



GHG Market Sentiment Survey 2020



This year's key findings:

1. Expected prices have decreased for every Emissions Trading System (ETS) included in the survey in comparison to 2019, and 60% of respondents expect that they will be negatively affected by COVID-19 for one to two years. An overwhelming 92% of respondents think that prices will recover within two years.
2. Two thirds of survey participants have a long-term emissions reduction goal or will have one by the end of this year, 71% of which are absolute targets. Pressure from stakeholders - both consumers and investors - was identified as the main driver of voluntary corporate action.
3. 57% of carbon market participants and 67% of airlines agree that COVID-19 will have a significant negative impact on the implementation of CORSIA.

In association with

Key findings from this year's survey:

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2. Two thirds of survey participants have a long-term emissions reduction goal or will have one by the end of this year, 71% of which are absolute targets. Pressure from stakeholders - both consumers and investors - was identified as the main driver of voluntary corporate action.
3. 57% of carbon market participants and 67% of airlines agree that COVID-19 will have a significant negative impact on the implementation of CORSIA.
4. Businesses support Natural Climate Solutions (NCS): most respondents believe that NCS should play a role in delivering the EU's climate strategy. The main barriers to investment in NCS at scale are perceived environmental integrity concerns and lack of recognition of the associated carbon credits in compliance systems.
5. Most respondents (65%) think that climate will be an important voting issue for some voters in the 2020 US presidential election.
6. Respondents thought that federal regulation was very important in driving private sector action in Canada, followed closely by provincial regulation. At the same time, reaching agreements with provinces and territories – whether related to political and legal challenges or operationalising the pan-Canadian offsets programme – is perceived as the main challenge to implementing the federal carbon pricing system.
7. Political instability is perceived by respondents as the biggest concern for implementing Latin American emissions trading systems.
8. At the EU level, respondents believe the European Climate Law and 2030 target should be the priority for policy makers.
9. Business is on board with the EU's proposed Carbon Border Adjustment Mechanism (CBAM), although the exact details are still to be announced. Just over half of respondents think that it should be introduced as an alternative to free allocation to sectors at risk of carbon leakage, although most think this will happen beyond 2024. Only 11% do not expect the EU to implement a CBAM.
10. Most respondents feel that introducing an explicit carbon price to Australia's economy via a cap-and-trade system would have the greatest impact on reducing its emissions.
11. Confidence in China is receding: the number of respondents who believe its national ETS will be operational by 2021 has halved since last year, returning to 2018 levels.

About PwC

PwC UK helps organisations and individuals create the value they're looking for. We're a member of the PwC network of firms in 157 countries with more than 208,000 people committed to delivering quality in assurance, tax and advisory services. The Sustainability and Climate Change team at PwC UK helps both public and private sector clients address the specific and immediate issues relating to sustainability, as well as with longer-term strategic thinking. The PwC global Sustainability and Climate Change network includes 700 people working in over 62 countries, with 100 based in the UK. You can find out more by visiting us at www.pwc.com/uk.

About IETA

For the past 21 years, IETA has been the leading voice of business on market-based ambitious solutions to climate change. Our objective is to build international policy and market frameworks to reduce greenhouse gases at lowest cost, delivering real and verifiable emission reductions with environmental integrity. To produce meaningful prices that drive change, we support market-based policies with effective emissions targets, clear rules and flexible compliance choices. See www.ieta.org for more information.



Message from President and CEO of IETA

As I write this, countries are slowly starting to emerge from their COVID-19 lockdowns. There are signs of a recovery in industrial activity and in transportation, while commercial activities are still lagging behind slightly.

This coronavirus pandemic represents the most severe test of the world's carbon markets to date, going far beyond the scope of the 2008 global financial crisis. Back then, it was the financial sector that shouldered the bulk of the recession's impact, though to be sure there was a clear impact on industrial output.

But COVID-19 has led to the virtual shutdown of entire sectors of the economy in a way that we haven't seen for many decades. We saw road use drop by as much as two-thirds in some countries, with a knock-on effect on oil prices. Aviation collapsed by up to two-thirds worldwide. Retail business pretty much closed across much of Europe, and even construction fell silent for a while.

This will all feed through to lower demand for allowances in carbon markets from New Zealand to California this year. Back in 2009, verified emissions in the EU ETS dropped 11% in the wake of the financial crisis, but analysts are predicting a drop of as much as 15-20% in 2020, following a slide of nearly 9% in 2019.

Can the market structures cope with a demand shock like this? For the most part, emissions trading systems have never faced this level of challenge. Sure, we have previously faced supply-demand imbalances, whether from poor industrial projections, negative economic cycles or policy overlaps. This time, we have built-in protections for market stability. But will they be enough? And how will economic recovery strategies impact future market formation?

2020 may well be one of the most instructive and pivotal years we have experienced, and how regulators react will be critical in order to reset the ambition of markets as we push on towards the Paris Agreement goals.

Clearly, this pandemic has affected most of the respondents in our survey as well. Some 60% expect COVID-19 to impact carbon prices for one to two years, though almost all think prices will recover within two years.

The aviation industry's CORSIA market is in turmoil as the collapse in activity has potentially enormous implications for the market's baseline emissions, and more than half of our respondents believe the impact on the system's pilot phase, which starts next year, will be negative.

Beyond this pandemic, there is still a great deal of activity at national level to drive forward carbon pricing, and our respondents see politics as one of the biggest uncertainties in the coming year.

Most of the people surveyed believe climate change may well feature in the US election this November, with the US scheduled to formally step away from the Paris Agreement the day after voting.

In Canada, the ongoing discussions on carbon pricing between federal, provincial and territorial governments, and legal challenges to the federal plan, are seen as the main obstacles to actually rolling out the price mechanism.

Latin America has emerged as one of the brightest hopes for market mechanisms, yet here too political instability is seen as a major challenge. And of course in Europe, discussions around the Green Deal and the review of the EU ETS are the top priority for respondents.

The debate over climate change, let alone carbon pricing, continues in Australia, and our survey shows people believe that cap-and-trade would be price on emissions would be the single most effective means of tackling the country's carbon footprint.

Looming over all is the shadow of China's nationwide ETS. In previous years, our survey reflected so much optimism that the world's largest emitter would soon start to impose a cost on climate pollution, but repeated delays have shaken confidence and, after peaking in 2019, our survey shows only a third of respondents expect an ETS to emerge in 2021 – especially given COVID-19 delays.

Politics and COVID-19 are this year's challenges to the growth of carbon pricing. Nevertheless, we at IETA will continue to press for ambitious, efficient and workable systems wherever they can be implemented and wherever the political will can be ignited.

Dirk Forrister
President and CEO of IETA

About the survey

This year's IETA GHG Market Sentiment Survey reflects key issues and developments in emissions markets against a backdrop of significant political and economic uncertainty. We designed the survey to assess key dimensions of market sentiment, such as future price and policy expectations. It was conducted among IETA members, with more than one response per organisation possible, and was open from 1 April to 24 April 2020. For the first time this year, the aviation section of the survey was also distributed to members of the International Air Transport Association (IATA). Statements based on responses from the IATA distribution only appear in the key findings and in 'Section 6: Aviation and CORSIA'. Any such statements are clearly attributed to 'airlines'.

We received responses from 137 IETA member representatives and 22 IATA member representatives,

from a broad range of locations. Participants were given some freedom to select which sections and topics they answered, and therefore some statistics are based on samples smaller than 137. Anonymous quotes from survey respondents are presented alongside the survey results.

This report consists of six sections, which reflect the key areas of focus for carbon markets over the past year:

1. European Union
2. China and Asia-Pacific
3. The Americas
4. Price trajectories
5. International: Voluntary carbon markets & UNFCCC
6. Aviation

