requirements. One expert predicts that the EU CBAM could indirectly impact Thailand's imports by attracting lower-carbon goods.

LL If the EU starts to enforce the CBAM, then carbon-intensive industries such as steel from China or petroleum from Russia, for example, will have to look for alternative markets for export. Thailand will still have a high demand for steel so we might need to import "dirty" steel instead of "clean" steel, which will be sent to Europe. If this becomes the case, Thailand may have to look into the possibility of implementing our own CBAM. If the dynamic of international trade forces us to buy things that are more carbon intensive, we may have to do that to protect our own industry. (Research Associate) **33**

Experts in Thailand do not see a great deal of preparation in any sector for the EU CBAM. They mention that some companies are adopting internal carbon pricing but suggest that this had been ongoing before the announcement of the coming EU CBAM and was not in response to it.

When asked if the EU CBAM will encourage Thailand to adopt policy changes for CO2 reduction, experts were somewhat optimistic. Many experts suggest that the EU CBAM will help Thailand transition to a greener economy. One expert, who works closely with the government, welcomed the measure and says that any measures from an external source such as the EU or UNFCCC are useful for driving change in Thailand and that Thailand's climate action is often driven by external forces. They say that the mechanism can be used by government and pro-climate stakeholders to convince industry to adopt greener practices, as there is currently not enough incentive for them to do so. With no binding legislation in the country to adopt low-carbon practices, industry has traditionally been reluctant to adopt them. Companies argue that Thailand is a Non-Annex I country for the UNFCCC and therefore is not required to reduce carbon emissions.

Experts believe that the EU CBAM could also influence Thailand's approach to carbon pricing. They suggest that the introduction of the mechanism could encourage the country to revise its voluntary ETS into a compulsory ETS. The EU CBAM could provide the Thai government with a way to convince companies to accept the compulsory ETS, which they have so far been unwilling to do. Experts also believe that Thailand could use this opportunity to model its data collection practices on the EU's and by doing so, it could improve its CO2 emissions data collection practices while mitigating some of the potential negative impacts of the EU CBAM.

Expert insights: How should the EU approach the EU CBAM?

Experts in Thailand differ in their opinions as to which of the measures would be most beneficial for Thailand. Some experts believe

that Option C would be the most beneficial for stakeholders promoting climate change mitigation schemes in Thailand. They value the incentive that it would provide for companies to take stronger action on carbon emissions reduction compared to a tax that would be passed on to the consumer. Others suggest that because of their fixed prices, Options A or B would be fairer, easier to implement, and would make it easier for Thai business to plan and adapt to the measure, thereby having less of a negative impact on the economy.

Expert insights: How can the EU ease the transition and make the EU CBAM more acceptable to Thailand?

Experts note the importance of supporting countries while they adapt to the EU CBAM. They mention that the revenue generated from the measure should be used to

support developing countries, rather than be put back into internal EU affairs, for example by contributing to the Global Climate Fund which would also make the EU CBAM appear less protectionist.

Experts also mention that the EU CBAM should allow for differentiation between products and/or countries because the different purchasing power in different countries would affect the level to which they are impacted. Experts mention that it is important for Thailand to be fairly treated in relation to its neighbours, as they perceive that the mechanism could damage relations between the countries if it increases competition, and therefore hostility, between the countries. To achieve this, experts stress that bilateral negotiations and full transparency are vital in the planning and implementation of the mechanism.

Experts stress the need for a grace period in Thailand with time to adjust to the EU CBAM because they perceive the current readiness as low and believe that the mechanism should be introduced in stages. They note that for Thailand, if the EU CBAM is introduced on goods that Thailand has already targeted in its V-ETS, these sectors would have more experience of dealing with the measures and would be better able to handle them.

Experts believe that there should be an incentive for Thai companies to engage with the mechanism rather than just have a deterrent. Offering incentives for reducing companies' carbon intensity would encourage them to do so and help the overall goal of reducing carbon emissions. Experts mention the importance of keeping the mechanism simple enough for stakeholders to understand and engage with.