Figure 1: Location of survey respondents

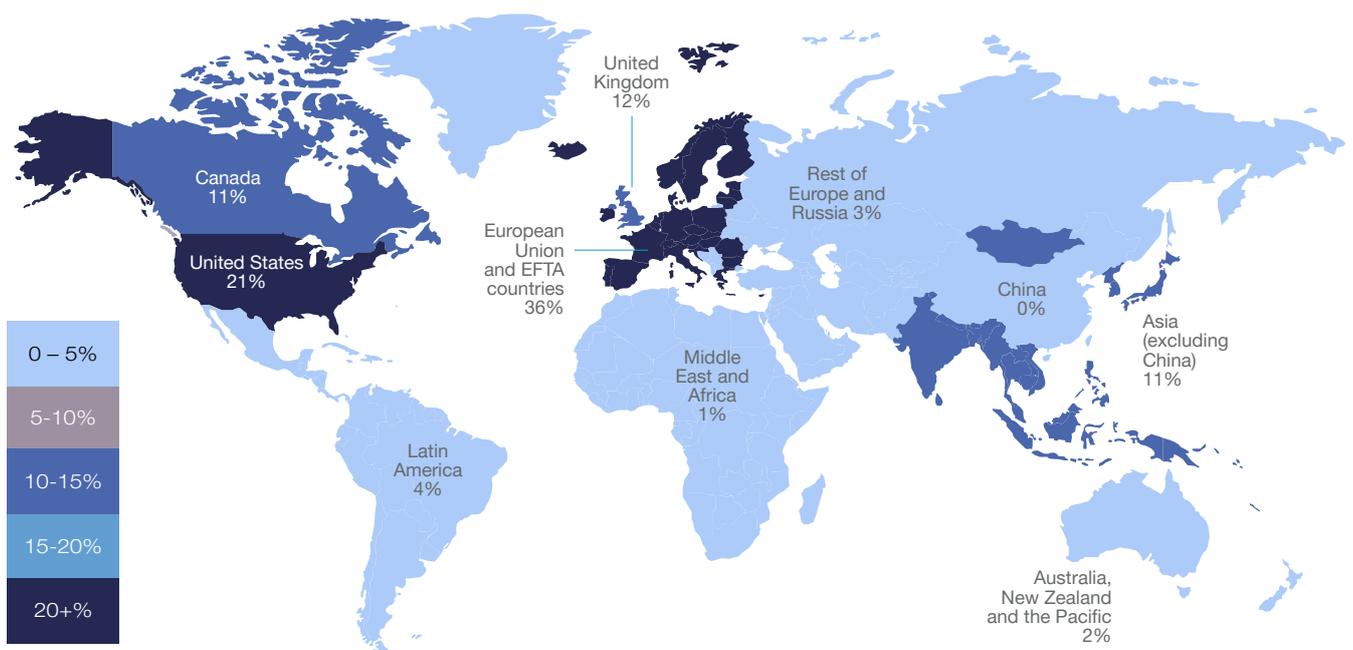
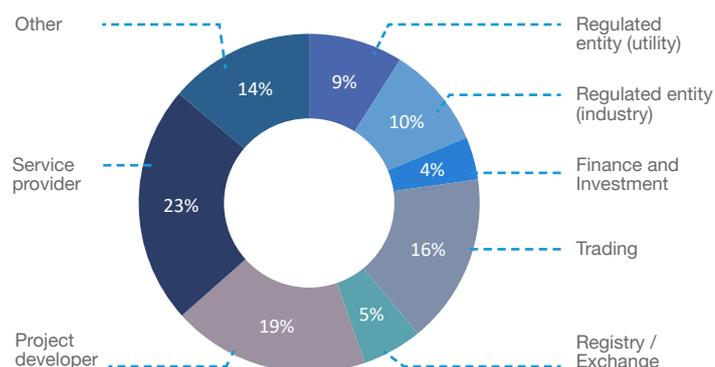
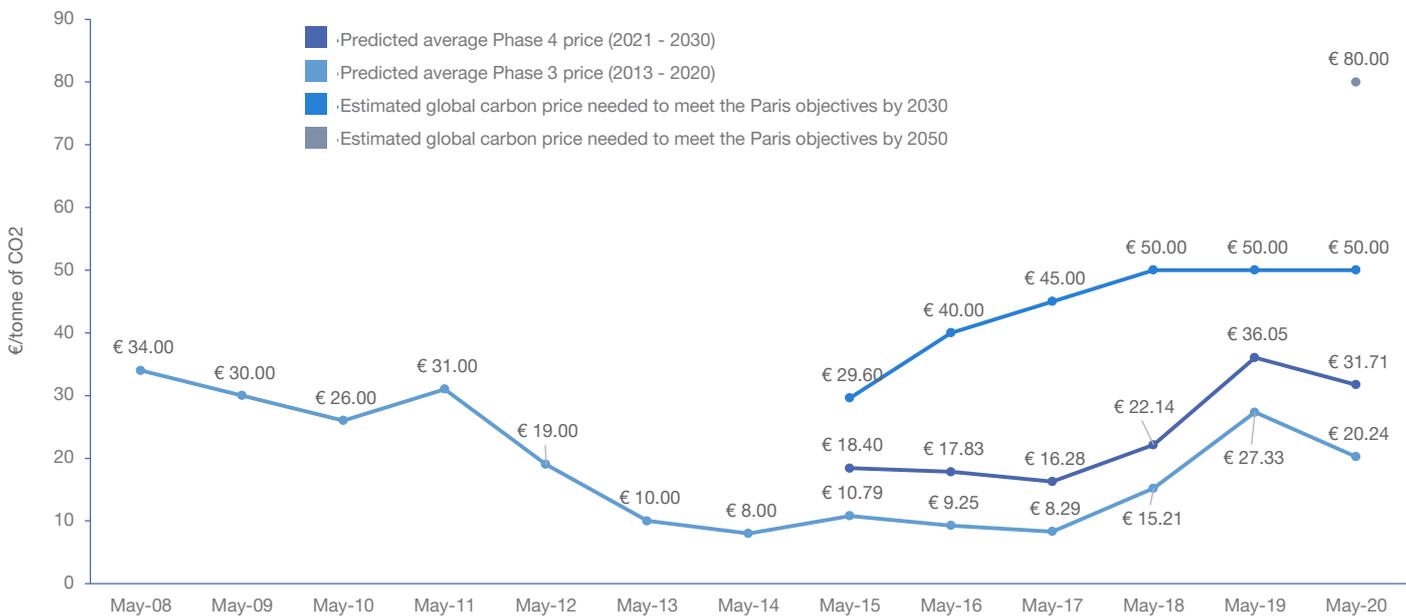


Figure 2: Type of IETA organisations responding to the survey



1. European Union

Figure 3: Average carbon price expectations for the EU ETS over successive surveys



COVID-19 affects confidence in the EU ETS price

The EU Emissions Trading System (ETS) is a cornerstone of the bloc's climate policy and its key mechanism to drive reductions in greenhouse gas (GHG) emissions in the commercial airline, power generation and industrial sectors. Over the past three years, the EU ETS price has risen markedly, beginning 2020 in a strong position at €24.28/tCO₂. The COVID-19 pandemic caused it to fall to a mid-March low of €15.24/tCO₂, before stabilising around the €18-20 mark at the time of writing. This represents a drop of approximately 20% compared to the 2019 average of €24.88/tCO₂.

The average EU ETS price predicted by survey participants this year fell to €20.24/tCO₂ for the remainder of Phase 3 (2020) and €31.71/tCO₂ for Phase 4 (2021-30), down from last year's predictions of €27.33 and €36.05 respectively. This may be attributed in large part to the fact that 60% of respondents thought the COVID-19 pandemic would depress ETS prices over the medium term (i.e. next one to two years). Only 8% thought prices would remain negatively affected beyond two years.

Currently, the EU ETS covers approximately 45% of the EU's total GHG emissions and applies to the power and industrial sectors and intra-EU flights. Most survey participants (68%) thought that coverage should be expanded to other sectors over the coming years, with shipping and road transport cited as the likeliest candidates.

“ The low-hanging fruit of fuel-switching has almost been exhausted in the EU – this will drive prices in the next few years, as well as COVID-19.”

The 2030 Climate Target and European Climate Law should be key EU climate policy priorities

Survey respondents were asked to select what the current climate policy priorities for the EU should be, in their opinion, out of a range of options (see Figure 4). The most often-selected policies were the 2030 Climate Target (32%) and agreeing the European Climate Law (29%).

At the end of last year, the European Commission announced the European Green Deal, its most ambitious climate policy package to date. The Commission's proposal for the first European Climate Law aims to enshrine in law the goal set out in the European Green Deal for Europe's economy and society to become climate-neutral by 2050. Whilst many respondents thought that the Climate Law should be a policy priority, opinions were split as to whether it would be agreed this year. Just over half of respondents (53%) thought that the negotiations would take longer. In addition, 73% of respondents think that Natural Climate Solutions (NCS) should play a role in delivering the EU's climate strategy.

The EU's current 2030 climate target stands at a 40% reduction in GHG emissions compared to 1990 levels. Despite current disruption, public consultations are continuing as to whether the target should be strengthened to a 50% or 55% reduction. Most survey respondents expect the target to be increased to 50%, whilst 21% expect that it will not be increased at all

A further 24% of respondents thought that preparation for the planned EU ETS review and market stability reserve (MSR) review in 2021 should be a policy priority. The new ETS rules scheduled for Phase 4 (2021-30) include increasing the annual cap reduction from 1.74% to 2.2%, revising free allocation rules and increasing the impact of the MSR on the surplus.

Figure 4: In your opinion, what should be the current climate policy priority for the EU?

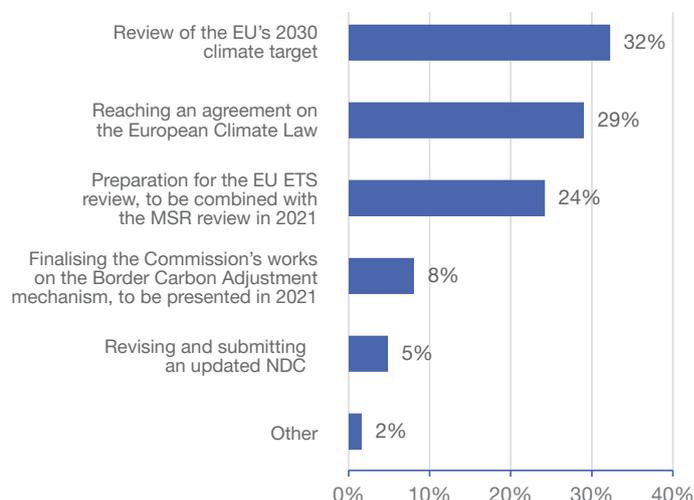
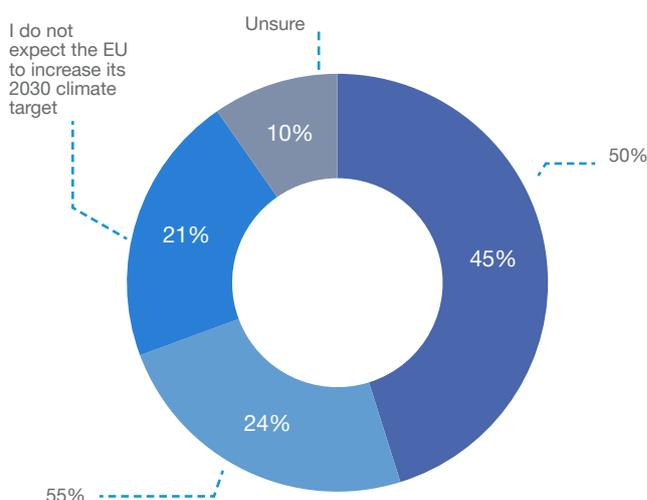


Figure 5: Do you expect the EU to increase its 2030 climate target to cut emissions by 50% or 55%?



“ There is pressure on governments to use this moment to restart economies with climate legislation in mind and provide stimulus packages for decarbonisation, but it's too early to see how industries will react to these plans.”

Business is supportive of a Carbon Border Adjustment Mechanism, but does not expect it to apply in the near future

55% of respondents agreed with the Commission's proposal that a Carbon Border Adjustment Mechanism (CBAM) should be introduced as an alternative to free allocation to sectors at risk of carbon leakage, while a further 21% think that both measures are needed.

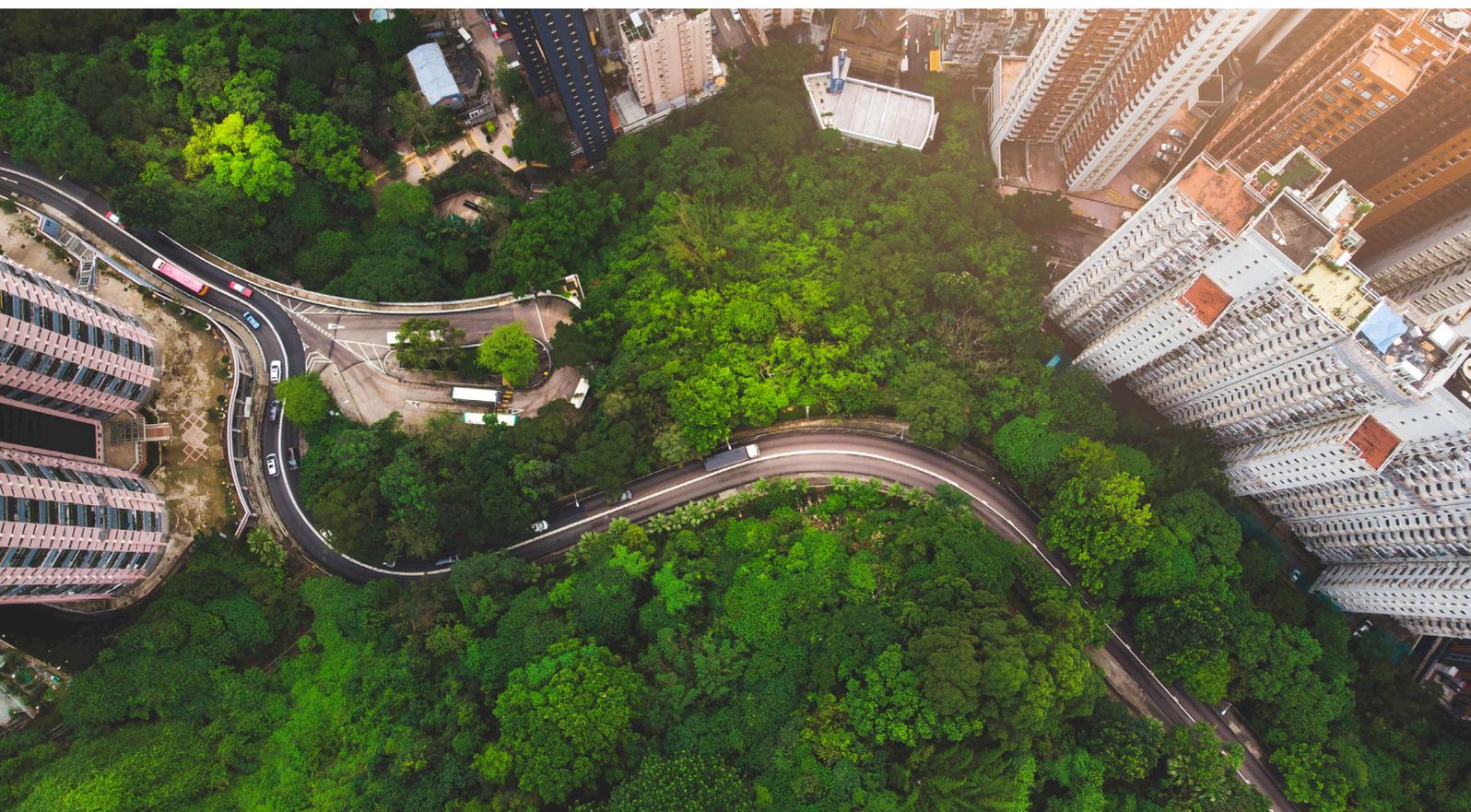
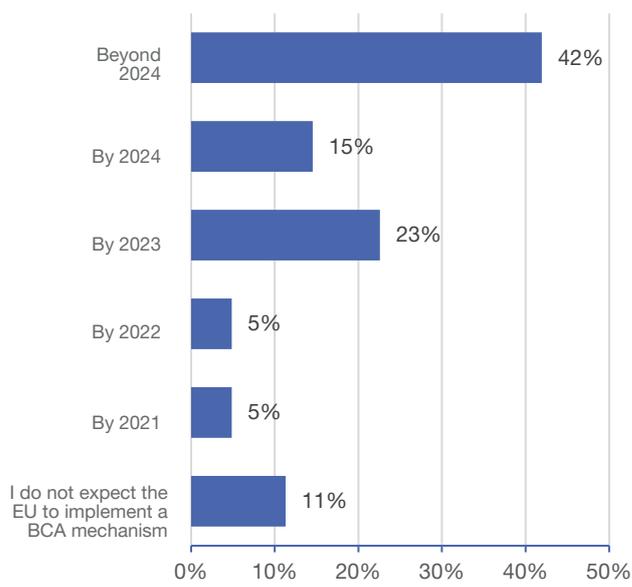
As yet, the lack of published details means that businesses can only get on board with the overarching principle. Most respondents did not think that the CBAM should be the short-term climate policy priority for the EU and accordingly most (41%) thought it would likely come into effect beyond 2024. This might indicate that businesses are keen that this policy takes a considerable amount of thought and time to develop. It is currently unknown what the sentiment of businesses will be once further details on the mechanism are released.

The Commission proposed the CBAM as part of the European Green Deal to address carbon leakage concerns and ensure that the price of imports accurately reflects their carbon content. Efforts by the EU to be more ambitious in reducing emissions could be undercut by increasing imports of products from countries with weaker climate policies. If adopted, the CBAM would help European companies remain competitive by putting a carbon price on imports of certain goods from outside the EU.

The Commission intends to present a proposal for the CBAM in the summer of 2021. Whilst there was support for the mechanism from survey participants, most

thought that it would likely be implemented beyond 2024 and only 8% thought that it should be a current climate policy priority. It is clear that a CBAM would be a challenging mechanism to implement, with substantial monitoring, reporting and verification (MRV) requirements and the added complexity of interaction with World Trade Organization (WTO) rules.

Figure 6: By when do you think the EU is likely to implement a Carbon Border Adjustment Mechanism (CBAM)?



2. China and Asia-Pacific

China

China continues to develop its plan for a national ETS, which was first officially announced in December 2017. Once operational, the ETS is set to cover more than 3 billion tonnes of CO₂e in its initial phase, accounting for about 30% of China's emissions. As of 2018, responsibility for the ETS has been assigned to the newly created Ministry for Ecology and Environment. Prior to the COVID-19 outbreak, the ministry stated that it would strive to make a breakthrough in the ETS this year, following slower progress in recent years due to infrastructure implementation challenges.

When will China's national ETS become operational?

China continues to develop its national market infrastructure for carbon trading in the power sector. However, efforts have been hampered this year by the COVID-19 pandemic. Accordingly, the share of participants which believe that a national ETS (covering the power sector initially) will emerge in China by 2021 has almost halved since our last survey, down from 62% in 2019 to 34% this year, nearing 2018 levels. Most other respondents expect trading to begin one year later, in 2022 (Figure 7), which is consistent with most participants believing that carbon markets in general will be affected by COVID-19 for one to two years.

Steel has narrowly overtaken chemicals as the next most likely sector to be included, with 30% of respondents predicting its inclusion by 2022. With respect to the remaining sectors, opinion is broadly unchanged from last year, with the majority of respondents still believing that building materials, chemicals, non-ferrous metals, paper, petro-chemicals and aviation will be covered after 2022. Participants had the least confidence in coverage of the aviation sector, with 15% not expecting it to be included at all.

Potential economic downturn as a key hurdle

Potential economic downturn is seen as the biggest challenge for China's ETS in the coming years (28%), followed by finalising power market reforms (23%) and establishing MRV systems (15%). One respondent noted that implementing an ambitious national ETS will require significant political will.

Figure 7: In what timeframe do you expect carbon trading (covering the power sector) to emerge in China's national ETS?

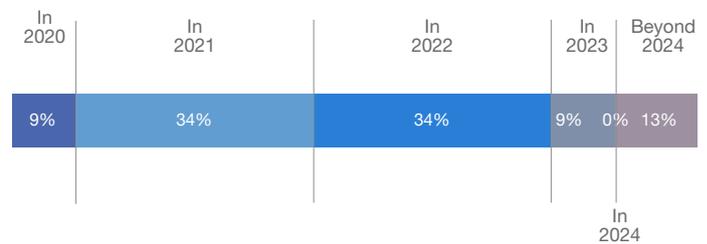
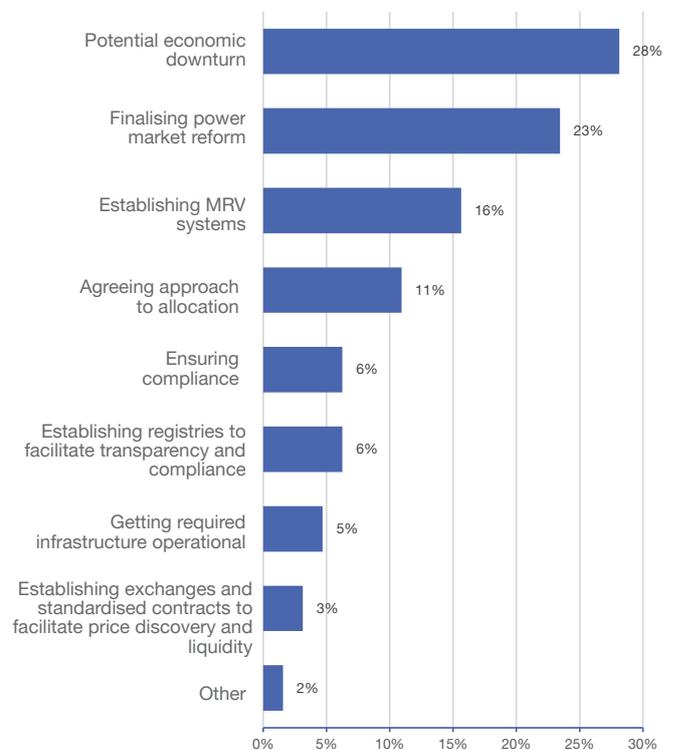


Figure 8: Which two of the following do you believe pose the biggest challenge to the future implementation of the Chinese ETS in the coming years?