LL Initially, the Kyoto Protocol was very effective, but when it became more about mathematical modelling, clean development mechanisms, and joint implementation, it became more and more difficult to digest. This had a fatiguing effect on many countries. It is important to build capacity across the whole chain with recognisable results. Thailand cannot achieve this independently, so the EU needs to make sure the mechanism is understandable to keep stakeholders energised. (Regional Coordinator) **JJ** Some experts mention that the messaging surrounding the mechanism is important and that the EU should frame the EU CBAM in a way such that businesses in Thailand can see the long-term stability, resistance, and economic gains. Awareness raising will also be helpful for people who do not understand the measure. Engaging NGOs is important because they are likely to see this as negatively impacting the Thai public and they will likely oppose it for that reason.

Expert Insights: Conclusion

he perceptions, reactions, and impacts (both current and anticipated) of the planned EU CBAM on different countries in Asia Pacific depend on variety of factors and differ significantly by country. A country's economic development level, climate action progression level, trade volume with the EU, and the types of commodities traded with the EU will have an impact on how much the EU CBAM will affect each country. A country's past experiences with the EU and its past national experiences with carbon pricing will have an influence on how the mechanism is perceived in each country. The steps that the EU should take to mitigate the negative impacts of the EU CBAM and make the mechanism more palatable are broadly similar across all eight countries in this study.

14.1 Perceptions

While many experts interviewed for this study could see the positive benefits of the EU CBAM as well as the necessity for such a measure, they believe that it will be widely perceived as protectionist and unfair.

Some experts believe that the concept of a CBAM is in opposition to the "common but differentiated responsibilities and respective capabilities" principle within the United Nations Framework Convention on Climate Change (UNFCCC), which acknowledges that developed countries can make greater steps to address climate change compared with developing countries. Similarly, they say that the mechanism is contrary to the "bottom up" approach and voluntary nationally determined targets of the Paris Agreement. These experts also say that the EU CBAM violates World Trade Organisation (WTO) rules on protectionism. They see the EU CBAM as an imposition of European ideals on other countries and do not believe there is a way to align the measure with these international rules and regulations. Experts note that this is likely how the EU CBAM will be perceived by many non-EU nations, especially those that are developing.

In contrast, other experts note that some stakeholders will see the dangers of carbon leakage and support measures that will further the climate agenda globally. They believe that the EU will be able to align its CBAM with international regulations in such a way that it will not disadvantage developing communities and could help other countries reach their climate goals. Experts see certain like-minded governments as likely to acknowledge this, especially those that may want to introduce a CBAM of their own, or those who see that they may be able to gain a competitive advantage by producing greener products than their competitors.

14.2 Impacts

The direct impacts that the EU CBAM will have on a country are heavily dependent on whether that country exports carbon-intensive material to the EU. Countries for which the EU is not a major export partner, or those that trade in goods and services that are not carbon heavy (e.g., Australia) will not experience heavy direct impacts, compared to countries such as China, that export steel and other high-carbon goods to the EU in high volumes.

The level of impact that the EU CBAM will have on a country will also depend on the ability of a country to react and adapt to the measure. Experts note that companies in developing countries such as Indonesia are unlikely to have the resources or capacity to avoid negative consequences from the measure. Developing countries will suffer from having less-advanced climate policies if countries with equivalent carbon pricing are exempt from the EU charges. Many experts see this as an unfair disadvantage to developing countries and believe the EU should make efforts to minimise these effects. For some countries, such as India or Japan, there will be a split between low carbon producers that are able to adapt to, and possibly even benefit from, the EU CBAM and others that will not.

Experts agree that while some governments and industries are in the initial stages of preparing for the EU CBAM, most stakeholders are waiting for the details of the measure to be announced before turning their full attention to it. In many cases, experts indicate that industry is ahead of government in their preparation. They note that many carbon intensive industries see the EU CBAM as a step towards inevitable decarbonisation measures and even if the mechanism does not directly affect them, they anticipate that similar measures are incoming that will require adaptation.

Some experts do not believe that the EU CBAM will have an influence on the climate policy of other countries, while others believe that it could be a driver for quicker transition towards climate action for countries that already have a decarbonisation strategy. They say that the EU CBAM will not force these countries to act or to change their decarbonisation plans drastically but may encourage them to move faster. The EU CBAM could also shape the way in which some countries (e.g. Indonesia) introduce their carbon pricing measures. For countries that may want to implement their own CBAM, a successful implementation of the EU CBAM could allow for an easier adoption of the mechanism.