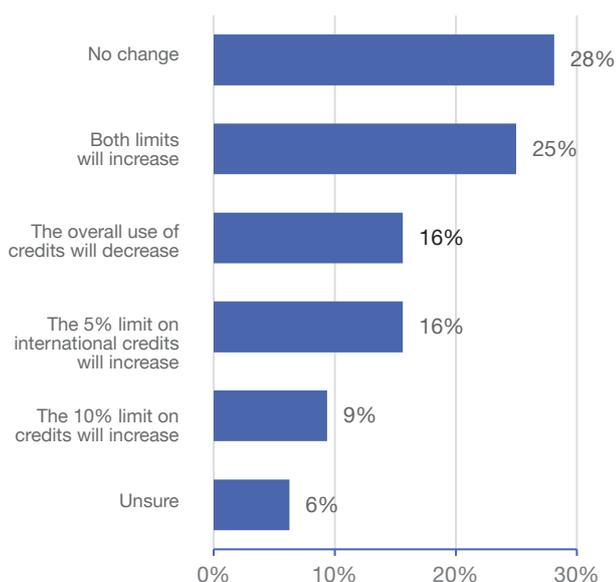


Rest of Asia-Pacific

Divided opinions on the South Korean ETS

Last year, the use of international offset credits was deemed by survey respondents to be the most effective measure in tackling the liquidity issues affecting the South Korean ETS. The amount of international credits to be used by participants to meet their annual obligations has been limited to 5%, with a further 5% permitted from domestic Clean Development Mechanism (CDM) projects. Survey participants were divided as to whether either of these limits might change as the market moves into its third phase (2021-25): 28% of respondents believed there would be no change, but 25% thought both limits would increase.

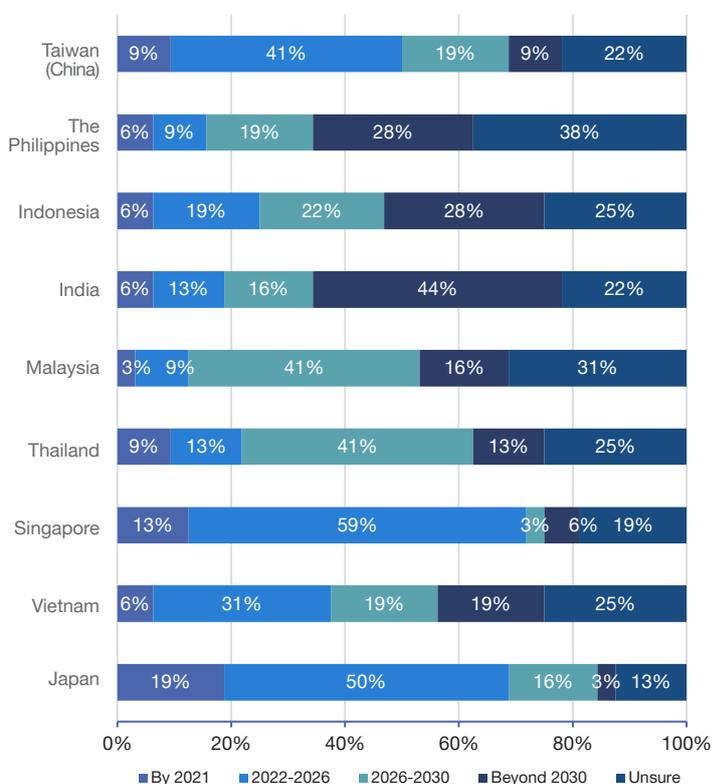
Figure 9: Participants in the Korea ETS are able to use Clean Development Mechanism (CDM) credits to meet up to 10% of their annual obligations, with no more than 5% coming from projects abroad. How do you anticipate this changing, moving into Phase 3 (2021-25)?



Implementation of a carbon price in Asian countries and regions

Expectations of a carbon pricing mechanism emerging in the near future in central and south-east Asian countries remain low (see Figure 10). Despite low expectations for action over the coming year, there are reasonable prospects for Japan and Singapore over the medium term. Only 19% of respondents believe a market will emerge in Japan by 2021, and 13% in Singapore. In contrast, the majority of respondents (50% - Japan and 59% - Singapore) believe a carbon market covering at least the power sector will emerge between 2022-26.

Figure 10: When do you expect the following countries and regions to implement a carbon market (covering at least the power sector)?



“South Korea is a strong candidate to have a swift, sustained recovery and accordingly ETS prices may remain high – partly due to the country’s net zero commitment and partly due to its relative success in handling COVID-19.”

Strong support for cap-and-trade in Australia

Introducing an explicit carbon price to the economy, via a cap-and-trade system, was considered to be the policy option which could have the greatest potential impact on reducing Australia's emissions (38% of respondents). This was followed by increasing the renewable energy target (16%), tightening the existing Safeguard Mechanism (13%) and a clean technology investment target (13%). In contrast to the strong support for cap-and-trade systems, only 9% of respondents were in favour of levying a carbon tax across the economy.

Will New Zealand meet its climate targets?

New Zealand was one of the first developed economies to set a target for climate neutrality by 2050, which was achieved through the passing of the Zero Carbon Act with near unanimous bipartisan support in November 2019. It also has an interim target to cut emissions to 30% below 2005 levels by 2030. In addition, the government has promised further reforms to its national ETS including phasing down industrial allocation, replacing Kyoto Protocol units, introducing average accounting for the forestry sector and confirming a new repayment penalty.

However, there was a high degree of uncertainty amongst survey respondents as to whether the planned reforms to the New Zealand ETS would put the country on track to achieve its 2030 and 2050 climate targets, with nearly two thirds either unsure (56%) or responding negatively (13%).

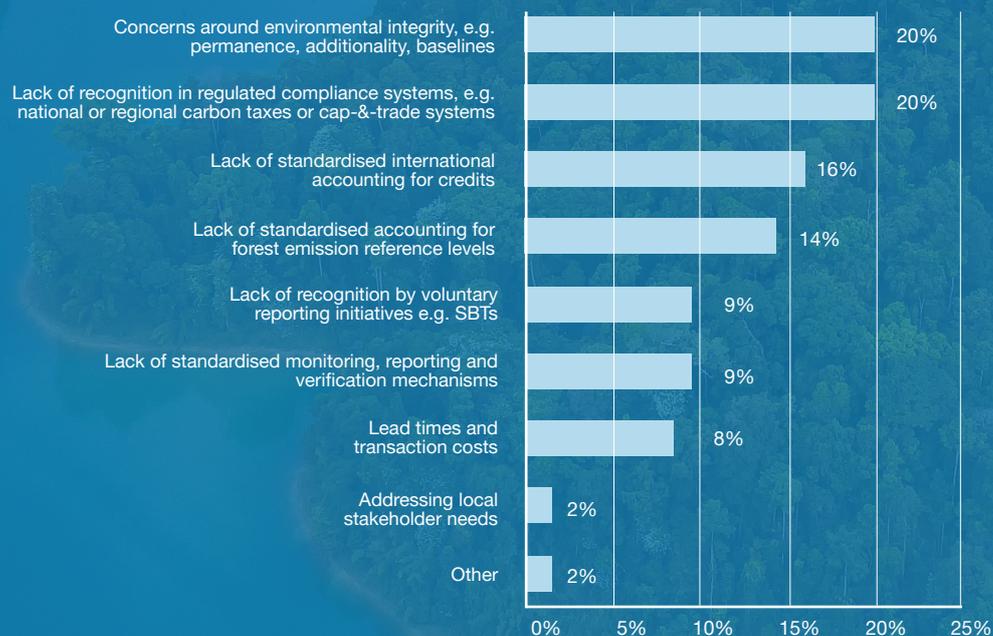


Achieving investment in Natural Climate Solutions at scale

Natural Climate Solutions (NCS) absorb and store carbon in the landscape and coastal zones by enhancing natural ‘sinks’ and limiting emissions from land use change. NCS can make a critical contribution to achieving carbon neutrality and are used as offsets in some markets.

However, a number of barriers are preventing the realisation of private sector investment in NCS at scale. Survey participants were asked to select what they consider to be the main barriers to investment; the two most often selected were concerns around environmental integrity of NCS, e.g. permanence, additionality, baselines (20%) and lack of recognition in regulated compliance systems, such as national or regional carbon taxes or cap-and-trade systems (20%). Accordingly, 73% of respondents think that NCS should play a role in delivering the EU’s current climate strategy.

Figure 11: What do you consider to be the main barriers to investment in Natural Climate Solutions (NCS) at scale?



NCS also featured prominently in the first round of nationally determined contributions (NDCs), which detail the intended GHG emission reduction plans of signatory countries to the Paris Agreement. Approximately two-thirds of original NDCs refer to the use of NCS to achieve their intended emissions reductions.

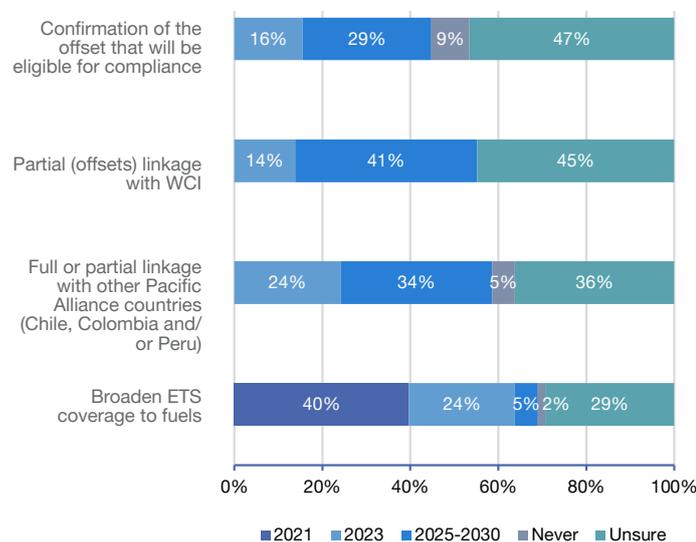
This year, countries have been invited to submit updated, more ambitious NDCs to cover the next period of implementation of the Paris Agreement and reflect the ambition that is needed to achieve its original goals. Most survey respondents expect that NCS will remain a prominent feature of new NDCs, with 33% expecting that there would be no change in reference to NCS and 28% expecting an increase.

3. The Americas

Latin America

Earlier this year, Mexico launched its pilot cap-and-trade ETS, despite concerns that the extended political transition period following the 2018 election would stall implementation. Most survey respondents (53%) think that the ETS will become fully operational at some point between 2022 and 2026. As can be seen in Figure 12, the majority of respondents believe the next development in Mexico’s ETS will be confirmation of the offsets that will be eligible for compliance; 40% think that this will happen in 2021.

Figure 12: Mexico launched its pilot ETS in 2020, which is scheduled to become fully operationalised by 2023. When do you think the following developments will occur?



The rest of Latin America is still relatively early on in adopting compliance ETS programmes. Most respondents think that an operational ETS will emerge in Colombia, Chile and Peru between 2022-26. Market sentiment is that this will come later for Argentina and Brazil, with most respondents believing a compliance ETS will emerge between 2026-30. Participants had least confidence in Brazil developing an operational ETS, with 15% of respondents not expecting one to emerge at all, which could be attributed to its current government’s stance on climate. The potential for an ETS or carbon tax was introduced for consideration in Brazil when it enacted its National Climate Change Policy in 2008, but there have been no developments since.

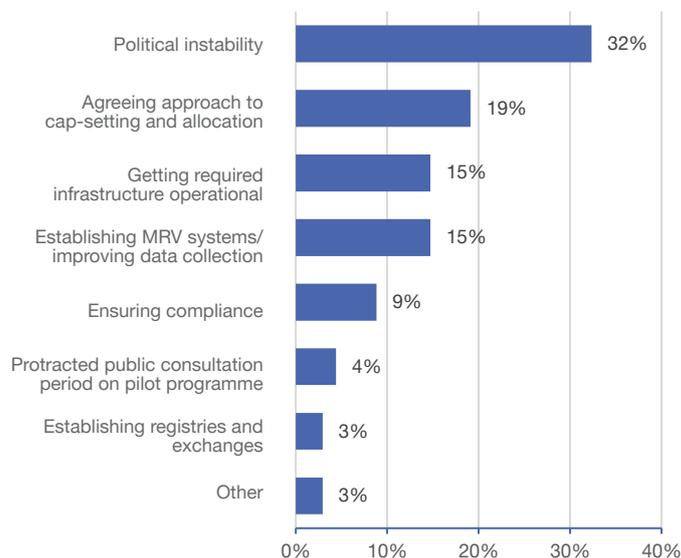
Figure 13: By when do you expect the following countries to launch an operational ETS?



Political instability challenges Latin American markets

Political instability is a clear concern across the region with 32% of respondents think that it poses the biggest challenge to the future implementation of emissions trading in Latin America in the coming years. This was followed by other challenges stunting market growth across the region, including: agreeing an approach to cap-setting and allocation (19%); establishing MRV systems/improving data collection (15%); getting required infrastructure operational (15%); ensuring compliance (9%); protracted public consultation period on pilot programme regulation (4%); and establishing registries and exchanges (3%).

Figure 14: Which two of the following do you believe pose the biggest challenge to the future implementation of ETS in Latin America in the coming years?



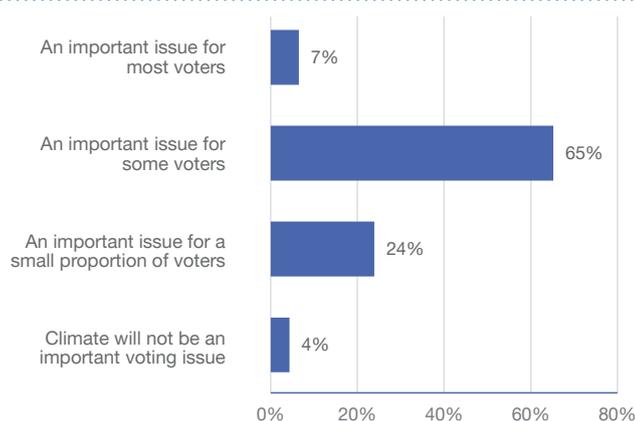
North America

Climate will play a role in the next US election

Climate policy remains turbulent in the US since its announcement of intent to withdraw from the Paris Agreement in 2017. The final date of its withdrawal, 4th November 2020, will come only one day after the Presidential election and the two major parties have polarised views on climate change. Indeed, the Democratic nominee, former Vice-President Joe Biden, has pledged to re-enter the Paris Agreement if successfully elected.

Most respondents felt that climate change would be an important voting issue for some voters in the upcoming presidential election (65%). Only 4% felt that climate change would not be an important voting issue.

Figure 15: To what extent do you believe that climate will be an important voting issue in the 2020 US presidential election? Climate will be;



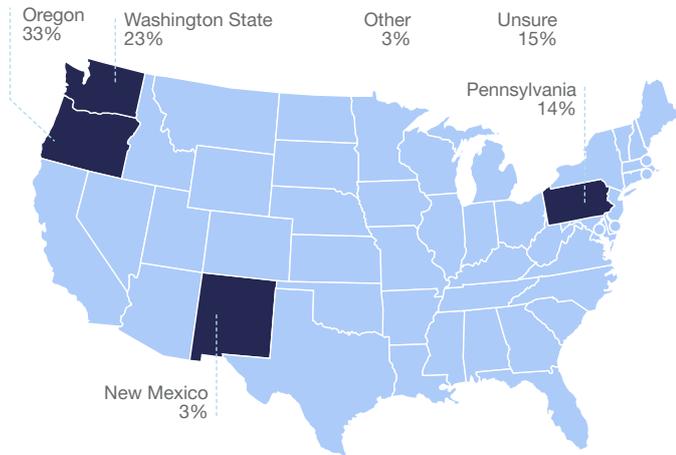
Regional cap-and-trade continues to dominate in the US

This year, the US has seen the reintroduction of a carbon tax bill to the House of Representatives and draft legislation for a 100% clean economy by 2050. However, neither has progressed significantly as yet and it seems that a national price on carbon is unlikely in the near future.

Regional markets continue to dominate carbon pricing in the US. Earlier this year, New Jersey rejoined the Regional Greenhouse Gas Initiative (RGGI) and Virginia is in the process of establishing a linked ETS, planned for the end of this year. Survey respondents believe that Oregon (33%) and Washington (29%) are the most likely states to launch new cap-and-trade systems or link to existing systems over the next two to three years. Both states are most likely to link to the Western Climate Initiative (WCI), another regional initiative of which California and the Canadian province of Québec are currently members. Oregon failed to adopt a legislated cap-and-trade programme in 2019, before the Governor issued an Executive Order on cap-based emission reductions in 2020. A further 14% of respondents think that Pennsylvania will be the next most likely; the state has begun drafting legislation for RGGI linkage, although this would not come into effect until 2022 at the earliest.

“ The most important milestone this year is the US election. If there is a change in government, there could be a massive impact, with a flurry of activity to get the US engaged and setting an NDC. This could have a catalytic impact along with Chinese climate leadership. The US and China could bring others back to the table.”

Figure 16: Which US States are most likely to launch a new cap-and-trade system or link to existing systems (WCI and RGGI) over the next 2-3 years?



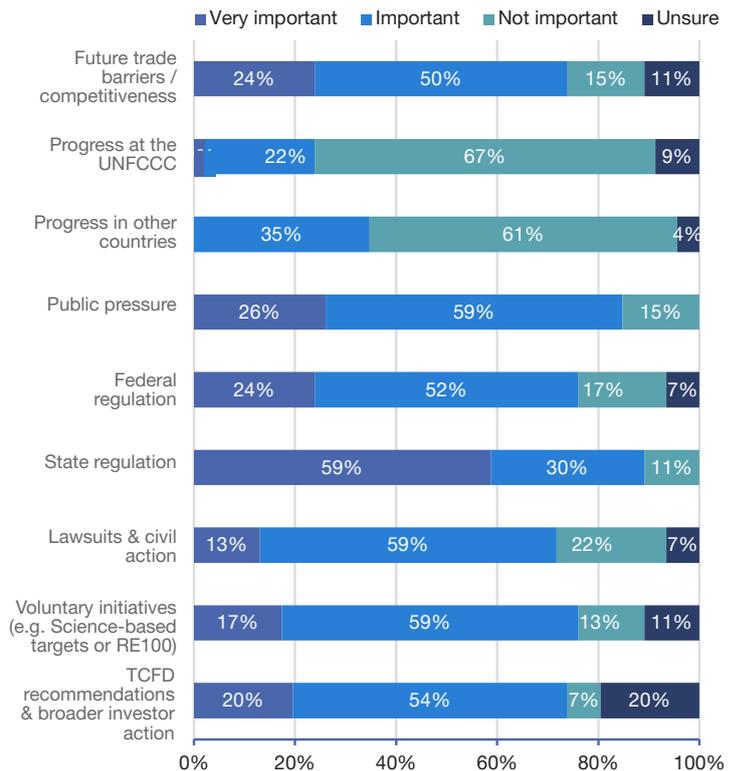
Over half of respondents (54%) think it is either likely or somewhat likely that north-eastern states and jurisdictions in the Transportation and Climate Initiative (TCI) will create a carbon pricing programme for transportation emissions. The initiative, which has moved forward in the past year, would see a collective ETS applied to the transport sector of 12 Northeast and Mid-Atlantic states and the District of Columbia. A final Memorandum of Understanding (MOU) is now expected in the fall of 2020, at which point each jurisdiction will decide whether to sign the MOU and participate in the regional programme. Despite the MOU delay, work and stakeholder consultations on TCI programme details continue.