14.3 Mitigation and Communication

In order for the EU to make the EU CBAM more acceptable to countries that will be affected, experts are largely in agreement about the steps that need to be taken. Many experts caution that if care is not taken while introducing the measure, the negative impacts of the EU CBAM could outweigh the positive impacts. Experts identify past initiatives from which the EU can learn when considering how best to approach the measure.

- Experts often refer to the EU's 2008 directive on aviation emissions (Section 4.1) as a caution to the EU as other countries may be able to block the measure and severely hinder its effectiveness.
- Australian experts point to the fallout from their own carbon pricing initiatives as a caution to how a failure to successfully implement planned climate measures can have long term negative effects on carbon goals and cause difficulties in introducing future measures (Section 6.1).
- Indonesian experts draw distinctions between the way the EU approached the sustainable timber initiative compared to the ban on palm oil (Section 9.1) and note that the overall aims of the EU CBAM would benefit from the inclusive, collaborative approach taken for the sustainable timber initiative.

Experts highlighted several areas that the EU needs to focus on to increase the chances of this mechanism being a success. These are broken down into engagement and technical aspects of the EU CBAM.

14.4 Engagement

According to experts, the first thing the EU should do to make countries more accepting of the EU CBAM is to engage with them on the topic bilaterally with thorough discussions that allow sufficient time for countries to understand and react to the measure. Although the EU has begun having initial talks with at least some countries, experts stress that the engagement needs to be active and targeted from the EU and there needs to be sufficient time for countries to prepare. Approaching this topic with countries that have similar goals first and moving on to countries that will likely oppose it will help garner support for the mechanism. As such, starting collaborations with Singapore, then South Korea, then Japan, then Thailand, then Indonesia could increase the mechanism's chance of success. For China and India, who are more likely to oppose the measure, greater engagement may be required. Experts also mention that it is important that the right stakeholders are engaged. While governments are important for the success of this measure, in practice it will mainly affect businesses and having these stakeholders involved in talks

is very important to prevent pushback against the measure. Experts also mentioned the need for the EU to approach bilateral discussions as negotiations and to realise that they may have to make concessions, especially to developing countries.

The messaging surrounding the EU CBAM and the way that it is communicated will be important for shaping international perceptions of the mechanism. As the EU CBAM is a complicated measure, the EU needs to adequately engage with countries depending on their capacity. As such, the EU should use language and terminology that countries and stakeholders will understand and perceive as neutral. Maintaining this clarity and neutrality will help avoid turning the introduction of the mechanism into a political trade issue when it should be positioned as an environmental measure that has global benefits. To avoid the EU CBAM being misinterpreted as protectionist, experts note that transparency is key. Stakeholders want to see details from the EU on how they intend to calculate emissions from outside the EU so that they know they are being fairly treated and that the EU is not simply using the EU CBAM to generate revenue. They also want details on the measures that the EU will take to ensure the EU CBAM is WTO compliant.

14.5 Implementation

Many experts note that the details of the EU CBAM will be vitally important for how the measure is received. Expert opinion differs greatly about which method (Section 4.2) of implementation of the mechanism would be most suitable, effective, and likely to be accepted by other countries. However, there are some common details that experts generally agree are important to include in the design of the EU CBAM.

The EU has suggested that products on which there is a carbon price that is deemed equivalent to the one in the EU will be exempt from additional charges. Experts from many countries agree that this would be an important measure to make the EU CBAM acceptable to other countries. Experts say that transparency on the details of exactly what would be considered equivalent and how this is calculated is also important for stakeholders to consider the mechanism fair and for them to accept it. Additionally, if the EU were to provide positive incentives rather than negative incentives, this would go further towards proving to the international community that the mechanism is fair and non-protectionist.

Experts agree that if the EU were to use the revenue generated by the EU CBAM to help developing countries with their decarbonisation efforts, this would go a long way towards assuaging negative feeling towards the mechanism and would make it less likely to be perceived as protectionist. If the EU were to use the money to develop capacity in developing countries and help these countries with access to technologies that would make the measure fairer.

Finally, many experts strongly recommend starting small and increasing the scope of the EU CBAM once the mechanism has taken root. A pilot phase on a small number of goods will allow for the EU to show that the measure is effective and non-protectionist while ensuring that it does not unduly disadvantage companies and countries that are making efforts at carbon reduction measures.

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