States are driving private sector action

59% of respondents think that state regulation is very important in driving private sector action on GHG emissions in the US, compared to just 24% for federal regulation. Since its withdrawal from the Paris Agreement, the US has seen increased action from subnational jurisdictions, including through the US Climate Alliance, a bipartisan coalition of 25 of its states and self-governing territories who have pledged to uphold the objectives of the Paris Agreement within their own borders.

74% of respondents felt that the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and broader investor action were either very important or important in driving private sector action on emissions in the US. In contrast, most respondents thought that progress in other countries and progress at the UNFCCC were the least important, with approximately two-thirds of respondents selecting them as not at all important in driving private sector action on emissions.

Figure 17: How important are the following in driving private sector action on emissions in the US?



“ There’s growing engagement on heavy polluting industries from investors, notably through Climate Action 100+, which represents tens of trillions of assets under management and over 450 investors, including Blackrock. This formal process of engagement is having an impact on companies in the US.”

Challenges for cap-and-trade in California

Respondents to this survey have consistently selected new offset design constraints as the most important policy challenge for California’s cap-and-trade market post-2020, since the extension was approved in July 2017. This includes 20% of survey participants this year.

Earlier this year, California began the process of convening a Compliance Offsets Protocol Task Force that will provide guidance to regulators on establishing new offset protocols for compliance use from 2021 through 2030. Task Force recommendations will prioritise direct environmental benefits within the state alongside social co-benefits for disadvantaged communities and Native American or tribal lands. It will also provide advice on new offset protocols for enhanced management or conservation of agricultural lands and wetlands.

Another notable development was the US federal lawsuit challenging the California market’s linkage with Québec’s under the Western Climate Initiative (WCI), which has been formally in place since January 2014. The federal lawsuit on linkage with Quebec (15%) ranked as the joint second most important policy challenge for California’s cap-and-trade system post-2020, alongside interactions with supplementary policies (15%).

What drives action on emissions in Canada?

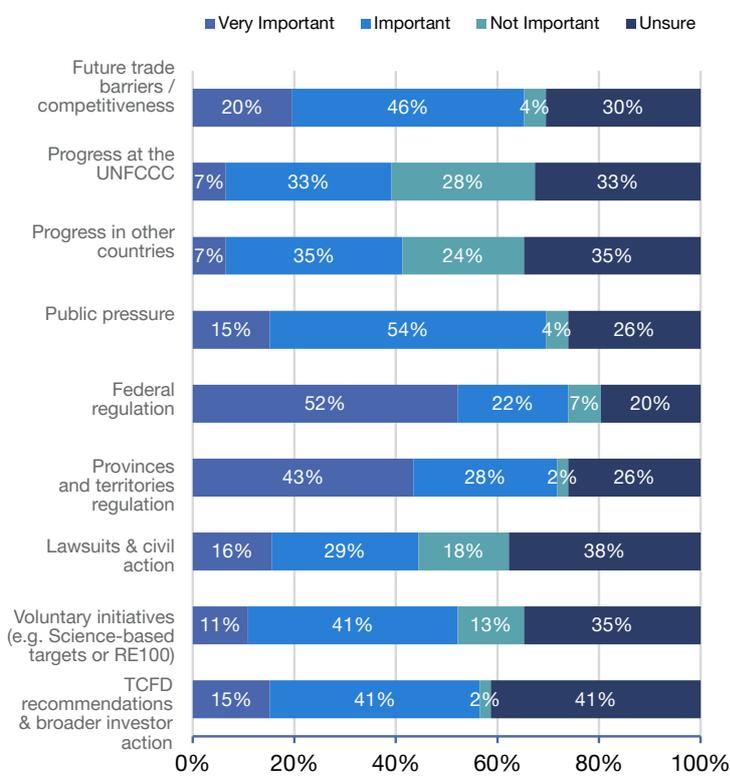
Canada’s current NDC is to reduce emissions to 30% below 2005 levels by 2030. Half of survey participants believe that it is somewhat likely that Canada will be able to meet this target (or an even more ambitious target) without using international credits, but a further 37% think that it is unlikely. So far, Canada’s federal carbon pricing regulations have not allowed for the use of international emission reduction credits for compliance, and most respondents do not expect this to change before 2025.

As a compliance option under Canada’s Output-Based Compliance System (OBPS), the federal government is moving forward with the development of a federal offsets system in 2020. The new federal offsets programme would encourage domestic GHG emissions reductions or removal enhancements from activities not covered by a carbon price and priority project types will be from forestry, agriculture and waste. Survey participants think the main challenge to implementation of this system will be reaching agreements with provinces and territories

(38%), a possible legacy of the contentious introduction of the Federal Carbon Pricing Backstop last year and the subsequent legal challenges brought by several provinces. This was followed by drafting final offset regulation following the public consultation period (13%), finalising federal protocols (13%) and political instability (12%).

In contrast to the US, respondents thought that federal regulation (52%) was very important in driving private sector action in Canada, although the margin was closer with 43% of respondents also considering province and territory regulation very important. Public pressure, future trade barriers and competitiveness, investor action and voluntary initiatives were also considered important.

Figure 18: How important are the following in driving private sector action on emissions in Canada?



4. Price trajectories

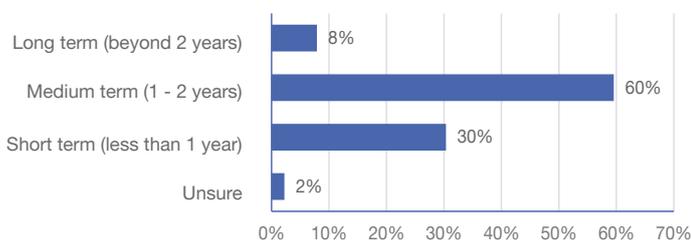
Figure 19: What do you expect the average carbon price to be for each of the following ETSs in the periods 2020 and 2021-30?



Each year, projected carbon prices are included in the survey in order to compare the market sentiment for prices year-on-year. Respondents selected price ranges which were then converted into weighted averages.

Expected prices decreased across the board compared to last year, some by slimmer margins than others, and respondents thought that ETS prices would remain suppressed by COVID-19 for the next one or two years. The EU ETS still has the highest expected average carbon price for both periods of 2020 and 2021-30, at €20.24/tCO₂ and €31.71/tCO₂, respectively. The New Zealand and Mexican ETS have seen the highest percentage decrease on last year's expected prices. As seen in Figure 21 below, respondents do not predict that the average carbon price will be anywhere close to €50/tCO₂e by 2030, and the expectation gap has widened.

Figure 20: For how long do you expect the pandemic to suppress ETS prices?



The average global carbon price that participants believe is needed by 2030 to achieve the Paris goals remains unchanged from last year's at €50/tCO₂, although there was a shift in the distribution towards higher prices. This year, survey participants were also asked to choose the global carbon price needed to meet the Paris goals by 2050. The median response was €80/tCO₂ and the mean was significantly higher at €96.84/tCO₂.

89% of respondents use an internal or shadow carbon price in their investment decisions, compared to 78% last year, which could be associated with a rise in the number of companies committing to ambitious climate action. Most companies are using a price within the €20-39 range; however, there was a greater spread of prices this year, with more companies selecting both lower and higher price ranges.

Figure 21: Carbon prices for the Paris Agreement goal

By 2030, what global carbon price do you believe is needed to meet the 2°C goal?

Year	Median	Mean	Min	Max
2020	€50.00	€55.97	€12.00	€180.00
2019	€50.00	€56.37	€20.00	€150.00

By 2050, what global carbon price do you believe is needed to meet the 2°C goal?

2020	€80.00	€96.84	€30.00	€250.00
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“ Prices will be closely correlated to the shape of COVID recovery in the short term, but in the longer term there will be broader forces around to what degree certain sources of emissions will return. We might see systematic behavioural changes as a result of post-pandemic economic structures being reshaped.”

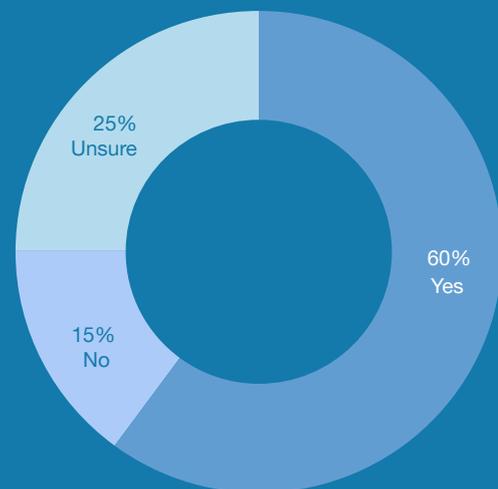
5. International: Voluntary carbon markets & UNFCCC

The rise of 'net zero' narrative

Voluntary corporate commitments on climate change have increased markedly over the course of the past year, as evidenced by the more than 200 companies that have signed the UN Global Compact's 'Business Ambition for 1.5°C' commitment. 63% of survey participants stated that their company has a long-term emissions reduction goal or will have one by the end of the year. 'Net zero' has emerged as an increasingly dominant narrative, where companies commit to bring their emissions as close to zero as possible and offset any that remain. Accordingly, there was a strong preference from survey respondents for absolute targets (such as "net zero") with 71% using an absolute target as opposed to a relative target (such as reducing intensity).

Many survey participants (60%) were confident that the voluntary market can accommodate this growth in pledges, but others cited concerns that there is an insufficient supply of high quality offsets that enable corporates to decarbonise with integrity, in line with the UN Sustainable Development Goals.

Figure 22: Can the voluntary market accommodate the growth in companies pledges to reduce emissions?

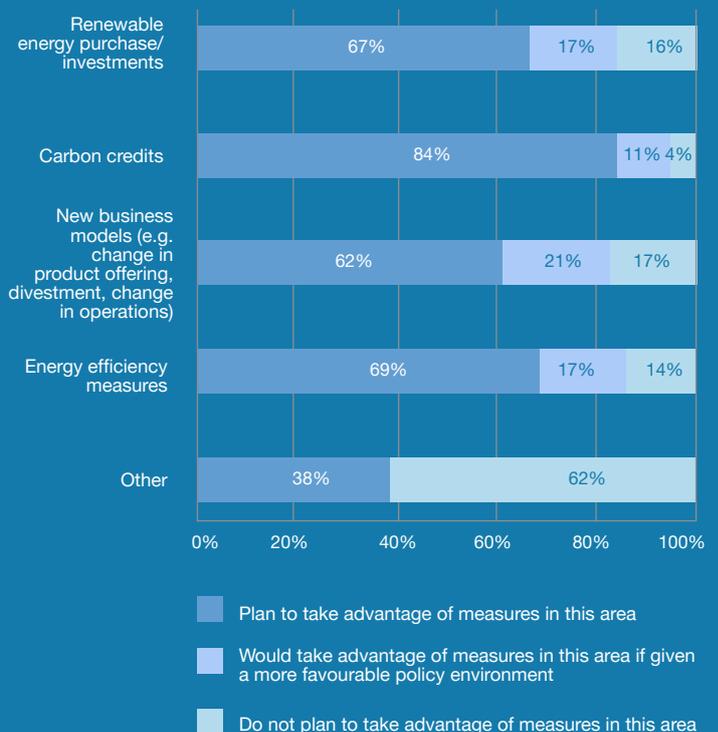


Most corporates plan to use carbon credits as part of their climate strategy

Voluntary carbon markets will play a key role in driving climate action for almost all corporates surveyed. Of those with a long-term emissions target, 84% plan to use carbon credits as part of their climate strategy and a further 11% would if given a more favourable policy environment. As shown in Figure 23, respondents are looking at all options for decarbonisation, with a majority also planning to take advantage of renewable energy purchase/investments, new business models (e.g. change in product offering, divestment, change in operations) and energy efficiency measures to achieve their emissions goals. Notably, 83% are either planning to take advantage of new business models or would do so if given a more favourable policy environment.

91% of participants expect corporate voluntary offsetting to increase further over the next five to ten years, although many respondents were concerned that policy uncertainties (36%) and carbon accounting uncertainties (17%) would be key challenges in the near term. Achieving carbon neutrality is increasingly making commercial sense with many respondents citing pressure from consumers, civil society and investors as drivers of voluntary corporate action on climate change.

Figure 23: Which of the following measures do you intend to take advantage of to achieve your emissions goal?



The Paris Agreement needs Article 6

This year, the ratcheting mechanism of the Paris Agreement comes into force: all signatory countries are invited to submit updated and more ambitious NDCs. Confidence in this was mixed: most survey respondents (44%) expect that some countries will submit more ambitious NDCs over the course of 2020, and only 5% expect all countries to do so. About half of original NDCs refer to the use of international carbon markets as part of their GHG emissions reduction strategy and most survey respondents (39%) expect this to increase in new NDCs that are submitted.

Accordingly, an overwhelming majority of respondents (87%) think that Article 6 will either be essential to or play an important role in achieving the Paris goals and the most-often selected reason that it is important to agree its rules was that it gives structure and integrity to markets. Only 5% of respondents think it is possible to achieve the goals without a global carbon market. However, opinions were split as to whether Parties will reach the necessary agreement at the next UN climate talks after delays for the past two years (30% yes, 32% no, 38% unsure).

Figure 24: What are the most important drivers of voluntary corporate action on climate change?

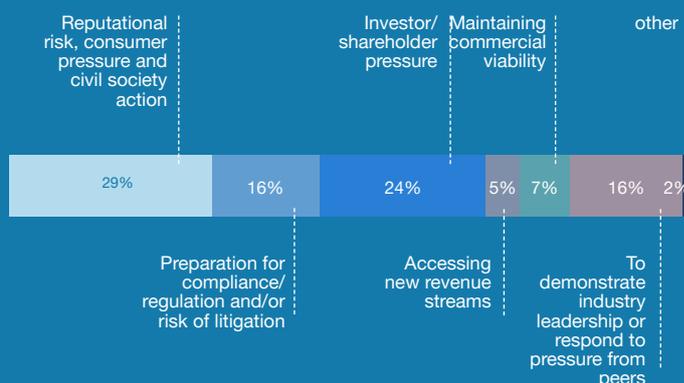
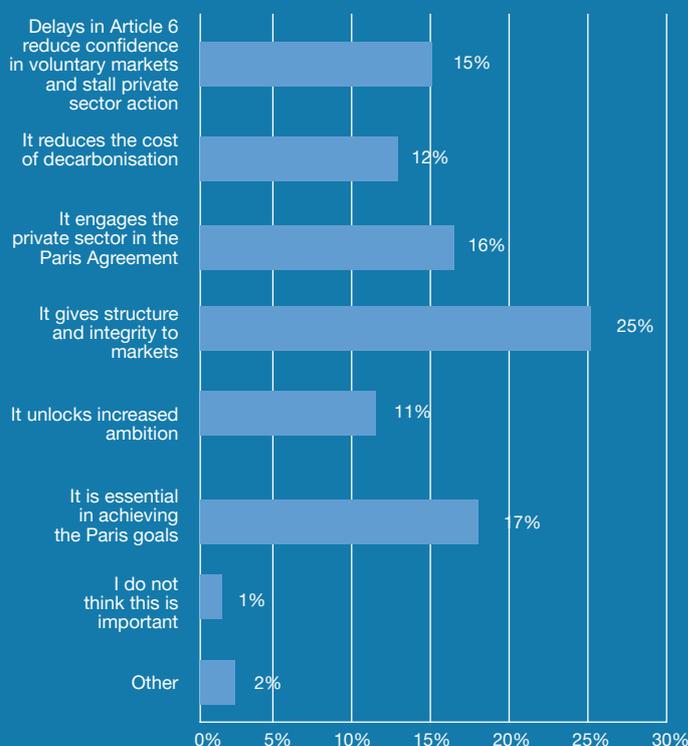


Figure 25: Why is it important that countries agree the rules for Article 6 at the next UN climate talks?



“The COP delay gives more time for Article 6 to be negotiated. If we miss this opportunity to get Article 6 sorted, we will likely see a move towards multilateral action as the new approach, with international negotiations just having to play catch up. At the next COP, pressure will be on like never before.”

6. Aviation

For the first time this year, the survey was also distributed to members of the International Aviation Transport Association (IATA) in order to compare views of carbon market participants with views of airlines.

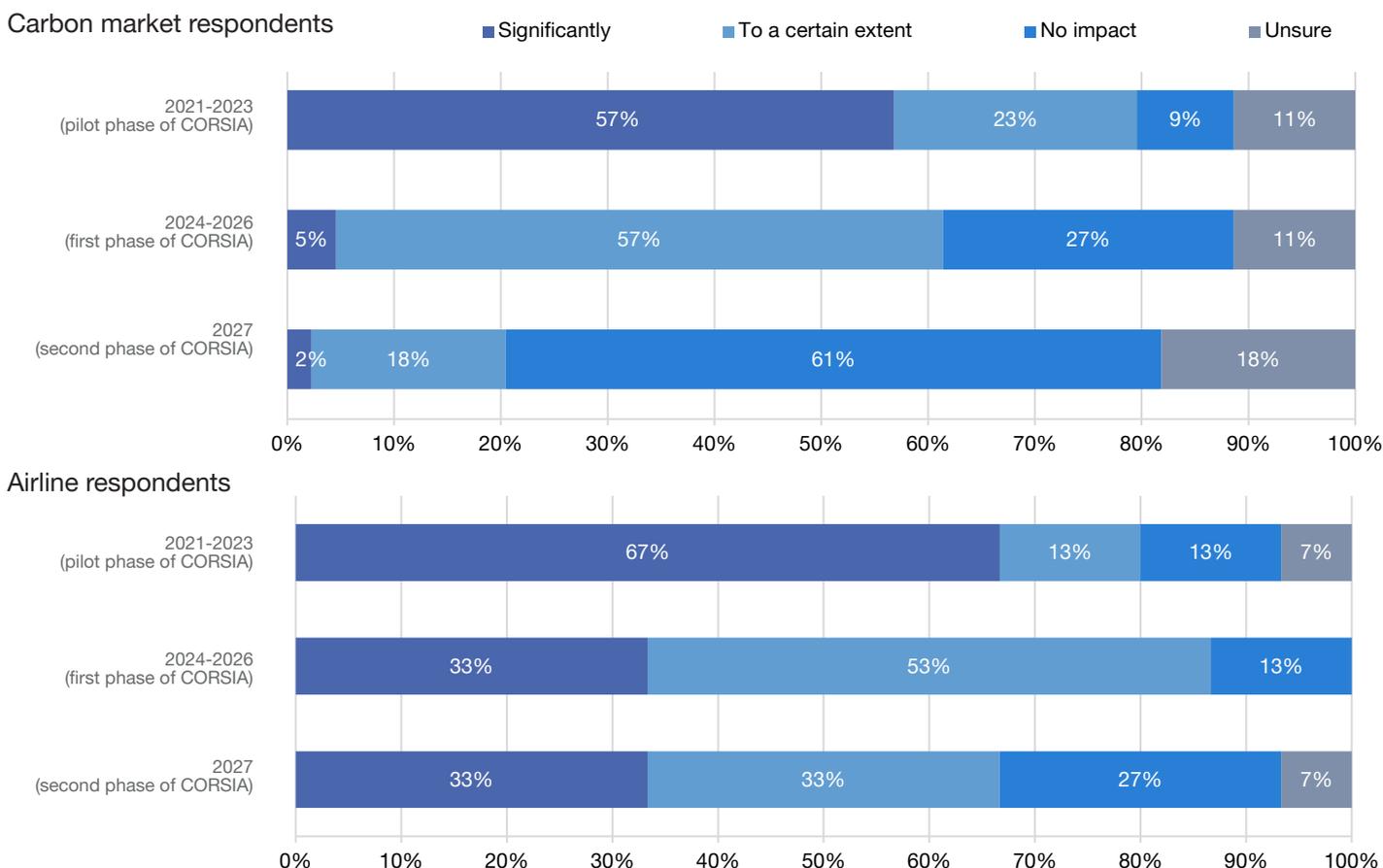
COVID-19 to have a significant short-term impact on CORSIA

57% of carbon market participants and 67% of airlines believe that COVID-19 is likely to negatively impact the pilot phase (2021-23) of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), the industry's GHG reduction programme. As seen in Figure 26, the majority of both carbon market and aviation respondents further believe that there will be an impact at least "to a certain extent" on the first phase (2024-26), but opinions differ on the second phase (2027). Participants were asked to give their opinion

on potential threats to the successful implementation of CORSIA. Whilst disruption to the baseline year measurements was identified as a key threat by both market participants and airlines (see Figure 27), the two groups had differing concerns about flows of Eligible Emission Units (EEUs), the carbon credits eligible under CORSIA. IATA members chose the price of EEUs being too low to encourage further investments in offsetting projects as the top barrier, alongside disruption to the baseline. In contrast, airlines considered insufficient availability of emissions reduction credits to satisfy the CORSIA demand (23%) as the key barrier.

Lack of participation of the BRIC countries (Brazil, Russia, India, China), and perception that CORSIA lacks environmental integrity or is not ambitious enough also ranked highly as potential challenges for both groups.

Figure 26: Do you believe that the anticipated drop in emissions due to COVID-19 during the 2020 baseline measurement period will negatively affect the implementation of CORSIA?



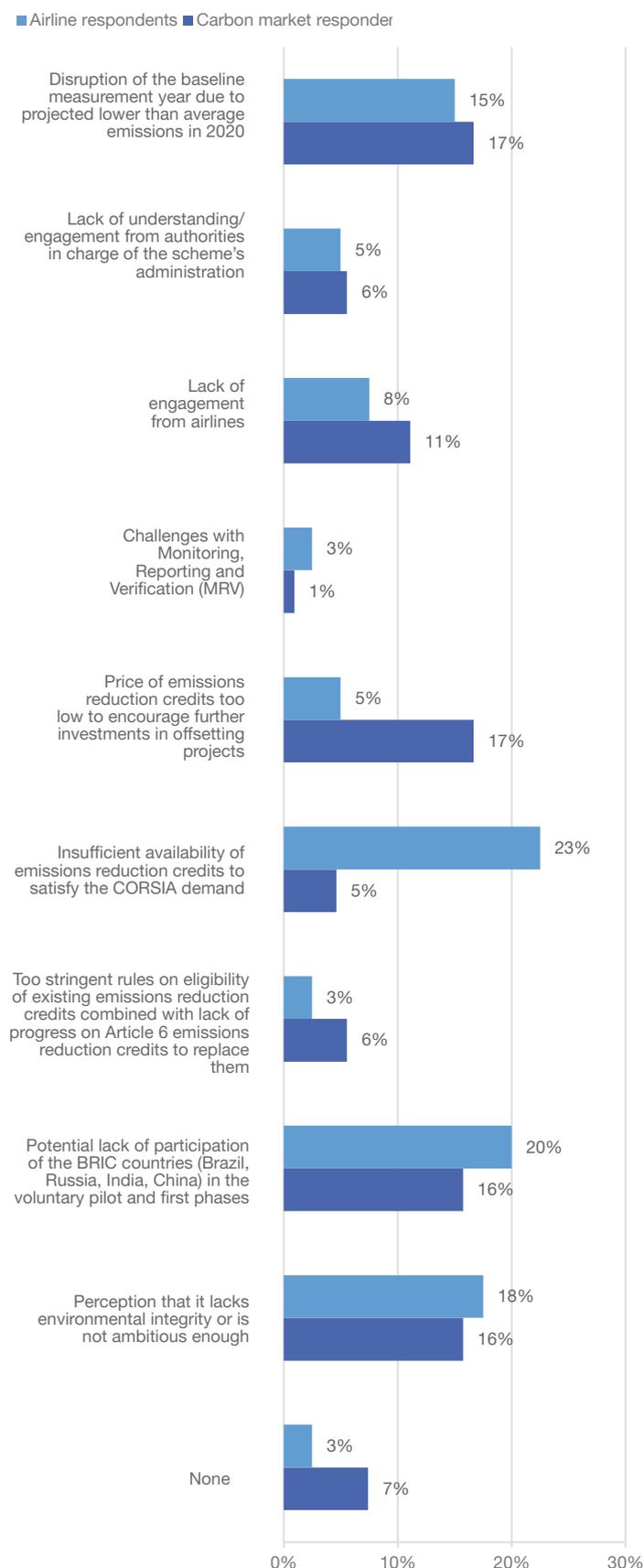
Will CORSIA credits satisfy demand?

This year, the UN body for civil aviation - the International Civil Aviation Organization (ICAO) - made its first decision on which carbon credits will be eligible for CORSIA (EEUs). 71% of survey participants believe that the six programmes approved are likely to provide enough EEUs to satisfy demand in the pilot phase of CORSIA (2021-23). When asked when the demand for these credits will arrive in the market, half of carbon market participants and most airlines (40%) surveyed expected substantial demand for carbon units from airlines to materialise in the following phase (2024-26).

Market participants are divided as to whether delays in finalising rules for Article 6 will negatively affect participation in the initial voluntary phases of CORSIA; 21% are unsure, 34% say no and 43% say yes, with many citing accounting and eligibility concerns. The vast majority of airlines responded “unsure” to this question, possibly indicating a lack of engagement with the UNFCCC process.

“ It is ultimately going to depend on where the baseline is set; whether the baseline is adjusted to a 2019 average instead of 2019 and 2020. CORSIA only becomes mandatory from 2027; holding tight on the baseline risks member states being under pressure from airline carriers to opt out, whilst they are facing the impacts of COVID-19. We need a healthy aviation sector to support a healthy CORSIA system.”

Figure 27: What do you consider to be the biggest threat to the successful implementation of CORSIA? (Comparison of carbon market and airline respondents' views)



Survey methodology

The survey was conducted by PwC UK using an online survey tool. The questionnaire was developed jointly by PwC and IETA. An email was sent out to all IETA members to invite them to participate. The survey consisted of 51 questions, but participants were given some freedom to choose sections and subject matter that they felt most confident answering. The questions were predominantly multiple choice with the option of providing comments and alternative answers. The survey opened on 1st of April 2020 and closed on 24th of April 2020. Reminders were sent out by email between these dates to increase the response rate. As in last year's edition, unattributed quotes taken from the survey were presented alongside the survey results, thereby giving all IETA members the opportunity to contribute in greater detail. It is important to make a few observations regarding the interpretation of data and the comparability of results between IETA GHG Market Sentiment Surveys conducted in different years.

Firstly, the sample size may differ between results. Secondly, since the first edition of the survey in 2005, different groups have been asked to participate. In the first four editions, only IETA members were asked to reply, by sending in one response per organisation. The mailing list was enlarged for the fifth and sixth editions of the survey, to include a wider range of GHG market participants and observers. The seventh survey, in 2012, was based on semi-structured interviews with key IETA members. In 2013, the original approach of surveying IETA members only was readopted. Since 2014, the survey has allowed multiple responses per IETA member company to gain a broader survey of sentiment amongst market participants. In 2020, the survey was distributed to both IETA members and members of the International Aviation Transport Association (IATA).

It should also be noted that several questions in the survey gave participants the option of selecting multiple answers. Hence, not all percentages displayed throughout the report add up to 100%. Moreover, where participants were asked to rank choices, weightings were applied accordingly. Finally, due to rounding, the percentages displayed in graphs may sometimes show slight discrepancies with the text descriptions or appear to not add up 100%.

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IETA: Advancing market solutions for climate change

The International Emissions Trading Association (IETA) is a non-profit business organisation created in June 1999 to serve businesses engaged in the new field of carbon markets. Our objective is to build international policy and market frameworks for reducing greenhouse gases at low cost.

Our vision is a single global carbon price produced by markets of high environmental integrity. We pursue this vision with an eye to pragmatism, political reality and sound economics.

With deep relationships in key policy centres and commercial arenas, IETA is the collective voice for the full range of businesses involved in carbon markets – all around the world. Our membership includes leading international companies from across the carbon trading cycle.

Through expert engagement, we enable our members to capture opportunities, mitigate risks and manage the uncertainties of global emissions markets.

Our global platform offers a full suite of advocacy services, market tools, information and forums – helping members excel in ETSs around the world.

Further information is available at www.ieta.org

